FIEC

Prohibits Possession of Defined Assault Weapons

19-01

2019

Financial Impact Estimating Conference

Prohibits Possession of Defined Assault Weapons Serial Number 19-01

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Key Inputs

Tab 1

Authorization





FLORIDA DEPARTMENT Of STATE

RON DESANTIS Governor

LAUREL M. LEE Secretary of State

June 26, 2019

Financial Impact Estimating Conference c/o Amy Baker, Coordinator Office of Economic and Demographic Research 111 West Madison Street, Ste. 574 Tallahassee, Florida 32399-6588

Dear Ms. Baker:

Section 15.21, Florida Statutes, provides that the Secretary of State shall submit an initiative petition to the Financial Impact Estimating Conference when a sponsoring political committee has met the registration, petition form submission and signature criteria set forth in that section.

The criteria in section 15.21, Florida Statutes, has now been met for the initiative petition titled **Prohibits possession of defined assault weapons**, Serial Number **19-01**. Therefore, I am submitting the proposed constitutional amendment petition form, along with a status update for the initiative petition, and a chart that provides a statewide signature count and count by congressional districts.

Sincerely 1mRie

Laurel M. Lee Secretary of State

LL/am/ljr

pc: Gail Schwartz, Chairperson, Ban Assault Weapons NOW

Enclosures

CONSTITUTIONAL AMENDMENT PETITION FORM

Under Florida law, it is a first degr more than one petition for an issue	ling your signature, becomes a publi ee misdemeanor, punishable as pro e. [Section 104.185, Florida Statutes s form is not completed, the form will	ovided in s. 775.082 or s. 77 s].	ne Supervisor of Elections. 75.08, Florida Statutes, to knowingly sign
Your name Please print name as i	t appears on your Voter Information Car		· · · · · · · · · · · · · · · · · · ·
Your address			
City	Zip	County	
Please change my legal residence	address on my voter registration recor	rd to the above residence ac	ldress (check box, if applicable).
Voter Registration Number		OR Date of Birt	h

I am a registered voter of Florida and hereby petition the Secretary of State to place the following proposed amendment to the Florida Constitution on the ballot in the general election:

BALLOT TITLE: Prohibits possession of defined assault weapons

BALLOT SUMMARY: Prohibits possession of assault weapons, defined as semiautomatic rifles and shotguns capable of holding more than 10 rounds of ammunition at once, either in fixed or detachable magazine, or any other ammunition-feeding device. Possession of handguns is not prohibited. Exempts military and law enforcement personnel in their official duties. Exempts and requires registration of assault weapons lawfully possessed prior to this provision's effective date. Creates criminal penalties for violations of this amendment.

ARTICLE AND SECTION BEING CREATED OR AMENDED: Article I, Section 8 Full text of proposed constitutional amendment:

ARTICLE I, SECTION 8. Right to Bear Arms.-

(a) The right of the people to keep and bear arms in defense of themselves and of the lawful authority of the state shall not be infringed, except that the manner of bearing arms may be regulated by law.

(b) There shall be a mandatory period of three days, excluding weekends and legal holidays, between the purchase and delivery at retail of any handgun. For the purposes of this section, "purchase" means the transfer of money or other valuable consideration to the retailer, and "handgun" means a firearm capable of being carried and used by one hand, such as a pistol or revolver. Holders of a concealed weapon permit as prescribed in Florida law shall not be subject to the provisions of this paragraph.

(c) The legislature shall enact legislation implementing subsection (b) of this section, effective no later than December 31,

1991, which shall provide that anyone violating the provisions of subsection (b) shall be guilty of a felony.

(d) This restriction shall not apply to a trade in of another handgun.

(e) The possession of an assault weapon, as that term is defined in this subsection, is prohibited in Florida except as provided in this subsection. This subsection shall be construed in conformity with the Second Amendment to the United States Constitution as interpreted by the United States Supreme Court.

1) Definitions -

a) Assault Weapons - For purposes of this subsection, any semiautomatic rifle or shotgun capable of holding more than ten (10) rounds of ammunition at once, either in a fixed or detachable magazine, or any other ammunition-feeding device. This subsection does not apply to handguns.

b) Semiautomatic - For purposes of this subsection, any weapon which fires a single projectile or a number of ball shots through a rifled or smooth bore for each single function of the trigger without further manual action required.

c) Ammunition-feeding device - For purposes of this subsection, any magazine, belt, drum, feed strip, or similar device for a firearm.

Continues on reverse

2) Limitations -

a) This subsection shall not apply to military or law enforcement use, or use by federal personnel, in conduct of their duties, or to an assault weapon being imported for sale and delivery to a federal, state or local governmental agency for use by employees of such agencies to perform official duties

b) This subsection does not apply to any firearm that is not semiautomatic, as defined in this subsection.

c) This subsection does not apply to handguns, as defined in Article I, Section 8(b), Florida Constitution.

d) If a person had lawful possession of an assault weapon prior to the effective date of this subsection, the person's possession of that assault weapon is not unlawful (1) during the first year after the effective date of this subsection, or (2) after the person has registered with the Florida Department of Law Enforcement or a successor agency, within one year of the effective date of this subsection, by providing a sworn or attested statement, that the weapon was lawfully in his or her possession prior to the effective date of this subsection and by identifying the weapon by make, model, and serial number. The agency must provide and the person must retain proof of registration in order for possession to remain lawful under this subsection. Registration records shall be available on a permanent basis to local, state and federal law enforcement agencies for valid law enforcement purposes but shall otherwise be confidential.

3) Criminal Penalties - Violation of this subsection is a third-degree felony. The legislature may designate greater, but not lesser, penalties for violations.

4) Self-executing - This provision shall be self-executing except where legislative action is authorized in subsection (3) to designate a more severe penalty for violation of this subsection. No legislative or administrative action may conflict with, diminish or delay the requirements of this subsection.

5) Severability - The provisions of this subsection are severable. If any clause, sentence, paragraph, section or subsection of this measure, or an application thereof, is adjudged invalid by any court of competent jurisdiction, other provisions shall continue to be in effect to the fullest extent possible.

6) Effective date - The effective date of this amendment shall be thirty days after its passage by the voters.

Х

DATE OF SIGNATURE

SIGNATURE OF REGISTERED VOTER

Initiative petition sponsored by Ban Assault Weapons NOW, 6619 S. Dixie Highway, #148, Miami, FL 33143

If paid petition circulator is used:

Circulator's name

Circulator's address

RETURN TO:

Ban Assault Weapons NOW 6619 S. Dixie Highway, #148 Miami, FL 33143

For official use only:

Serial number <u>19-01</u> Date approved 1/11/2019

Attachment for Initiative Petition

Prohibits possession of defined assault weapons Serial Number 19-01

 Name and address of the sponsor of the initiative petition: Gail Schwartz Ban Assault Weapons NOW 6619 South Dixie Highway #148 Miami, FL 33143

- 2. Name and address of the sponsor's attorney, if the sponsor is represented: Unknown
- **3.** A statement as to whether the sponsor has obtained the requisite number of signatures on the initiative petition to have the proposed amendment put on the ballot: As of June 26, 2019, the sponsor has not obtained the requisite number of signatures to have the proposed amendment placed on the ballot. A total of 766,200 valid signatures are required for placement on the 2020 general election ballot.
- 4. If the sponsor has not obtained the requisite number of signatures on the initiative petition to have the proposed amendment put on the ballot, the current status of the signature-collection process: As of June 26, 2019, Supervisors of Elections have certified a total of 91,211 valid petition signatures to the Division of Elections for this initiative petition. This number represents more than 10% of the total number of valid signatures needed from electors statewide and in at least one-fourth of the congressional districts in order to have the initiative placed on the 2020 general election ballot.
- 5. The date of the election during which the sponsor is planning to submit the proposed amendment to the voters: Unknown. The earliest date of election that this proposed amendment can be placed on the ballot is November 3, 2020, provided the sponsor successfully obtains the requisite number of valid signatures by February 1, 2020.
- 6. The last possible date that the ballot for the target election can be printed in order to be ready for the election: Unknown
- 7. A statement identifying the date by which the Financial Impact Statement will be filed, if the Financial Impact Statement is not filed concurrently with the request: The Secretary of State forwarded a letter to the Financial Impact Estimating Conference in the care of the coordinator on June 26, 2019.
- 8. The names and complete mailing addresses of all of the parties who are to be served: This information is unknown at this time.

FLORIDA DEPARTMENT OF STATE DIVISION OF ELECTIONS

SUMMARY OF PETITION SIGNATURES

Political Committee: Ban Assault Weapons Now

Amendment Title: Prohibits possession of defined assault weapons

Congressional District	Voting Electors in 2016 Presidential Election	For Review 10% of 8% Required By Section 15.21 Florida Statutes	For Ballot 8% Required By Article XI, Section 3 Florida Constitution	Signatures Certified	
FIRST	386,504	3,093	30,921	336	÷.
SECOND	360,098	2,881	28,808	1,533	
THIRD	356,715	2,854	28,538	3,165	
FOURTH	428,190	3,426	34,256	1,810	
FIFTH	316,115	2,529	25,290	5,339	
SIXTH	385,918	3,088	30,874	2,051	
SEVENTH	370,466	2,964	29,638	3,510	
EIGHTH	409,569	3,277	32,766	234	
NINTH	362,593	2,901	29,008	3,662	
TENTH	320,548	2,565	25,644	2,657	
ELEVENTH	417,253	3,339	33,381	1,965	
TWELFTH	386,775	3,095	30,942	3,270	
THIRTEENTH	367,818	2,943	29,426	5,361	
FOURTEENTH	336,289	2,691	26,904	4,734	
FIFTEENTH	340,331	2,723	27,227	2,919	
SIXTEENTH	403,805	3,231	32,305	6,587	
SEVENTEENTH	360,061	2,881	28,805	3,068	
EIGHTEENTH	388,772	3,111	31,102	1,690	
NINETEENTH	389,415	3,116	31,154	3,011	
TWENTIETH	291,984	2,336	23,359	6,475	
TWENTY-FIRST	355,842	2,847	28,468	5,228	
TWENTY-SECOND	361,305	2,891	28,905	7,284	
TWENTY-THIRD	342,784	2,743	27,423	5,122	
TWENTY-FOURTH	269,446	2,156	21,556	5,225	
TWENTY-FIFTH	269,983	2,160	21,599	1,093	
TWENTY-SIXTH	294,742	2,358	23,580	1,859	
TWENTY-SEVENTH	304,012	2,433	24,321	2,023	
TOTAL:	9,577,333	76,632	766,200	91,211	

Tab 2

Current Law



July 28, 2019

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Search Statutes: 2018

Select Year: 2018

The 2018 Florida Statutes

<u>Title XIV</u> TAXATION AND FINANCE

Chapter 212 TAX ON SALES, USE, AND OTHER TRANSACTIONS View Entire Chapter

212.05 Sales, storage, use tax.—It is hereby declared to be the legislative intent that every person is exercising a taxable privilege who engages in the business of selling tangible personal property at retail in this state, including the business of making mail order sales, or who rents or furnishes any of the things or services taxable under this chapter, or who stores for use or consumption in this state any item or article of tangible personal property as defined herein and who leases or rents such property within the state.

(1) For the exercise of such privilege, a tax is levied on each taxable transaction or incident, which tax is due and payable as follows:

(a)1.a. At the rate of 6 percent of the sales price of each item or article of tangible personal property when sold at retail in this state, computed on each taxable sale for the purpose of remitting the amount of tax due the state, and including each and every retail sale.

b. Each occasional or isolated sale of an aircraft, boat, mobile home, or motor vehicle of a class or type which is required to be registered, licensed, titled, or documented in this state or by the United States Government shall be subject to tax at the rate provided in this paragraph. The department shall by rule adopt any nationally recognized publication for valuation of used motor vehicles as the reference price list for any used motor vehicle which is required to be licensed pursuant to s. <u>320.08(1)</u>, (2), (3)(a), (b), (c), or (e), or (9). If any party to an occasional or isolated sale of such a vehicle reports to the tax collector a sales price which is less than 80 percent of the average loan price for the specified model and year of such vehicle as listed in the most recent reference price list, the tax levied under this paragraph shall be computed by the department on such average loan price unless the parties to the sale have provided to the tax collector an affidavit signed by each party, or other substantial proof, stating the actual sales price. Any party to such sale who reports a sales price less than the actual sales price is guilty of a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083. The department shall collect or attempt to collect from such party any delinguent sales taxes. In addition, such party shall pay any tax due and any penalty and interest assessed plus a penalty equal to twice the amount of the additional tax owed. Notwithstanding any other provision of law, the Department of Revenue may waive or compromise any penalty imposed pursuant to this subparagraph.

2. This paragraph does not apply to the sale of a boat or aircraft by or through a registered dealer under this chapter to a purchaser who, at the time of taking delivery, is a nonresident of this state, does not make his or her permanent place of abode in this state, and is not engaged in carrying on in this state any employment, trade, business, or profession in which the boat or aircraft will be used in this state, or is a corporation none of the officers or directors of which is a resident of, or makes his or her permanent place of abode in, this state, or is a noncorporate entity that has no individual

vested with authority to participate in the management, direction, or control of the entity's affairs who is a resident of, or makes his or her permanent abode in, this state. For purposes of this exemption, either a registered dealer acting on his or her own behalf as seller, a registered dealer acting as broker on behalf of a seller, or a registered dealer acting as broker on behalf of the purchaser may be deemed to be the selling dealer. This exemption shall not be allowed unless:

a. The purchaser removes a qualifying boat, as described in sub-subparagraph f., from the state within 90 days after the date of purchase or extension, or the purchaser removes a nonqualifying boat or an aircraft from this state within 10 days after the date of purchase or, when the boat or aircraft is repaired or altered, within 20 days after completion of the repairs or alterations; or if the aircraft will be registered in a foreign jurisdiction and:

(I) Application for the aircraft's registration is properly filed with a civil airworthiness authority of a foreign jurisdiction within 10 days after the date of purchase;

(II) The purchaser removes the aircraft from the state to a foreign jurisdiction within 10 days after the date the aircraft is registered by the applicable foreign airworthiness authority; and

(III) The aircraft is operated in the state solely to remove it from the state to a foreign jurisdiction.

For purposes of this sub-subparagraph, the term "foreign jurisdiction" means any jurisdiction outside of the United States or any of its territories;

b. The purchaser, within 30 days from the date of departure, provides the department with written proof that the purchaser licensed, registered, titled, or documented the boat or aircraft outside the state. If such written proof is unavailable, within 30 days the purchaser shall provide proof that the purchaser applied for such license, title, registration, or documentation. The purchaser shall forward to the department proof of title, license, registration, or documentation upon receipt;

c. The purchaser, within 10 days of removing the boat or aircraft from Florida, furnishes the department with proof of removal in the form of receipts for fuel, dockage, slippage, tie-down, or hangaring from outside of Florida. The information so provided must clearly and specifically identify the boat or aircraft;

d. The selling dealer, within 5 days of the date of sale, provides to the department a copy of the sales invoice, closing statement, bills of sale, and the original affidavit signed by the purchaser attesting that he or she has read the provisions of this section;

e. The seller makes a copy of the affidavit a part of his or her record for as long as required by s. <u>213.35;</u> and

f. Unless the nonresident purchaser of a boat of 5 net tons of admeasurement or larger intends to remove the boat from this state within 10 days after the date of purchase or when the boat is repaired or altered, within 20 days after completion of the repairs or alterations, the nonresident purchaser applies to the selling dealer for a decal which authorizes 90 days after the date of purchase for removal of the boat. The nonresident purchaser of a qualifying boat may apply to the selling dealer within 60 days after the date of purchase for an extension decal that authorizes the boat to remain in this state for an additional 90 days, but not more than a total of 180 days, before the nonresident purchaser is required to pay the tax imposed by this chapter. The department is authorized to issue decals in advance to dealers. The number of decals issued in advance to a dealer shall be consistent with the volume of the dealer's past sales of boats which qualify under this sub-subparagraph. The selling dealer or his or her agent shall mark and affix the decals to qualifying boats in the manner prescribed by the department, before delivery of the boat.

(I) The department is hereby authorized to charge dealers a fee sufficient to recover the costs of decals issued, except the extension decal shall cost \$425.

(II) The proceeds from the sale of decals will be deposited into the administrative trust fund.

(III) Decals shall display information to identify the boat as a qualifying boat under this sub-

subparagraph, including, but not limited to, the decal's date of expiration.

(IV) The department is authorized to require dealers who purchase decals to file reports with the department and may prescribe all necessary records by rule. All such records are subject to inspection by the department.

(V) Any dealer or his or her agent who issues a decal falsely, fails to affix a decal, mismarks the expiration date of a decal, or fails to properly account for decals will be considered prima facie to have committed a fraudulent act to evade the tax and will be liable for payment of the tax plus a mandatory penalty of 200 percent of the tax, and shall be liable for fine and punishment as provided by law for a conviction of a misdemeanor of the first degree, as provided in s. <u>775.082</u> or s. <u>775.083</u>.

(VI) Any nonresident purchaser of a boat who removes a decal before permanently removing the boat from the state, or defaces, changes, modifies, or alters a decal in a manner affecting its expiration date before its expiration, or who causes or allows the same to be done by another, will be considered prima facie to have committed a fraudulent act to evade the tax and will be liable for payment of the tax plus a mandatory penalty of 200 percent of the tax, and shall be liable for fine and punishment as provided by law for a conviction of a misdemeanor of the first degree, as provided in s. <u>775.082</u> or s. <u>775.083</u>.

(VII) The department is authorized to adopt rules necessary to administer and enforce this subparagraph and to publish the necessary forms and instructions.

(VIII) The department is hereby authorized to adopt emergency rules pursuant to s. 120.54(4) to administer and enforce the provisions of this subparagraph.

If the purchaser fails to remove the qualifying boat from this state within the maximum 180 days after purchase or a nonqualifying boat or an aircraft from this state within 10 days after purchase or, when the boat or aircraft is repaired or altered, within 20 days after completion of such repairs or alterations, or permits the boat or aircraft to return to this state within 6 months from the date of departure, except as provided in s. 212.08(7)(fff), or if the purchaser fails to furnish the department with any of the documentation required by this subparagraph within the prescribed time period, the purchaser shall be liable for use tax on the cost price of the boat or aircraft and, in addition thereto, payment of a penalty to the Department of Revenue equal to the tax payable. This penalty shall be in lieu of the penalty imposed by s. 212.12(2). The maximum 180-day period following the sale of a qualifying boat tax-exempt to a nonresident may not be tolled for any reason.

(b) At the rate of 6 percent of the cost price of each item or article of tangible personal property when the same is not sold but is used, consumed, distributed, or stored for use or consumption in this state; however, for tangible property originally purchased exempt from tax for use exclusively for lease and which is converted to the owner's own use, tax may be paid on the fair market value of the property at the time of conversion. If the fair market value of the property cannot be determined, use tax at the time of conversion shall be based on the owner's acquisition cost. Under no circumstances may the aggregate amount of sales tax from leasing the property and use tax due at the time of conversion be less than the total sales tax that would have been due on the original acquisition cost paid by the owner.

(c) At the rate of 6 percent of the gross proceeds derived from the lease or rental of tangible personal property, as defined herein; however, the following special provisions apply to the lease or rental of motor vehicles:

1. When a motor vehicle is leased or rented for a period of less than 12 months:

a. If the motor vehicle is rented in Florida, the entire amount of such rental is taxable, even if the vehicle is dropped off in another state.

b. If the motor vehicle is rented in another state and dropped off in Florida, the rental is exempt from Florida tax.

2. Except as provided in subparagraph 3., for the lease or rental of a motor vehicle for a period of

not less than 12 months, sales tax is due on the lease or rental payments if the vehicle is registered in this state; provided, however, that no tax shall be due if the taxpayer documents use of the motor vehicle outside this state and tax is being paid on the lease or rental payments in another state.

3. The tax imposed by this chapter does not apply to the lease or rental of a commercial motor vehicle as defined in s. 316.003(13)(a) to one lessee or rentee for a period of not less than 12 months when tax was paid on the purchase price of such vehicle by the lessor. To the extent tax was paid with respect to the purchase of such vehicle in another state, territory of the United States, or the District of Columbia, the Florida tax payable shall be reduced in accordance with the provisions of s. 212.06(7). This subparagraph shall only be available when the lease or rental of such property is an established business or part of an established business or the same is incidental or germane to such business.

(d) At the rate of 6 percent of the lease or rental price paid by a lessee or rentee, or contracted or agreed to be paid by a lessee or rentee, to the owner of the tangible personal property.

 $\frac{1}{(e)1}$. At the rate of 6 percent on charges for:

a. Prepaid calling arrangements. The tax on charges for prepaid calling arrangements shall be collected at the time of sale and remitted by the selling dealer.

(I) "Prepaid calling arrangement" has the same meaning as provided in s. 202.11.

(II) If the sale or recharge of the prepaid calling arrangement does not take place at the dealer's place of business, it shall be deemed to have taken place at the customer's shipping address or, if no item is shipped, at the customer's address or the location associated with the customer's mobile telephone number.

(III) The sale or recharge of a prepaid calling arrangement shall be treated as a sale of tangible personal property for purposes of this chapter, regardless of whether a tangible item evidencing such arrangement is furnished to the purchaser, and such sale within this state subjects the selling dealer to the jurisdiction of this state for purposes of this subsection.

(IV) No additional tax under this chapter or chapter 202 is due or payable if a purchaser of a prepaid calling arrangement who has paid tax under this chapter on the sale or recharge of such arrangement applies one or more units of the prepaid calling arrangement to obtain communications services as described in s. 202.11(9)(b)3., other services that are not communications services, or products.

b. The installation of telecommunication and telegraphic equipment.

c. Electrical power or energy, except that the tax rate for charges for electrical power or energy is 4.35 percent. Charges for electrical power and energy do not include taxes imposed under ss. <u>166.231</u> and <u>203.01(1)(a)3</u>.

2. Section <u>212.17</u>(3), regarding credit for tax paid on charges subsequently found to be worthless, is equally applicable to any tax paid under this section on charges for prepaid calling arrangements, telecommunication or telegraph services, or electric power subsequently found to be uncollectible. As used in this paragraph, the term "charges" does not include any excise or similar tax levied by the Federal Government, a political subdivision of this state, or a municipality upon the purchase, sale, or recharge of prepaid calling arrangements or upon the purchase or sale of telecommunication, television system program, or telegraph service or electric power, which tax is collected by the seller from the purchaser.

(f) At the rate of 6 percent on the sale, rental, use, consumption, or storage for use in this state of machines and equipment, and parts and accessories therefor, used in manufacturing, processing, compounding, producing, mining, or quarrying personal property for sale or to be used in furnishing communications, transportation, or public utility services.

(g)1. At the rate of 6 percent on the retail price of newspapers and magazines sold or used in Florida.

2. Notwithstanding other provisions of this chapter, inserts of printed materials which are distributed with a newspaper or magazine are a component part of the newspaper or magazine, and neither the sale nor use of such inserts is subject to tax when:

a. Printed by a newspaper or magazine publisher or commercial printer and distributed as a component part of a newspaper or magazine, which means that the items after being printed are delivered directly to a newspaper or magazine publisher by the printer for inclusion in editions of the distributed newspaper or magazine;

b. Such publications are labeled as part of the designated newspaper or magazine publication into which they are to be inserted; and

c. The purchaser of the insert presents a resale certificate to the vendor stating that the inserts are to be distributed as a component part of a newspaper or magazine.

(h)1. A tax is imposed at the rate of 4 percent on the charges for the use of coin-operated amusement machines. The tax shall be calculated by dividing the gross receipts from such charges for the applicable reporting period by a divisor, determined as provided in this subparagraph, to compute gross taxable sales, and then subtracting gross taxable sales from gross receipts to arrive at the amount of tax due. For counties that do not impose a discretionary sales surtax, the divisor is equal to 1.04; for counties that impose a 0.5 percent discretionary sales surtax, the divisor is equal to 1.045; for counties that impose a 1 percent discretionary sales surtax, the divisor is equal to 1.045; and for counties that impose a 2 percent sales surtax, the divisor is equal to 1.050; and for counties that impose a 2 percent sales surtax, the divisor is equal to 1.060. If a county imposes a discretionary sales surtax that is not listed in this subparagraph, the department shall make the applicable divisor available in an electronic format or otherwise. Additional divisors shall bear the same mathematical relationship to the next higher and next lower divisors have been established. When a machine is activated by a slug, token, coupon, or any similar device which has been purchased, the tax is on the price paid by the user of the device for such device.

2. As used in this paragraph, the term "operator" means any person who possesses a coinoperated amusement machine for the purpose of generating sales through that machine and who is responsible for removing the receipts from the machine.

a. If the owner of the machine is also the operator of it, he or she shall be liable for payment of the tax without any deduction for rent or a license fee paid to a location owner for the use of any real property on which the machine is located.

b. If the owner or lessee of the machine is also its operator, he or she shall be liable for payment of the tax on the purchase or lease of the machine, as well as the tax on sales generated through the machine.

c. If the proprietor of the business where the machine is located does not own the machine, he or she shall be deemed to be the lessee and operator of the machine and is responsible for the payment of the tax on sales, unless such responsibility is otherwise provided for in a written agreement between him or her and the machine owner.

3.a. An operator of a coin-operated amusement machine may not operate or cause to be operated in this state any such machine until the operator has registered with the department and has conspicuously displayed an identifying certificate issued by the department. The identifying certificate shall be issued by the department upon application from the operator. The identifying certificate shall include a unique number, and the certificate shall be permanently marked with the operator's name, the operator's sales tax number, and the maximum number of machines to be operated under the certificate. An identifying certificate shall not be transferred from one operator to another. The identifying certificate must be conspicuously displayed on the premises where the coin-operated amusement machines are being operated.

b. The operator of the machine must obtain an identifying certificate before the machine is first

operated in the state and by July 1 of each year thereafter. The annual fee for each certificate shall be based on the number of machines identified on the application times \$30 and is due and payable upon application for the identifying device. The application shall contain the operator's name, sales tax number, business address where the machines are being operated, and the number of machines in operation at that place of business by the operator. No operator may operate more machines than are listed on the certificate. A new certificate is required if more machines are being operated at that location than are listed on the certificate. The fee for the new certificate shall be based on the number of additional machines identified on the application form times \$30.

c. A penalty of \$250 per machine is imposed on the operator for failing to properly obtain and display the required identifying certificate. A penalty of \$250 is imposed on the lessee of any machine placed in a place of business without a proper current identifying certificate. Such penalties shall apply in addition to all other applicable taxes, interest, and penalties.

d. Operators of coin-operated amusement machines must obtain a separate sales and use tax certificate of registration for each county in which such machines are located. One sales and use tax certificate of registration is sufficient for all of the operator's machines within a single county.

4. The provisions of this paragraph do not apply to coin-operated amusement machines owned and operated by churches or synagogues.

5. In addition to any other penalties imposed by this chapter, a person who knowingly and willfully violates any provision of this paragraph commits a misdemeanor of the second degree, punishable as provided in s. <u>775.082</u> or s. <u>775.083</u>.

6. The department may adopt rules necessary to administer the provisions of this paragraph.

(i)1. At the rate of 6 percent on charges for all:

a. Detective, burglar protection, and other protection services (NAICS National Numbers 561611, 561612, 561613, and 561621). Fingerprint services required under s. 790.06 or s. 790.062 are not subject to the tax. Any law enforcement officer, as defined in s. <u>943.10</u>, who is performing approved duties as determined by his or her local law enforcement agency in his or her capacity as a law enforcement officer, and who is subject to the direct and immediate command of his or her law enforcement agency, and in the law enforcement officer's uniform as authorized by his or her law enforcement agency, is performing law enforcement and public safety services and is not performing detective, burglar protection, or other protective services, if the law enforcement officer is performing his or her approved duties in a geographical area in which the law enforcement officer has arrest jurisdiction. Such law enforcement and public safety services are not subject to tax irrespective of whether the duty is characterized as "extra duty," "off-duty," or "secondary employment," and irrespective of whether the officer is paid directly or through the officer's agency by an outside source. The term "law enforcement officer" includes full-time or part-time law enforcement officers, and any auxiliary law enforcement officer, when such auxiliary law enforcement officer is working under the direct supervision of a full-time or part-time law enforcement officer.

b. Nonresidential cleaning, excluding cleaning of the interiors of transportation equipment, and nonresidential building pest control services (NAICS National Numbers 561710 and 561720).

2. As used in this paragraph, "NAICS" means those classifications contained in the North American Industry Classification System, as published in 2007 by the Office of Management and Budget, Executive Office of the President.

3. Charges for detective, burglar protection, and other protection security services performed in this state but used outside this state are exempt from taxation. Charges for detective, burglar protection, and other protection security services performed outside this state and used in this state are subject to tax.

4. If a transaction involves both the sale or use of a service taxable under this paragraph and the

sale or use of a service or any other item not taxable under this chapter, the consideration paid must be separately identified and stated with respect to the taxable and exempt portions of the transaction or the entire transaction shall be presumed taxable. The burden shall be on the seller of the service or the purchaser of the service, whichever applicable, to overcome this presumption by providing documentary evidence as to which portion of the transaction is exempt from tax. The department is authorized to adjust the amount of consideration identified as the taxable and exempt portions of the transaction; however, a determination that the taxable and exempt portions are inaccurately stated and that the adjustment is applicable must be supported by substantial competent evidence.

5. Each seller of services subject to sales tax pursuant to this paragraph shall maintain a monthly log showing each transaction for which sales tax was not collected because the services meet the requirements of subparagraph 3. for out-of-state use. The log must identify the purchaser's name, location and mailing address, and federal employer identification number, if a business, or the social security number, if an individual, the service sold, the price of the service, the date of sale, the reason for the exemption, and the sales invoice number. The monthly log shall be maintained pursuant to the same requirements and subject to the same penalties imposed for the keeping of similar records pursuant to this chapter.

(j)1. Notwithstanding any other provision of this chapter, there is hereby levied a tax on the sale, use, consumption, or storage for use in this state of any coin or currency, whether in circulation or not, when such coin or currency:

- a. Is not legal tender;
- b. If legal tender, is sold, exchanged, or traded at a rate in excess of its face value; or
- c. Is sold, exchanged, or traded at a rate based on its precious metal content.

2. Such tax shall be at a rate of 6 percent of the price at which the coin or currency is sold, exchanged, or traded, except that, with respect to a coin or currency which is legal tender of the United States and which is sold, exchanged, or traded, such tax shall not be levied.

3. There are exempt from this tax exchanges of coins or currency which are in general circulation in, and legal tender of, one nation for coins or currency which are in general circulation in, and legal tender of, another nation when exchanged solely for use as legal tender and at an exchange rate based on the relative value of each as a medium of exchange.

4. With respect to any transaction that involves the sale of coins or currency taxable under this paragraph in which the taxable amount represented by the sale of such coins or currency exceeds \$500, the entire amount represented by the sale of such coins or currency is exempt from the tax imposed under this paragraph. The dealer must maintain proper documentation, as prescribed by rule of the department, to identify that portion of a transaction which involves the sale of coins or currency and is exempt under this subparagraph.

(k) At the rate of 6 percent of the sales price of each gallon of diesel fuel not taxed under chapter 206 purchased for use in a vessel, except dyed diesel fuel that is exempt pursuant to s. <u>212.08</u>(4)(a)4.

(l) Florists located in this state are liable for sales tax on sales to retail customers regardless of where or by whom the items sold are to be delivered. Florists located in this state are not liable for sales tax on payments received from other florists for items delivered to customers in this state.

(m) Operators of game concessions or other concessionaires who customarily award tangible personal property as prizes may, in lieu of paying tax on the cost price of such property, pay tax on 25 percent of the gross receipts from such concession activity.

(2) The tax shall be collected by the dealer, as defined herein, and remitted by the dealer to the state at the time and in the manner as hereinafter provided.

(3) The tax so levied is in addition to all other taxes, whether levied in the form of excise,

license, or privilege taxes, and in addition to all other fees and taxes levied.

(4) The tax imposed pursuant to this chapter shall be due and payable according to the brackets set forth in s. <u>212.12</u>.

(5) Notwithstanding any other provision of this chapter, the maximum amount of tax imposed under this chapter and collected on each sale or use of a boat in this state may not exceed \$18,000 and on each repair of a boat in this state may not exceed \$60,000.

History.-s. 5, ch. 26319, 1949; s. 3, ch. 59-289; s. 4, ch. 63-526; ss. 5, 6, ch. 68-27; ss. 8, 9, ch. 69-222; s. 4, ch. 71-360; s. 1, ch. 76-6; s. 2, ch. 78-74; s. 114, ch. 81-259; s. 4, ch. 82-154; s. 2, ch. 83-3; s. 7, ch. 85-174; s. 6, ch. 85-348; ss. 80, 81, ch. 86-152; ss. 6, 7, ch. 86-155; s. 3, ch. 86-166; ss. 10, 83, ch. 87-6; ss. 2, 9, ch. 87-99; ss. 12, 52, ch. 87-101; s. 7, ch. 87-402; ss. 7, 8, 9, ch. 87-548; s. 18, ch. 90-132; s. 89, ch. 90-136; s. 86, ch. 91-45; s. 1, ch. 91-66; s. 171, ch. 91-112; s. 239, ch. 91-224; ss. 10, 13, 16, ch. 92-319; s. 1, ch. 93-86; ss. 8, 17, ch. 94-314; s. 8, ch. 94-353; s. 1495, ch. 95-147; ss. 1, 2, ch. 95-302; s. 4, ch. 95-403; s. 3, ch. 95-416; s. 112, ch. 95-417; ss. 22, 28, ch. 96-397; s. 35, ch. 96-410; s. 12, ch. 97-54; s. 20, ch. 97-94; s. 28, ch. 97-96; s. 20, ch. 97-99; s. 1, ch. 97-121; s. 3, ch. 97-283; s. 5, ch. 98-140; s. 1, ch. 99-337; s. 2, ch. 99-363; ss. 45, 48, 58, ch. 2000-260; s. 38, ch. 2001-140; s. 15, ch. 2002-48; s. 13, ch. 2005-280; s. 20, ch. 2007-106; s. 3, ch. 2009-51; s. 1, ch. 2010-128; s. 5, ch. 2010-138; s. 7, ch. 2010-147; s. 20, ch. 2011-3; s. 1, ch. 2013-82; s. 2, ch. 2014-38; s. 13, ch. 2015-221; s. 10, ch. 2016-220; s. 63, ch. 2016-239; s. 23, ch. 2017-36; s. 12, ch. 2018-130.

¹Note.—Section 3, ch. 2007-78, provides that "[s]ection 501.95(2)(a), Florida Statutes, as created in [ch. 2007-256] or similar legislation, does not apply to prepaid calling arrangements as defined in s. 212.05(1)(e), Florida Statutes, including prepaid cards for wireless or wireline telecommunications service."

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Authorization for governmental manufacture, possession, and use of destructive devices.Unlawful throwing, projecting, placing, or discharging of destructive device or bomb that results in injury to another; penalty.

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790.233 Possession of firearm or ammunition prohibited when person is subject to an injunction against committing acts of domestic violence, stalking, or cyberstalking; penalties.

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790.251 Protection of the right to keep and bear arms in motor vehicles for self-defense and other lawful purposes; prohibited acts; duty of public and private employers; immunity from liability; enforcement.

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790.27 Alteration or removal of firearm serial number or possession, sale, or delivery of firearm with serial number altered or removed prohibited; penalties.

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790.31 Armor-piercing or exploding ammunition or dragon's breath shotgun shells, bolo shells, or flechette shells prohibited.

790.33 Field of regulation of firearms and ammunition preempted.

790.331 Prohibition of civil actions against firearms or ammunition manufacturers, firearms trade

associations, firearms or ammunition distributors, or firearms or ammunition dealers. 790.333 Sport shooting and training range protection; liability; claims, expenses, and fees; penalties; preemption; construction.

790.335 Prohibition of registration of firearms; electronic records.

790.336 Lists, records, or registries to be destroyed.

790.338 Medical privacy concerning firearms; prohibitions; penalties; exceptions.

790.401 Risk protection orders.

790.001 Definitions.—As used in this chapter, except where the context otherwise requires:

(1) "Antique firearm" means any firearm manufactured in or before 1918 (including any matchlock, flintlock, percussion cap, or similar early type of ignition system) or replica thereof, whether actually manufactured before or after the year 1918, and also any firearm using fixed ammunition manufactured in or before 1918, for which ammunition is no longer manufactured in the United States and is not readily available in the ordinary channels of commercial trade.

(2) "Concealed firearm" means any firearm, as defined in subsection (6), which is carried on or about a person in such a manner as to conceal the firearm from the ordinary sight of another person.

(3)(a) "Concealed weapon" means any dirk, metallic knuckles, billie, tear gas gun, chemical weapon or device, or other deadly weapon carried on or about a person in such a manner as to conceal the weapon from the ordinary sight of another person.

(b) "Tear gas gun" or "chemical weapon or device" means any weapon of such nature, except a device known as a "self-defense chemical spray." "Self-defense chemical spray" means a device carried solely for purposes of lawful self-defense that is compact in size, designed to be carried on or about the person, and contains not more than two ounces of chemical.

(4) "Destructive device" means any bomb, grenade, mine, rocket, missile, pipebomb, or similar device containing an explosive, incendiary, or poison gas and includes any frangible container filled with an explosive, incendiary, explosive gas, or expanding gas, which is designed or so constructed as to explode by such filler and is capable of causing bodily harm or property damage; any combination of parts either designed or intended for use in converting any device into a destructive device and from which a destructive device may be readily assembled; any device declared a destructive device by the Bureau of Alcohol, Tobacco, and Firearms; any type of weapon which will, is designed to, or may readily be converted to expel a projectile by the action of any explosive and which has a barrel with a bore of one-half inch or more in diameter; and ammunition for such destructive devices, but not including shotgun shells or any other ammunition designed for use in a firearm other than a destructive device. "Destructive device" does not include:

(a) A device which is not designed, redesigned, used, or intended for use as a weapon;

(b) Any device, although originally designed as a weapon, which is redesigned so that it may be used solely as a signaling, line-throwing, safety, or similar device;

(c) Any shotgun other than a short-barreled shotgun; or

(d) Any nonautomatic rifle (other than a short-barreled rifle) generally recognized or particularly suitable for use for the hunting of big game.

(5) "Explosive" means any chemical compound or mixture that has the property of yielding readily to combustion or oxidation upon application of heat, flame, or shock, including but not limited to dynamite, nitroglycerin, trinitrotoluene, or ammonium nitrate when combined with other ingredients to form an explosive mixture, blasting caps, and detonators; but not including:

(a) Shotgun shells, cartridges, or ammunition for firearms;

(b) Fireworks as defined in s. 791.01;

(c) Smokeless propellant powder or small arms ammunition primers, if possessed, purchased, sold, transported, or used in compliance with s. 552.241;

(d) Black powder in quantities not to exceed that authorized by chapter 552, or by any rules

adopted thereunder by the Department of Financial Services, when used for, or intended to be used for, the manufacture of target and sporting ammunition or for use in muzzle-loading flint or percussion weapons.

The exclusions contained in paragraphs (a)-(d) do not apply to the term "explosive" as used in the definition of "firearm" in subsection (6).

(6) "Firearm" means any weapon (including a starter gun) which will, is designed to, or may readily be converted to expel a projectile by the action of an explosive; the frame or receiver of any such weapon; any firearm muffler or firearm silencer; any destructive device; or any machine gun. The term "firearm" does not include an antique firearm unless the antique firearm is used in the commission of a crime.

(7) "Indictment" means an indictment or an information in any court under which a crime punishable by imprisonment for a term exceeding 1 year may be prosecuted.

(8) "Law enforcement officer" means:

(a) All officers or employees of the United States or the State of Florida, or any agency, commission, department, board, division, municipality, or subdivision thereof, who have authority to make arrests;

(b) Officers or employees of the United States or the State of Florida, or any agency, commission, department, board, division, municipality, or subdivision thereof, duly authorized to carry a concealed weapon;

(c) Members of the Armed Forces of the United States, the organized reserves, state militia, or Florida National Guard, when on duty, when preparing themselves for, or going to or from, military duty, or under orders;

(d) An employee of the state prisons or correctional systems who has been so designated by the Department of Corrections or by a warden of an institution;

(e) All peace officers;

(f) All state attorneys and United States attorneys and their respective assistants and investigators.

(9) "Machine gun" means any firearm, as defined herein, which shoots, or is designed to shoot, automatically more than one shot, without manually reloading, by a single function of the trigger.

(10) "Short-barreled shotgun" means a shotgun having one or more barrels less than 18 inches in length and any weapon made from a shotgun (whether by alteration, modification, or otherwise) if such weapon as modified has an overall length of less than 26 inches.

(11) "Short-barreled rifle" means a rifle having one or more barrels less than 16 inches in length and any weapon made from a rifle (whether by alteration, modification, or otherwise) if such weapon as modified has an overall length of less than 26 inches.

(12) "Slungshot" means a small mass of metal, stone, sand, or similar material fixed on a flexible handle, strap, or the like, used as a weapon.

(13) "Weapon" means any dirk, knife, metallic knuckles, slungshot, billie, tear gas gun, chemical weapon or device, or other deadly weapon except a firearm or a common pocketknife, plastic knife, or blunt-bladed table knife.

(14) "Electric weapon or device" means any device which, through the application or use of electrical current, is designed, redesigned, used, or intended to be used for offensive or defensive purposes, the destruction of life, or the infliction of injury.

(15) "Dart-firing stun gun" means any device having one or more darts that are capable of delivering an electrical current.

(16) "Readily accessible for immediate use" means that a firearm or other weapon is carried on the person or within such close proximity and in such a manner that it can be retrieved and used as easily and quickly as if carried on the person. (17) "Securely encased" means in a glove compartment, whether or not locked; snapped in a holster; in a gun case, whether or not locked; in a zippered gun case; or in a closed box or container which requires a lid or cover to be opened for access.

(18) "Sterile area" means the area of an airport to which access is controlled by the inspection of persons and property in accordance with federally approved airport security programs.

- (19) "Ammunition" means an object consisting of all of the following:
- (a) A fixed metallic or nonmetallic hull or casing containing a primer.
- (b) One or more projectiles, one or more bullets, or shot.
- (c) Gunpowder.

All of the specified components must be present for an object to be ammunition.

History.-s. 1, ch. 69-306; ss. 13, 19, 35, ch. 69-106; ss. 1, 2, ch. 70-441; s. 32, ch. 73-334; s. 1, ch. 76-165; s. 12, ch. 77-120; s. 1, ch. 78-200; s. 19, ch. 79-3; s. 1, ch. 79-58; s. 1, ch. 80-112; s. 1, ch. 82-131; s. 162, ch. 83-216; s. 2, ch. 88-183; s. 43, ch. 88-381; s. 1, ch. 90-124; s. 1, ch. 90-176; s. 1, ch. 93-17; s. 1, ch. 97-72; s. 1202, ch. 97-102; s. 5, ch. 2000-161; s. 1904, ch. 2003-261; s. 1, ch. 2004-286; s. 1, ch. 2006-186; s. 1, ch. 2006-298; s. 2, ch. 2016-106.

790.01 Unlicensed carrying of concealed weapons or concealed firearms.-

(1) Except as provided in subsection (3), a person who is not licensed under s. 790.06 and who carries a concealed weapon or electric weapon or device on or about his or her person commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

(2) Except as provided in subsection (3), a person who is not licensed under s. 790.06 and who carries a concealed firearm on or about his or her person commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(3) This section does not apply to:

(a) A person who carries a concealed weapon, or a person who may lawfully possess a firearm and who carries a concealed firearm, on or about his or her person while in the act of evacuating during a mandatory evacuation order issued during a state of emergency declared by the Governor pursuant to chapter 252 or declared by a local authority pursuant to chapter 870. As used in this subsection, the term "in the act of evacuating" means the immediate and urgent movement of a person away from the evacuation zone within 48 hours after a mandatory evacuation is ordered. The 48 hours may be extended by an order issued by the Governor.

(b) A person who carries for purposes of lawful self-defense, in a concealed manner:

1. A self-defense chemical spray.

2. A nonlethal stun gun or dart-firing stun gun or other nonlethal electric weapon or device that is designed solely for defensive purposes.

(4) This section does not preclude any prosecution for the use of an electric weapon or device, a dart-firing stun gun, or a self-defense chemical spray during the commission of any criminal offense under s. 790.07, s. 790.10, s. 790.23, or s. 790.235, or for any other criminal offense.

History.-s. 1, ch. 4929, 1901; GS 3262; RGS 5095; CGL 7197; s. 1, ch. 67-165; s. 2, ch. 69-306; s. 739, ch. 71-136; s. 2, ch. 76-165; s. 3, ch. 80-268; s. 2, ch. 92-183; s. 2, ch. 97-72; s. 1203, ch. 97-102; s. 5, ch. 2004-286; s. 2, ch. 2006-298; s. 1, ch. 2015-44.

790.015 Nonresidents who are United States citizens and hold a concealed weapons license in another state; reciprocity.—

(1) Notwithstanding s. 790.01, a nonresident of Florida may carry a concealed weapon or concealed firearm while in this state if the nonresident:

(a) Is 21 years of age or older.

(b) Has in his or her immediate possession a valid license to carry a concealed weapon or concealed firearm issued to the nonresident in his or her state of residence.

- (c) Is a resident of the United States.
- (2) A nonresident is subject to the same laws and restrictions with respect to carrying a concealed

weapon or concealed firearm as a resident of Florida who is so licensed.

(3) If the resident of another state who is the holder of a valid license to carry a concealed

weapon or concealed firearm issued in another state establishes legal residence in this state by:

- (a) Registering to vote;
- (b) Making a statement of domicile pursuant to s. 222.17; or
- (c) Filing for homestead tax exemption on property in this state,

the license shall remain in effect for 90 days following the date on which the holder of the license establishes legal state residence.

(4) This section applies only to nonresident concealed weapon or concealed firearm licenseholders from states that honor Florida concealed weapon or concealed firearm licenses.

(5) The requirement of paragraph (1)(a) does not apply to a person who:

(a) Is a servicemember, as defined in s. 250.01; or

(b) Is a veteran of the United States Armed Forces who was discharged under honorable conditions.

History.-s. 1, ch. 99-132; s. 2, ch. 2012-108.

790.02 Officer to arrest without warrant and upon probable cause.—The carrying of a concealed weapon is declared a breach of peace, and any officer authorized to make arrests under the laws of this state may make arrests without warrant of persons violating the provisions of s. 790.01 when said officer has reasonable grounds or probable cause to believe that the offense of carrying a concealed weapon is being committed.

History.-s. 1, ch. 4929, 1901; GS 3263; RGS 5096; CGL 7198; s. 3, ch. 69-306.

790.051 Exemption from licensing requirements; law enforcement officers.—Law enforcement officers are exempt from the licensing and penal provisions of this chapter when acting at any time within the scope or course of their official duties or when acting at any time in the line of or performance of duty.

History.-s. 11, ch. 69-306.

790.052 Carrying concealed firearms; off-duty law enforcement officers.—

(1) All persons holding active certifications from the Criminal Justice Standards and Training Commission as law enforcement officers or correctional officers as defined in s. 943.10(1), (2), (6), (7), (8), or (9) shall have the right to carry, on or about their persons, concealed firearms, during offduty hours, at the discretion of their superior officers, and may perform those law enforcement functions that they normally perform during duty hours, utilizing their weapons in a manner which is reasonably expected of on-duty officers in similar situations. However, nothing in this subsection shall be construed to limit the right of a law enforcement officer, correctional officer, or correctional probation officer to carry a concealed firearm off duty as a private citizen under the exemption provided in s. 790.06 that allows a law enforcement officer, correctional officer, or correctional probation officer as defined in s. 943.10(1), (2), (3), (6), (7), (8), or (9) to carry a concealed firearm without a concealed weapon or firearm license. The appointing or employing agency or department of an officer carrying a concealed firearm as a private citizen under s. 790.06 shall not be liable for the use of the firearm in such capacity. Nothing herein limits the authority of the appointing or employing agency or department from establishing policies limiting law enforcement officers or correctional officers from carrying concealed firearms during off-duty hours in their capacity as appointees or employees of the agency or department.

(2) The superior officer of any police department or sheriff's office or the Florida Highway Patrol, if he or she elects to direct the officers under his or her supervision to carry concealed firearms while off duty, shall file a statement with the governing body of such department of his or her instructions

and requirements relating to the carrying of said firearms.

History.-ss. 1, 2, 3, ch. 72-84; s. 235, ch. 77-104; s. 23, ch. 79-8; s. 3, ch. 88-183; s. 4, ch. 95-318; s. 1204, ch. 97-102.

790.053 Open carrying of weapons.—

(1) Except as otherwise provided by law and in subsection (2), it is unlawful for any person to openly carry on or about his or her person any firearm or electric weapon or device. It is not a violation of this section for a person licensed to carry a concealed firearm as provided in s. 790.06(1), and who is lawfully carrying a firearm in a concealed manner, to briefly and openly display the firearm to the ordinary sight of another person, unless the firearm is intentionally displayed in an angry or threatening manner, not in necessary self-defense.

(2) A person may openly carry, for purposes of lawful self-defense:

(a) A self-defense chemical spray.

(b) A nonlethal stun gun or dart-firing stun gun or other nonlethal electric weapon or device that is designed solely for defensive purposes.

(3) Any person violating this section commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

History.-s. 1, ch. 87-537; s. 173, ch. 91-224; s. 3, ch. 97-72; s. 1205, ch. 97-102; s. 3, ch. 2006-298; s. 1, ch. 2011-145.

790.054 Prohibited use of self-defense weapon or device against law enforcement officer; penalties.—A person who knowingly and willfully uses a self-defense chemical spray, a nonlethal stun gun or other nonlethal electric weapon or device, or a dart-firing stun gun against a law enforcement officer engaged in the performance of his or her duties commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

History.-s. 4, ch. 97-72; s. 4, ch. 2006-298.

790.06 License to carry concealed weapon or firearm.-

(1) The Department of Agriculture and Consumer Services is authorized to issue licenses to carry concealed weapons or concealed firearms to persons qualified as provided in this section. Each such license must bear a color photograph of the licensee. For the purposes of this section, concealed weapons or concealed firearms are defined as a handgun, electronic weapon or device, tear gas gun, knife, or billie, but the term does not include a machine gun as defined in s. 790.001(9). Such licenses shall be valid throughout the state for a period of 7 years from the date of issuance. Any person in compliance with the terms of such license may carry a concealed weapon or concealed firearm notwithstanding the provisions of s. 790.01. The licensee must carry the license, together with valid identification, at all times in which the licensee is in actual possession of a concealed weapon or firearm and must display both the license and proper identification upon demand by a law enforcement officer. Violations of the provisions of this subsection shall constitute a noncriminal violation with a penalty of \$25, payable to the clerk of the court.

(2) The Department of Agriculture and Consumer Services shall issue a license if the applicant:

(a) Is a resident of the United States and a citizen of the United States or a permanent resident alien of the United States, as determined by the United States Bureau of Citizenship and Immigration Services, or is a consular security official of a foreign government that maintains diplomatic relations and treaties of commerce, friendship, and navigation with the United States and is certified as such by the foreign government and by the appropriate embassy in this country;

(b) Is 21 years of age or older;

(c) Does not suffer from a physical infirmity which prevents the safe handling of a weapon or firearm;

(d) Is not ineligible to possess a firearm pursuant to s. 790.23 by virtue of having been convicted

of a felony;

(e) Has not been:

1. Found guilty of a crime under the provisions of chapter 893 or similar laws of any other state relating to controlled substances within a 3-year period immediately preceding the date on which the application is submitted; or

2. Committed for the abuse of a controlled substance under chapter 397 or under the provisions of former chapter 396 or similar laws of any other state. An applicant who has been granted relief from firearms disabilities pursuant to s. 790.065(2)(a)4.d. or pursuant to the law of the state in which the commitment occurred is deemed not to be committed for the abuse of a controlled substance under this subparagraph;

(f) Does not chronically and habitually use alcoholic beverages or other substances to the extent that his or her normal faculties are impaired. It shall be presumed that an applicant chronically and habitually uses alcoholic beverages or other substances to the extent that his or her normal faculties are impaired if the applicant has been convicted under s. 790.151 or has been deemed a habitual offender under s. 856.011(3), or has had two or more convictions under s. 316.193 or similar laws of any other state, within the 3-year period immediately preceding the date on which the application is submitted;

(g) Desires a legal means to carry a concealed weapon or firearm for lawful self-defense;

(h) Demonstrates competence with a firearm by any one of the following:

1. Completion of any hunter education or hunter safety course approved by the Fish and Wildlife Conservation Commission or a similar agency of another state;

2. Completion of any National Rifle Association firearms safety or training course;

3. Completion of any firearms safety or training course or class available to the general public offered by a law enforcement agency, junior college, college, or private or public institution or organization or firearms training school, using instructors certified by the National Rifle Association, Criminal Justice Standards and Training Commission, or the Department of Agriculture and Consumer Services;

4. Completion of any law enforcement firearms safety or training course or class offered for security guards, investigators, special deputies, or any division or subdivision of a law enforcement agency or security enforcement;

5. Presents evidence of equivalent experience with a firearm through participation in organized shooting competition or military service;

6. Is licensed or has been licensed to carry a firearm in this state or a county or municipality of this state, unless such license has been revoked for cause; or

7. Completion of any firearms training or safety course or class conducted by a state-certified or National Rifle Association certified firearms instructor;

A photocopy of a certificate of completion of any of the courses or classes; an affidavit from the instructor, school, club, organization, or group that conducted or taught such course or class attesting to the completion of the course or class by the applicant; or a copy of any document that shows completion of the course or class or evidences participation in firearms competition shall constitute evidence of qualification under this paragraph. A person who conducts a course pursuant to subparagraph 2., subparagraph 3., or subparagraph 7., or who, as an instructor, attests to the completion of such courses, must maintain records certifying that he or she observed the student safely handle and discharge the firearm in his or her physical presence and that the discharge of the firearm included live fire using a firearm and ammunition as defined in s. 790.001;

(i) Has not been adjudicated an incapacitated person under s. 744.331, or similar laws of any other state. An applicant who has been granted relief from firearms disabilities pursuant to s. 790.065(2)(a)4.d. or pursuant to the law of the state in which the adjudication occurred is deemed

not to have been adjudicated an incapacitated person under this paragraph;

(j) Has not been committed to a mental institution under chapter 394, or similar laws of any other state. An applicant who has been granted relief from firearms disabilities pursuant to s. 790.065(2)
 (a)4.d. or pursuant to the law of the state in which the commitment occurred is deemed not to have been committed in a mental institution under this paragraph;

(k) Has not had adjudication of guilt withheld or imposition of sentence suspended on any felony unless 3 years have elapsed since probation or any other conditions set by the court have been fulfilled, or expunction has occurred;

(l) Has not had adjudication of guilt withheld or imposition of sentence suspended on any misdemeanor crime of domestic violence unless 3 years have elapsed since probation or any other conditions set by the court have been fulfilled, or the record has been expunged;

(m) Has not been issued an injunction that is currently in force and effect and that restrains the applicant from committing acts of domestic violence or acts of repeat violence; and

(n) Is not prohibited from purchasing or possessing a firearm by any other provision of Florida or federal law.

(3) The Department of Agriculture and Consumer Services shall deny a license if the applicant has been found guilty of, had adjudication of guilt withheld for, or had imposition of sentence suspended for one or more crimes of violence constituting a misdemeanor, unless 3 years have elapsed since probation or any other conditions set by the court have been fulfilled or the record has been sealed or expunged. The Department of Agriculture and Consumer Services shall revoke a license if the licensee has been found guilty of, had adjudication of guilt withheld for, or had imposition of sentence suspended for one or more crimes of violence within the preceding 3 years. The department shall, upon notification by a law enforcement agency, a court, or the Florida Department of Law Enforcement and subsequent written verification, suspend a license or the processing of an application for a license if the licensee or applicant is arrested or formally charged with a crime that would disqualify such person from having a license under this section, until final disposition of the case. The department shall suspend a license or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or the processing of an application for a license if the licensee or applicant is issued an injunction that restrains the licensee or applicant from committing acts of domestic violence or acts of repeat violence.

(4) The application shall be completed, under oath, on a form adopted by the Department of Agriculture and Consumer Services and shall include:

(a) The name, address, place of birth, date of birth, and race of the applicant;

(b) A statement that the applicant is in compliance with criteria contained within subsections (2) and (3);

(c) A statement that the applicant has been furnished a copy of or a website link to this chapter and is knowledgeable of its provisions;

(d) A conspicuous warning that the application is executed under oath and that a false answer to any question, or the submission of any false document by the applicant, subjects the applicant to criminal prosecution under s. 837.06;

(e) A statement that the applicant desires a concealed weapon or firearms license as a means of lawful self-defense; and

(f) Directions for an applicant who is a servicemember, as defined in s. 250.01, or a veteran, as defined in s. 1.01, to request expedited processing of his or her application.

(5) The applicant shall submit to the Department of Agriculture and Consumer Services or an approved tax collector pursuant to s. 790.0625:

(a) A completed application as described in subsection (4).

(b) A nonrefundable license fee of up to \$55 if he or she has not previously been issued a statewide license or of up to \$45 for renewal of a statewide license. The cost of processing

fingerprints as required in paragraph (c) shall be borne by the applicant. However, an individual holding an active certification from the Criminal Justice Standards and Training Commission as a law enforcement officer, correctional officer, or correctional probation officer as defined in s. 943.10(1), (2), (3), (6), (7), (8), or (9) is exempt from the licensing requirements of this section. If such individual wishes to receive a concealed weapon or firearm license, he or she is exempt from the background investigation and all background investigation fees but must pay the current license fees regularly required to be paid by nonexempt applicants. Further, a law enforcement officer, a correctional officer, or a correctional probation officer as defined in s. 943.10(1), (2), or (3) is exempt from the required fees and background investigation for 1 year after his or her retirement.

(c) A full set of fingerprints of the applicant administered by a law enforcement agency or the Division of Licensing of the Department of Agriculture and Consumer Services or an approved tax collector pursuant to s. 790.0625 together with any personal identifying information required by federal law to process fingerprints. Charges for fingerprint services under this paragraph are not subject to the sales tax on fingerprint services imposed in s. 212.05(1)(i).

(d) A photocopy of a certificate, affidavit, or document as described in paragraph (2)(h).

(e) A full frontal view color photograph of the applicant taken within the preceding 30 days, in which the head, including hair, measures $^{7}/_{8}$ of an inch wide and $1^{1}/_{8}$ inches high.

(f) For expedited processing of an application:

1. A servicemember shall submit a copy of the Common Access Card, United States Uniformed Services Identification Card, or current deployment orders.

2. A veteran shall submit a copy of the DD Form 214, issued by the United States Department of Defense, or another acceptable form of identification as specified by the Department of Veterans' Affairs.

(6)(a) The Department of Agriculture and Consumer Services, upon receipt of the items listed in subsection (5), shall forward the full set of fingerprints of the applicant to the Department of Law Enforcement for state and federal processing, provided the federal service is available, to be processed for any criminal justice information as defined in s. 943.045. The cost of processing such fingerprints shall be payable to the Department of Law Enforcement by the Department of Agriculture and Consumer Services.

(b) The sheriff's office shall provide fingerprinting service if requested by the applicant and may charge a fee not to exceed \$5 for this service.

(c) The Department of Agriculture and Consumer Services shall, within 90 days after the date of receipt of the items listed in subsection (5):

1. Issue the license; or

2. Deny the application based solely on the ground that the applicant fails to qualify under the criteria listed in subsection (2) or subsection (3). If the Department of Agriculture and Consumer Services denies the application, it shall notify the applicant in writing, stating the ground for denial and informing the applicant of any right to a hearing pursuant to chapter 120.

3. In the event the department receives criminal history information with no final disposition on a crime which may disqualify the applicant, the time limitation prescribed by this paragraph may be suspended until receipt of the final disposition or proof of restoration of civil and firearm rights.

(d) In the event a legible set of fingerprints, as determined by the Department of Agriculture and Consumer Services or the Federal Bureau of Investigation, cannot be obtained after two attempts, the Department of Agriculture and Consumer Services shall determine eligibility based upon the name checks conducted by the Florida Department of Law Enforcement.

(e) A consular security official of a foreign government that maintains diplomatic relations and treaties of commerce, friendship, and navigation with the United States and is certified as such by the foreign government and by the appropriate embassy in this country must be issued a license

within 20 days after the date of the receipt of a completed application, certification document, color photograph as specified in paragraph (5)(e), and a nonrefundable license fee of \$300. Consular security official licenses shall be valid for 1 year and may be renewed upon completion of the application process as provided in this section.

(f) The Department of Agriculture and Consumer Services shall, upon receipt of a completed application and the identifying information required under paragraph (5)(f), expedite the processing of a servicemember's or a veteran's concealed weapon or firearm license application.

(7) The Department of Agriculture and Consumer Services shall maintain an automated listing of licenseholders and pertinent information, and such information shall be available online, upon request, at all times to all law enforcement agencies through the Florida Crime Information Center.

(8) Within 30 days after the changing of a permanent address, or within 30 days after having a license lost or destroyed, the licensee shall notify the Department of Agriculture and Consumer Services of such change. Failure to notify the Department of Agriculture and Consumer Services pursuant to the provisions of this subsection shall constitute a noncriminal violation with a penalty of \$25.

(9) In the event that a concealed weapon or firearm license is lost or destroyed, the license shall be automatically invalid, and the person to whom the same was issued may, upon payment of \$15 to the Department of Agriculture and Consumer Services, obtain a duplicate, or substitute thereof, upon furnishing a notarized statement to the Department of Agriculture and Consumer Services that such license has been lost or destroyed.

(10) A license issued under this section shall be suspended or revoked pursuant to chapter 120 if the licensee:

(a) Is found to be ineligible under the criteria set forth in subsection (2);

(b) Develops or sustains a physical infirmity which prevents the safe handling of a weapon or firearm;

(c) Is convicted of a felony which would make the licensee ineligible to possess a firearm pursuant to s. 790.23;

(d) Is found guilty of a crime under the provisions of chapter 893, or similar laws of any other state, relating to controlled substances;

(e) Is committed as a substance abuser under chapter 397, or is deemed a habitual offender under s. 856.011(3), or similar laws of any other state;

(f) Is convicted of a second violation of s. 316.193, or a similar law of another state, within 3 years after a first conviction of such section or similar law of another state, even though the first violation may have occurred before the date on which the application was submitted;

(g) Is adjudicated an incapacitated person under s. 744.331, or similar laws of any other state; or

(h) Is committed to a mental institution under chapter 394, or similar laws of any other state.

Notwithstanding s. 120.60(5), service of a notice of the suspension or revocation of a concealed weapon or firearm license must be given by either certified mail, return receipt requested, to the licensee at his or her last known mailing address furnished to the Department of Agriculture and Consumer Services, or by personal service. If a notice given by certified mail is returned as undeliverable, a second attempt must be made to provide notice to the licensee at that address, by either first-class mail in an envelope, postage prepaid, addressed to the licensee at his or her last known mailing address furnished to the department, or, if the licensee has provided an e-mail address to the department, by e-mail. Such mailing by the department constitutes notice, and any failure by the licensee to receive such notice does not stay the effective date or term of the suspension or revocation. A request for hearing must be filed with the department within 21 days after notice is received by personal delivery, or within 26 days after the date the department deposits the notice in the United States mail (21 days plus 5 days for mailing). The department shall document its attempts

to provide notice, and such documentation is admissible in the courts of this state and constitutes sufficient proof that notice was given.

(11)(a) At least 90 days before the expiration date of the license, the Department of Agriculture and Consumer Services shall mail to each licensee a written notice of the expiration and a renewal form prescribed by the Department of Agriculture and Consumer Services. The licensee must renew his or her license on or before the expiration date by filing with the Department of Agriculture and Consumer Services the renewal form containing an affidavit submitted under oath and under penalty of perjury stating that the licensee remains qualified pursuant to the criteria specified in subsections (2) and (3), a color photograph as specified in paragraph (5)(e), and the required renewal fee. Out-ofstate residents must also submit a complete set of fingerprints and fingerprint processing fee. The license shall be renewed upon receipt of the completed renewal form, color photograph, appropriate payment of fees, and, if applicable, fingerprints. Additionally, a licensee who fails to file a renewal application on or before its expiration date must renew his or her license by paying a late fee of \$15. A license may not be renewed 180 days or more after its expiration date, and such a license is deemed to be permanently expired. A person whose license has been permanently expired may reapply for licensure; however, an application for licensure and fees under subsection (5) must be submitted, and a background investigation shall be conducted pursuant to this section. A person who knowingly files false information under this subsection is subject to criminal prosecution under s. 837.06.

(b) A license issued to a servicemember, as defined in s. 250.01, is subject to paragraph (a); however, such a license does not expire while the servicemember is serving on military orders that have taken him or her over 35 miles from his or her residence and shall be extended, as provided in this paragraph, for up to 180 days after his or her return to such residence. If the license renewal requirements in paragraph (a) are met within the 180-day extension period, the servicemember may not be charged any additional costs, such as, but not limited to, late fees or delinquency fees, above the normal license fees. The servicemember must present to the Department of Agriculture and Consumer Services a copy of his or her official military orders or a written verification from the member's commanding officer before the end of the 180-day period in order to qualify for the extension.

(12)(a) A license issued under this section does not authorize any person to openly carry a handgun or carry a concealed weapon or firearm into:

- 1. Any place of nuisance as defined in s. 823.05;
- 2. Any police, sheriff, or highway patrol station;
- 3. Any detention facility, prison, or jail;
- 4. Any courthouse;

5. Any courtroom, except that nothing in this section would preclude a judge from carrying a concealed weapon or determining who will carry a concealed weapon in his or her courtroom;

6. Any polling place;

7. Any meeting of the governing body of a county, public school district, municipality, or special district;

8. Any meeting of the Legislature or a committee thereof;

- 9. Any school, college, or professional athletic event not related to firearms;
- 10. Any elementary or secondary school facility or administration building;
- 11. Any career center;

12. Any portion of an establishment licensed to dispense alcoholic beverages for consumption on the premises, which portion of the establishment is primarily devoted to such purpose;

13. Any college or university facility unless the licensee is a registered student, employee, or faculty member of such college or university and the weapon is a stun gun or nonlethal electric

weapon or device designed solely for defensive purposes and the weapon does not fire a dart or projectile;

14. The inside of the passenger terminal and sterile area of any airport, provided that no person shall be prohibited from carrying any legal firearm into the terminal, which firearm is encased for shipment for purposes of checking such firearm as baggage to be lawfully transported on any aircraft; or

15. Any place where the carrying of firearms is prohibited by federal law.

(b) A person licensed under this section shall not be prohibited from carrying or storing a firearm in a vehicle for lawful purposes.

(c) This section does not modify the terms or conditions of s. 790.251(7).

(d) Any person who knowingly and willfully violates any provision of this subsection commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

(13) All moneys collected by the department pursuant to this section shall be deposited in the Division of Licensing Trust Fund, and the Legislature shall appropriate from the fund those amounts deemed necessary to administer the provisions of this section. All revenues collected, less those costs determined by the Department of Agriculture and Consumer Services to be nonrecurring or one-time costs, shall be deferred over the 7-year licensure period. Notwithstanding the provisions of s. 493.6117, all moneys collected pursuant to this section shall not revert to the General Revenue Fund; however, this shall not abrogate the requirement for payment of the service charge imposed pursuant to chapter 215.

(14) All funds received by the sheriff pursuant to the provisions of this section shall be deposited into the general revenue fund of the county and shall be budgeted to the sheriff.

(15) The Legislature finds as a matter of public policy and fact that it is necessary to provide statewide uniform standards for issuing licenses to carry concealed weapons and firearms for self-defense and finds it necessary to occupy the field of regulation of the bearing of concealed weapons or firearms for self-defense to ensure that no honest, law-abiding person who qualifies under the provisions of this section is subjectively or arbitrarily denied his or her rights. The Department of Agriculture and Consumer Services shall implement and administer the provisions of this section. The Legislature does not delegate to the Department of Agriculture and Consumer Services the authority to regulate or restrict the issuing of licenses provided for in this section, beyond those provisions contained in this section. Subjective or arbitrary actions or rules which encumber the issuing process by placing burdens on the applicant beyond those sworn statements and specified documents detailed in this section are in conflict with the intent of this section and are prohibited. This section shall be liberally construed to carry out the constitutional right to bear arms for self-defense. This section shall impair or diminish such rights.

(16) The Department of Agriculture and Consumer Services shall maintain statistical information on the number of licenses issued, revoked, suspended, and denied.

(17) As amended by chapter 87-24, Laws of Florida, this section shall be known and may be cited as the "Jack Hagler Self Defense Act."

History.-s. 2, ch. 4147, 1893; s. 1, ch. 5139, 1903; GS 3268; RGS 5101; CGL 7203; s. 2, ch. 76-165; s. 67, ch. 77-121; s. 1, ch. 77-302; s. 176, ch. 79-164; ss. 1, 2, ch. 87-24; s. 4, ch. 88-183; s. 2, ch. 89-60; s. 110, ch. 89-96; s. 3, ch. 90-311; s. 2, ch. 90-316; ss. 1, 7, ch. 90-364; s. 1, ch. 92-52; s. 1, ch. 92-183; s. 38, ch. 93-39; s. 52, ch. 95-196; s. 1, ch. 95-229; s. 10, ch. 95-430; s. 17, ch. 97-94; s. 1206, ch. 97-102; s. 5, ch. 98-284; s. 3, ch. 98-335; s. 228, ch. 99-245; s. 61, ch. 2000-258; s. 10, ch. 2002-295; s. 108, ch. 2003-1; s. 60, ch. 2004-357; s. 1, ch. 2006-90; s. 1, ch. 2008-105; s. 2, ch. 2011-145; s. 1, ch. 2012-144; s. 61, ch. 2013-116; s. 1, ch. 2014-205; ss. 39, 40, ch. 2016-166; s. 50, ch. 2017-36; s. 39, ch. 2017-85.

790.0601 Public records exemption for concealed weapons.-

(1) Personal identifying information of an individual who has applied for or received a license to

carry a concealed weapon or firearm pursuant to s. 790.06 held by the Division of Licensing of the Department of Agriculture and Consumer Services is confidential and exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution. This exemption applies to such information held by the division before, on, or after the effective date of this section.

(2) Personal identifying information of an individual who has applied for a license to carry a concealed weapon or firearm pursuant to s. 790.0625 which is held by a tax collector appointed by the Department of Agriculture and Consumer Services to receive applications and fees is confidential and exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution. This exemption applies to such information held by the tax collector before, on, or after the effective date of this subsection.

(3) Information made confidential and exempt by this section shall be disclosed:

(a) With the express written consent of the applicant or licensee or his or her legally authorized representative.

(b) By court order upon a showing of good cause.

(c) Upon request by a law enforcement agency in connection with the performance of lawful duties, which shall include access to any automated database containing such information maintained by the Department of Agriculture and Consumer Services.

(4) Subsection (2) is subject to the Open Government Sunset Review Act in accordance with s. 119.15 and shall stand repealed on October 2, 2019, unless reviewed and saved from repeal through reenactment by the Legislature.

History.-s. 1, ch. 2006-102; s. 1, ch. 2011-136; s. 1, ch. 2014-206.

790.061 Judges and justices; exceptions from licensure provisions.—A county court judge, circuit court judge, district court of appeal judge, justice of the supreme court, federal district court judge, or federal court of appeals judge serving in this state is not required to comply with the provisions of s. 790.06 in order to receive a license to carry a concealed weapon or firearm, except that any such justice or judge must comply with the provisions of s. 790.06(2)(h). The Department of Agriculture and Consumer Services shall issue a license to carry a concealed weapon or firearm to any such justice or judge upon demonstration of competence of the justice or judge pursuant to s. 790.06(2)(h).

History.-s. 2, ch. 90-311; s. 2, ch. 95-229; s. 158, ch. 2004-5.

790.062 Members and veterans of United States Armed Forces; exceptions from licensure provisions.—

(1) Notwithstanding s. 790.06(2)(b), the Department of Agriculture and Consumer Services shall issue a license to carry a concealed weapon or firearm under s. 790.06 if the applicant is otherwise qualified and:

(a) Is a servicemember, as defined in s. 250.01; or

(b) Is a veteran of the United States Armed Forces who was discharged under honorable conditions.

(2) The Department of Agriculture and Consumer Services shall accept fingerprints of an applicant under this section administered by any law enforcement agency, military provost, or other military unit charged with law enforcement duties or as otherwise provided for in s. 790.06(5)(c). Charges for fingerprint services under this subsection are not subject to the sales tax on fingerprint services imposed in s. 212.05(1)(i).

History.-s. 1, ch. 2012-108; s. 51, ch. 2017-36.

790.0625 Appointment of tax collectors to accept applications for a concealed weapon or firearm license; fees; penalties.—

- (1) As used in this section, the term:
- (a) "Department" means the Department of Agriculture and Consumer Services.

(b) "Division" means the Division of Licensing of the Department of Agriculture and Consumer Services.

(2) The department, at its discretion, may appoint tax collectors, as defined in s. 1(d) of Art. VIII of the State Constitution, to accept applications on behalf of the division for concealed weapon or firearm licenses. Such appointment shall be for specified locations that will best serve the public interest and convenience in applying for these licenses.

(3) A tax collector seeking to be appointed to accept applications for new or renewal concealed weapon or firearm licenses must submit a written request to the division stating his or her name, address, telephone number, each location within the county at which the tax collector wishes to accept applications, and other information as required by the division.

(a) Upon receipt of a written request, the division shall review it and at its discretion may decline to enter into a memorandum of understanding or, if approved, enter into a memorandum of understanding with the tax collector to accept applications for new or renewal concealed weapon or firearm licenses on behalf of the department.

(b) The department or the division may rescind a memorandum of understanding for any reason at any time.

(4) All personal identifying information that is provided pursuant to s. 790.06 and contained in the records of a tax collector appointed under this section is confidential and exempt as provided in s. 790.0601.

(5) A tax collector appointed under this section may collect and retain a convenience fee of \$22 for each new application and \$12 for each renewal application and shall remit weekly to the department the license fees pursuant to s. 790.06 for deposit in the Division of Licensing Trust Fund.

(6)(a) A tax collector appointed under this section may not maintain a list or record of persons who apply for or are granted a new or renewal license to carry a concealed weapon or firearm. A violation of this paragraph is subject to s. 790.335.

(b) A person may not handle an application for a concealed weapon or firearm for a fee or compensation of any kind unless he or she has been appointed by the department to do so.

(7) A person who willfully violates this section commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

(8) Upon receipt of a completed renewal application, a new color photograph, and appropriate payment of fees, a tax collector authorized to accept renewal applications for concealed weapon or firearm licenses under this section may, upon approval and confirmation of license issuance by the department, print and deliver a concealed weapon or firearm license to a licensee renewing his or her license at the tax collector's office.

History.-s. 2, ch. 2014-205; s. 41, ch. 2016-166.

790.064 Firearm possession and firearm ownership disability.-

(1) A person who has been adjudicated mentally defective or who has been committed to a mental institution, as those terms are defined in s. 790.065(2), may not own a firearm or possess a firearm until relief from the firearm possession and firearm ownership disability is obtained.

(2) The firearm possession and firearm ownership disability runs concurrently with the firearm purchase disability provided in s. 790.065(2).

(3) A person may petition the court that made the adjudication or commitment, or that ordered that the record be submitted to the Department of Law Enforcement pursuant to s. 790.065(2), for relief from the firearm possession and firearm ownership disability.

(4) The person seeking relief must follow the procedures set forth in s. 790.065(2) for obtaining relief from the firearm purchase disability in seeking relief from the firearm possession and firearm ownership disability.

(5) The person may seek relief from the firearm possession and firearm ownership disability

simultaneously with the relief being sought from the firearm purchase disability, if such relief is sought, pursuant to the procedure set forth in s. 790.065(2). History.-s. 10, ch. 2018-3.

¹790.065 Sale and delivery of firearms.–

(1)(a) A licensed importer, licensed manufacturer, or licensed dealer may not sell or deliver from her or his inventory at her or his licensed premises any firearm to another person, other than a licensed importer, licensed manufacturer, licensed dealer, or licensed collector, until she or he has:

1. Obtained a completed form from the potential buyer or transferee, which form shall have been promulgated by the Department of Law Enforcement and provided by the licensed importer, licensed manufacturer, or licensed dealer, which shall include the name, date of birth, gender, race, and social security number or other identification number of such potential buyer or transferee and has inspected proper identification including an identification containing a photograph of the potential buyer or transferee.

 $\frac{1}{2}$. Collected a fee from the potential buyer for processing the criminal history check of the potential buyer. The fee shall be established by the Department of Law Enforcement and may not exceed \$8 per transaction. The Department of Law Enforcement may reduce, or suspend collection of, the fee to reflect payment received from the Federal Government applied to the cost of maintaining the criminal history check system established by this section as a means of facilitating or supplementing the National Instant Criminal Background Check System. The Department of Law Enforcement shall, by rule, establish procedures for the fees to be transmitted by the licensee to the Department of Law Enforcement. Such procedures must provide that fees may be paid or transmitted by electronic means, including, but not limited to, debit cards, credit cards, or electronic funds transfers. All such fees shall be deposited into the Department of Law Enforcement Operating Trust Fund, but shall be segregated from all other funds deposited into such trust fund and must be accounted for separately. Such segregated funds must not be used for any purpose other than the operation of the criminal history checks required by this section. The Department of Law Enforcement, each year before February 1, shall make a full accounting of all receipts and expenditures of such funds to the President of the Senate, the Speaker of the House of Representatives, the majority and minority leaders of each house of the Legislature, and the chairs of the appropriations committees of each house of the Legislature. In the event that the cumulative amount of funds collected exceeds the cumulative amount of expenditures by more than \$2.5 million, excess funds may be used for the purpose of purchasing soft body armor for law enforcement officers.

3. Requested, by means of a toll-free telephone call or other electronic means, the Department of Law Enforcement to conduct a check of the information as reported and reflected in the Florida Crime Information Center and National Crime Information Center systems as of the date of the request.

4. Received a unique approval number for that inquiry from the Department of Law Enforcement, and recorded the date and such number on the consent form.

(b) However, if the person purchasing, or receiving delivery of, the firearm is a holder of a valid concealed weapons or firearms license pursuant to the provisions of s. 790.06 or holds an active certification from the Criminal Justice Standards and Training Commission as a "law enforcement officer," a "correctional officer," or a "correctional probation officer" as defined in s. 943.10(1), (2), (3), (6), (7), (8), or (9), this subsection does not apply.

(c) This subsection does not apply to the purchase, trade, or transfer of a rifle or shotgun by a resident of this state when the resident makes such purchase, trade, or transfer from a licensed importer, licensed manufacturer, or licensed dealer in another state.

(2) Upon receipt of a request for a criminal history record check, the Department of Law Enforcement shall, during the licensee's call or by return call, forthwith:

(a) Review any records available to determine if the potential buyer or transferee:

1. Has been convicted of a felony and is prohibited from receipt or possession of a firearm pursuant to s. 790.23;

2. Has been convicted of a misdemeanor crime of domestic violence, and therefore is prohibited from purchasing a firearm;

3. Has had adjudication of guilt withheld or imposition of sentence suspended on any felony or misdemeanor crime of domestic violence unless 3 years have elapsed since probation or any other conditions set by the court have been fulfilled or expunction has occurred; or

4. Has been adjudicated mentally defective or has been committed to a mental institution by a court or as provided in sub-sub-subparagraph b.(II), and as a result is prohibited by state or federal law from purchasing a firearm.

a. As used in this subparagraph, "adjudicated mentally defective" means a determination by a court that a person, as a result of marked subnormal intelligence, or mental illness, incompetency, condition, or disease, is a danger to himself or herself or to others or lacks the mental capacity to contract or manage his or her own affairs. The phrase includes a judicial finding of incapacity under s. 744.331(6)(a), an acquittal by reason of insanity of a person charged with a criminal offense, and a judicial finding that a criminal defendant is not competent to stand trial.

b. As used in this subparagraph, "committed to a mental institution" means:

(I) Involuntary commitment, commitment for mental defectiveness or mental illness, and commitment for substance abuse. The phrase includes involuntary inpatient placement as defined in s. 394.467, involuntary outpatient placement as defined in s. 394.4655, involuntary assessment and stabilization under s. 397.6818, and involuntary substance abuse treatment under s. 397.6957, but does not include a person in a mental institution for observation or discharged from a mental institution based upon the initial review by the physician or a voluntary admission to a mental institution; or

(II) Notwithstanding sub-sub-subparagraph (I), voluntary admission to a mental institution for outpatient or inpatient treatment of a person who had an involuntary examination under s. 394.463, where each of the following conditions have been met:

(A) An examining physician found that the person is an imminent danger to himself or herself or others.

(B) The examining physician certified that if the person did not agree to voluntary treatment, a petition for involuntary outpatient or inpatient treatment would have been filed under s. 394.463(2)(g)4., or the examining physician certified that a petition was filed and the person subsequently agreed to voluntary treatment prior to a court hearing on the petition.

(C) Before agreeing to voluntary treatment, the person received written notice of that finding and certification, and written notice that as a result of such finding, he or she may be prohibited from purchasing a firearm, and may not be eligible to apply for or retain a concealed weapon or firearms license under s. 790.06 and the person acknowledged such notice in writing, in substantially the following form:

"I understand that the doctor who examined me believes I am a danger to myself or to others. I understand that if I do not agree to voluntary treatment, a petition will be filed in court to require me to receive involuntary treatment. I understand that if that petition is filed, I have the right to contest it. In the event a petition has been filed, I understand that I can subsequently agree to voluntary treatment prior to a court hearing. I understand that by agreeing to voluntary treatment in either of these situations, I may be prohibited from buying firearms and from applying for or retaining a concealed weapons or firearms license until I apply for and receive relief from that restriction under Florida law." (D) A judge or a magistrate has, pursuant to sub-sub-subparagraph c.(II), reviewed the record of the finding, certification, notice, and written acknowledgment classifying the person as an imminent danger to himself or herself or others, and ordered that such record be submitted to the department.

c. In order to check for these conditions, the department shall compile and maintain an automated database of persons who are prohibited from purchasing a firearm based on court records of adjudications of mental defectiveness or commitments to mental institutions.

(I) Except as provided in sub-sub-subparagraph (II), clerks of court shall submit these records to the department within 1 month after the rendition of the adjudication or commitment. Reports shall be submitted in an automated format. The reports must, at a minimum, include the name, along with any known alias or former name, the sex, and the date of birth of the subject.

(II) For persons committed to a mental institution pursuant to sub-sub-subparagraph b.(II), within 24 hours after the person's agreement to voluntary admission, a record of the finding, certification, notice, and written acknowledgment must be filed by the administrator of the receiving or treatment facility, as defined in s. 394.455, with the clerk of the court for the county in which the involuntary examination under s. 394.463 occurred. No fee shall be charged for the filing under this sub-sub-subparagraph. The clerk must present the records to a judge or magistrate within 24 hours after receipt of the records. A judge or magistrate is required and has the lawful authority to review the records ex parte and, if the judge or magistrate determines that the record supports the classifying of the person as an imminent danger to himself or herself or others, to order that the record be submitted to the department. If a judge or magistrate orders the submittal of the record to the department, the record must be submitted to the department within 24 hours.

d. A person who has been adjudicated mentally defective or committed to a mental institution, as those terms are defined in this paragraph, may petition the court that made the adjudication or commitment, or the court that ordered that the record be submitted to the department pursuant to sub-sub-subparagraph c.(II), for relief from the firearm disabilities imposed by such adjudication or commitment. A copy of the petition shall be served on the state attorney for the county in which the person was adjudicated or committed. The state attorney may object to and present evidence relevant to the relief sought by the petition. The hearing on the petition may be open or closed as the petitioner may choose. The petitioner may present evidence and subpoena witnesses to appear at the hearing on the petition. The petitioner may confront and cross-examine witnesses called by the state attorney. A record of the hearing shall be made by a certified court reporter or by court-approved electronic means. The court shall make written findings of fact and conclusions of law on the issues before it and issue a final order. The court shall grant the relief requested in the petition if the court finds, based on the evidence presented with respect to the petitioner's reputation, the petitioner's mental health record and, if applicable, criminal history record, the circumstances surrounding the firearm disability, and any other evidence in the record, that the petitioner will not be likely to act in a manner that is dangerous to public safety and that granting the relief would not be contrary to the public interest. If the final order denies relief, the petitioner may not petition again for relief from firearm disabilities until 1 year after the date of the final order. The petitioner may seek judicial review of a final order denying relief in the district court of appeal having jurisdiction over the court that issued the order. The review shall be conducted de novo. Relief from a firearm disability granted under this sub-subparagraph has no effect on the loss of civil rights, including firearm rights, for any reason other than the particular adjudication of mental defectiveness or commitment to a mental institution from which relief is granted.

e. Upon receipt of proper notice of relief from firearm disabilities granted under subsubparagraph d., the department shall delete any mental health record of the person granted relief from the automated database of persons who are prohibited from purchasing a firearm based on court records of adjudications of mental defectiveness or commitments to mental institutions. f. The department is authorized to disclose data collected pursuant to this subparagraph to agencies of the Federal Government and other states for use exclusively in determining the lawfulness of a firearm sale or transfer. The department is also authorized to disclose this data to the Department of Agriculture and Consumer Services for purposes of determining eligibility for issuance of a concealed weapons or concealed firearms license and for determining whether a basis exists for revoking or suspending a previously issued license pursuant to s. 790.06(10). When a potential buyer or transferee appeals a nonapproval based on these records, the clerks of court and mental institutions shall, upon request by the department, provide information to help determine whether the potential buyer or transferee is the same person as the subject of the record. Photographs and any other data that could confirm or negate identity must be made available to the department for such purposes, notwithstanding any other provision of state law to the contrary. Any such information that is made confidential or exempt from disclosure by law shall retain such confidential or exempt status when transferred to the department.

(b) Inform the licensee making the inquiry either that records demonstrate that the buyer or transferee is so prohibited and provide the licensee a nonapproval number, or provide the licensee with a unique approval number.

(c)1. Review any records available to it to determine whether the potential buyer or transferee has been indicted or has had an information filed against her or him for an offense that is a felony under either state or federal law, or, as mandated by federal law, has had an injunction for protection against domestic violence entered against the potential buyer or transferee under s. 741.30, has had an injunction for protection against repeat violence entered against the potential buyer or transferee under s. 784.046, or has been arrested for a dangerous crime as specified in s. 907.041(4)(a) or for any of the following enumerated offenses:

- a. Criminal anarchy under ss. 876.01 and 876.02.
- b. Extortion under s. 836.05.
- c. Explosives violations under s. 552.22(1) and (2).
- d. Controlled substances violations under chapter 893.
- e. Resisting an officer with violence under s. 843.01.
- f. Weapons and firearms violations under this chapter.
- g. Treason under s. 876.32.
- h. Assisting self-murder under s. 782.08.
- i. Sabotage under s. 876.38.
- j. Stalking or aggravated stalking under s. 784.048.

If the review indicates any such indictment, information, or arrest, the department shall provide to the licensee a conditional nonapproval number.

2. Within 24 working hours, the department shall determine the disposition of the indictment, information, or arrest and inform the licensee as to whether the potential buyer is prohibited from receiving or possessing a firearm. For purposes of this paragraph, "working hours" means the hours from 8 a.m. to 5 p.m. Monday through Friday, excluding legal holidays.

3. The office of the clerk of court, at no charge to the department, shall respond to any department request for data on the disposition of the indictment, information, or arrest as soon as possible, but in no event later than 8 working hours.

4. The department shall determine as quickly as possible within the allotted time period whether the potential buyer is prohibited from receiving or possessing a firearm.

5. If the potential buyer is not so prohibited, or if the department cannot determine the disposition information within the allotted time period, the department shall provide the licensee with a conditional approval number.

6. If the buyer is so prohibited, the conditional nonapproval number shall become a nonapproval

number.

7. The department shall continue its attempts to obtain the disposition information and may retain a record of all approval numbers granted without sufficient disposition information. If the department later obtains disposition information which indicates:

a. That the potential buyer is not prohibited from owning a firearm, it shall treat the record of the transaction in accordance with this section; or

b. That the potential buyer is prohibited from owning a firearm, it shall immediately revoke the conditional approval number and notify local law enforcement.

8. During the time that disposition of the indictment, information, or arrest is pending and until the department is notified by the potential buyer that there has been a final disposition of the indictment, information, or arrest, the conditional nonapproval number shall remain in effect.

(3) In the event of scheduled computer downtime, electronic failure, or similar emergency beyond the control of the Department of Law Enforcement, the department shall immediately notify the licensee of the reason for, and estimated length of, such delay. After such notification, the department shall forthwith, and in no event later than the end of the next business day of the licensee, either inform the requesting licensee if its records demonstrate that the buyer or transferee is prohibited from receipt or possession of a firearm pursuant to Florida and Federal law or provide the licensee with a unique approval number. Unless notified by the end of said next business day that the buyer or transferee is so prohibited, and without regard to whether she or he has received a unique approval number, the licensee may complete the sale or transfer and shall not be deemed in violation of this section with respect to such sale or transfer.

(4)(a) Any records containing any of the information set forth in subsection (1) pertaining to a buyer or transferee who is not found to be prohibited from receipt or transfer of a firearm by reason of Florida and federal law which records are created by the Department of Law Enforcement to conduct the criminal history record check shall be confidential and exempt from the provisions of s. 119.07(1) and may not be disclosed by the Department of Law Enforcement or any officer or employee thereof to any person or to another agency. The Department of Law Enforcement shall destroy any such records forthwith after it communicates the approval and nonapproval numbers to the licensee and, in any event, such records shall be destroyed within 48 hours after the day of the response to the licensee's request.

(b) Notwithstanding the provisions of this subsection, the Department of Law Enforcement may maintain records of NCIC transactions to the extent required by the Federal Government, and may maintain a log of dates of requests for criminal history records checks, unique approval and nonapproval numbers, license identification numbers, and transaction numbers corresponding to such dates for a period of not longer than 2 years or as otherwise required by law.

(c) Nothing in this chapter shall be construed to allow the State of Florida to maintain records containing the names of purchasers or transferees who receive unique approval numbers or to maintain records of firearm transactions.

(d) Any officer or employee, or former officer or employee of the Department of Law Enforcement or law enforcement agency who intentionally and maliciously violates the provisions of this subsection commits a felony of the third degree punishable as provided in s. 775.082 or s. 775.083.

(5) The Department of Law Enforcement shall establish a toll-free telephone number which shall be operational 7 days a week with the exception of Christmas Day and New Year's Day, for a period of 12 hours a day beginning at 9 a.m. and ending at 9 p.m., for purposes of responding to inquiries as described in this section from licensed manufacturers, licensed importers, and licensed dealers. The Department of Law Enforcement shall employ and train such personnel as are necessary expeditiously to administer the provisions of this section.

(6) Any person who is denied the right to receive or purchase a firearm as a result of the procedures established by this section may request a criminal history records review and correction in accordance with the rules promulgated by the Department of Law Enforcement.

(7) It shall be unlawful for any licensed dealer, licensed manufacturer, or licensed importer willfully and intentionally to request criminal history record information under false pretenses, or willfully and intentionally to disseminate criminal history record information to any person other than the subject of such information. Any person convicted of a violation of this subsection commits a felony of the third degree punishable as provided in s. 775.082 or s. 775.083.

(8) The Department of Law Enforcement shall promulgate regulations to ensure the identity, confidentiality, and security of all records and data provided pursuant to this section.

(9) This section shall become effective at such time as the Department of Law Enforcement has notified all licensed importers, licensed manufacturers, and licensed dealers in writing that the procedures and toll-free number described in this section are operational. This section shall remain in effect only during such times as the procedures described in subsection (2) remain operational.

(10) A licensed importer, licensed manufacturer, or licensed dealer is not required to comply with the requirements of this section in the event of:

(a) Unavailability of telephone service at the licensed premises due to the failure of the entity which provides telephone service in the state, region, or other geographical area in which the licensee is located to provide telephone service to the premises of the licensee due to the location of said premises; or the interruption of telephone service by reason of hurricane, tornado, flood, natural disaster, or other act of God, war, invasion, insurrection, riot, or other bona fide emergency, or other reason beyond the control of the licensee; or

(b) Failure of the Department of Law Enforcement to comply with the requirements of subsections (2) and (3).

(11) Compliance with the provisions of this chapter shall be a complete defense to any claim or cause of action under the laws of any state for liability for damages arising from the importation or manufacture, or the subsequent sale or transfer to any person who has been convicted in any court of a crime punishable by imprisonment for a term exceeding 1 year, of any firearm which has been shipped or transported in interstate or foreign commerce. The Department of Law Enforcement, its agents and employees shall not be liable for any claim or cause of action under the laws of any state for liability for damages arising from its actions in lawful compliance with this section.

(12)(a) Any potential buyer or transferee who willfully and knowingly provides false information or false or fraudulent identification commits a felony of the third degree punishable as provided in s. 775.082 or s. 775.083.

(b) Any licensed importer, licensed manufacturer, or licensed dealer who violates the provisions of subsection (1) commits a felony of the third degree punishable as provided in s. 775.082 or s. 775.083.

(c) Any employee or agency of a licensed importer, licensed manufacturer, or licensed dealer who violates the provisions of subsection (1) commits a felony of the third degree punishable as provided in s. 775.082 or s. 775.083.

(d) Any person who knowingly acquires a firearm through purchase or transfer intended for the use of a person who is prohibited by state or federal law from possessing or receiving a firearm commits a felony of the third degree, punishable as provided in s. 775.082 or s. 775.083.

(13) A person younger than 21 years of age may not purchase a firearm. The sale or transfer of a firearm to a person younger than 21 years of age may not be made or facilitated by a licensed importer, licensed manufacturer, or licensed dealer. A person who violates this subsection commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084. The prohibitions of this subsection do not apply to the purchase of a rifle or shotgun by a law enforcement

officer or correctional officer, as those terms are defined in s. 943.10(1), (2), (3), (6), (7), (8), or (9), or a servicemember as defined in s. 250.01.

(14) This section does not apply to employees of sheriff's offices, municipal police departments, correctional facilities or agencies, or other criminal justice or governmental agencies when the purchases or transfers are made on behalf of an employing agency for official law enforcement purposes.

History.—s. 1, ch. 89-191; s. 1, ch. 90-316; s. 4, ch. 92-183; s. 1, ch. 93-197; s. 1, ch. 94-256; s. 14, ch. 95-195; s. 8, ch. 95-430; s. 7, ch. 96-392; s. 429, ch. 96-406; s. 29, ch. 97-94; s. 1816, ch. 97-102; s. 6, ch. 98-284; ss. 8, 9, ch. 99-300; s. 1, ch. 2000-218; s. 12, ch. 2002-205; s. 3, ch. 2003-23; s. 1, ch. 2004-79; s. 1, ch. 2006-176; s. 1, ch. 2008-50; s. 1, ch. 2009-233; s. 1, ch. 2010-62; s. 4, ch. 2011-145; s. 1, ch. 2013-249; s. 11, ch. 2016-127; s. 46, ch. 2017-3; s. 8, ch. 2017-23; s. 11, ch. 2018-3; s. 1, ch. 2018-144.

¹Note.-

A. Section 1, ch. 89-191, provides that "[t]his section expires on the effective date of federal law which provides access to national criminal history information and requires national criminal history checks on potential buyers or transferees on firearms."

B. Section 3, ch. 90-316, provides that "[t]his act shall not be construed to nullify the expiration of s. 790.065, Florida Statutes, provided for in chapter 89-191, Laws of Florida."

²Note.—Section 2, ch. 2009-233, provides that "[s]ection 790.065, Florida Statutes, must be reviewed by the Legislature and approved for continuation before the limit of \$8 on the fee established by the Department of Law Enforcement under s. 790.065(1)(b), Florida Statutes, may be increased." Paragraph (1)(b) was redesignated as subparagraph (1)(a)2. by s. 4, ch. 2011-145.

790.0655 Purchase and delivery of firearms; mandatory waiting period; exceptions; penalties.—

(1)(a) A mandatory waiting period is imposed between the purchase and delivery of a firearm. The mandatory waiting period is 3 days, excluding weekends and legal holidays, or expires upon the completion of the records checks required under s. 790.065, whichever occurs later. "Purchase" means the transfer of money or other valuable consideration to the retailer. "Retailer" means and includes a licensed importer, licensed manufacturer, or licensed dealer engaged in the business of making firearm sales at retail or for distribution, or use, or consumption, or storage to be used or consumed in this state, as defined in s. 212.02(13).

(b) Records of firearm sales must be available for inspection by any law enforcement agency, as defined in s. 934.02, during normal business hours.

(2) The waiting period does not apply in the following circumstances:

(a) When a firearm is being purchased by a holder of a concealed weapons permit as defined in s. 790.06.

(b) To a trade-in of another firearm.

(c) To the purchase of a rifle or shotgun, upon a person's successfully completing a minimum of a 16-hour hunter safety course and possessing a hunter safety certification card issued under s.

379.3581. A person who is exempt from the hunter safety course requirements under s. 379.3581 and holds a valid Florida hunting license is exempt from the mandatory waiting period under this section for the purchase of a rifle or shotgun.

(d) When a rifle or shotgun is being purchased by a law enforcement officer or correctional officer, as those terms are defined in s. 943.10(1), (2), (3), (6), (7), (8), or (9), or a servicemember as defined in s. 250.01.

(3) It is a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084:

(a) For any retailer, or any employee or agent of a retailer, to deliver a firearm before the expiration of the waiting period, subject to the exceptions provided in subsection (2).

(b) For a purchaser to obtain delivery of a firearm by fraud, false pretense, or false representation.

History.-s. 1, ch. 91-24; s. 3, ch. 92-183; s. 98, ch. 99-3; s. 12, ch. 2018-3.

790.07 Persons engaged in criminal offense, having weapons.—

(1) Whoever, while committing or attempting to commit any felony or while under indictment, displays, uses, threatens, or attempts to use any weapon or electric weapon or device or carries a concealed weapon is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(2) Whoever, while committing or attempting to commit any felony, displays, uses, threatens, or attempts to use any firearm or carries a concealed firearm is guilty of a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, and s. 775.084.

(3) The following crimes are excluded from application of this section: Antitrust violations, unfair trade practices, restraints of trade, nonsupport of dependents, bigamy, or other similar offenses.

(4) Whoever, having previously been convicted of a violation of subsection (1) or subsection (2) and, subsequent to such conviction, displays, uses, threatens, or attempts to use any weapon, firearm, or electric weapon or device, carries a concealed weapon, or carries a concealed firearm while committing or attempting to commit any felony or while under indictment is guilty of a felony of the first degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084. Sentence shall not be suspended or deferred under the provisions of this subsection.

History.-s. 10, ch. 1637, 1868; RS 2423; s. 2, ch. 4124, 1893; GS 3269; RGS 5102; CGL 7204; s. 4, ch. 69-306; s. 741, ch. 71-136; s. 2, ch. 76-165; s. 2, ch. 91-223.

790.08 Taking possession of weapons and arms; reports; disposition; custody.—

(1) Every officer making an arrest under s. 790.07, or under any other law or municipal ordinance within the state, shall take possession of any weapons, electric weapons or devices, or arms mentioned in s. 790.07 found upon the person arrested and deliver them to the sheriff of the county, or the chief of police of the municipality wherein the arrest is made, who shall retain the same until after the trial of the person arrested.

(2) If the person arrested as aforesaid is convicted of violating s. 790.07, or of a similar offense under any municipal ordinance, or any other offense involving the use or attempted use of such weapons, electric weapons or devices, or arms, such weapons, electric weapons or devices, or arms shall become forfeited to the state, without any order of forfeiture being necessary, although the making of such an order shall be deemed proper, and such weapons, electric weapons or devices, or arms shall be forthwith delivered to the sheriff by the chief of police or other person having custody thereof, and the sheriff is hereby made the custodian of such weapons, electric weapons or devices, and arms for the state.

(3) If the person arrested as aforesaid is acquitted of the offenses mentioned in subsection (2), the said weapons, electric weapons or devices, or arms taken from the person as aforesaid shall be returned to him or her; however, if he or she fails to call for or receive the same within 60 days from and after his or her acquittal or the dismissal of the charges against him or her, the same shall be delivered to the sheriff as aforesaid to be held by the sheriff as hereinafter provided. This subsection shall likewise apply to persons and their weapons, electric weapons or devices, or arms who have heretofore been acquitted or the charges against them dismissed.

(4) All such weapons, electric weapons or devices, and arms now in, or hereafter coming into, the hands of any of the peace officers of this state or any of its political subdivisions, which have been found abandoned or otherwise discarded, or left in their hands and not reclaimed by the owners shall, within 60 days, be delivered by such peace officers to the sheriff of the county aforesaid.

(5) Weapons, electric weapons or devices, and arms coming into the hands of the sheriff pursuant to subsections (3) and (4) aforesaid shall, unless reclaimed by the owner thereof within 6 months from the date the same come into the hands of the said sheriff, become forfeited to the state, and no action or proceeding for their recovery shall thereafter be maintained in this state.

(6) Weapons, electric weapons or devices, and arms coming into the hands of the sheriff as

aforesaid shall be listed, kept, and held by him or her as custodian for the state. Any or all such weapons, electric weapons or devices, and arms suitable for use by the sheriff may be so used. All such weapons, electric weapons or devices, and arms not needed by the said sheriff may be loaned to any other department of the state or to any county or municipality having use for such weapons, electric weapons or devices, and arms. The sheriff shall take the receipt of such other department, county, or municipality for such weapons, electric weapons or devices, and arms which are not needed or which are useless or unfit for use shall be destroyed or otherwise disposed of by the sheriff as provided in chapter 705 or as provided in the Florida Contraband Forfeiture Act. All sums received from the sale or other chapter 705 as aforesaid shall be paid into the State Treasury for the benefit of the State School Fund and shall become a part thereof. All sums received from the sale or other disposition of any such weapons or devices, or arms disposed of by the sheriff under the Florida Contraband Forfeiture Act shall be disbursed as provided therein.

(7) This section does not apply to any municipality in any county having home rule under the State Constitution.

History.—s. 3, ch. 3620, 1885; RS 2424; GS 3270; RGS 5103; CGL 7205; s. 1, ch. 22049, 1943; s. 1, ch. 65-189; ss. 1, 2, 3, 4, 5, 6, 7, 8, ch. 67-523; s. 3, ch. 67-2207; ss. 20, 35, ch. 69-106; s. 2, ch. 76-165; s. 24, ch. 79-8; s. 12, ch. 80-68; s. 1, ch. 83-21; s. 17, ch. 97-93; s. 1207, ch. 97-102.

790.09 Manufacturing or selling metallic knuckles.—Whoever manufactures or causes to be manufactured or sells or exposes for sale any instrument or weapon of the kind usually known as metallic knuckles commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

History.-s. 11, ch. 1637, 1868; RS 2425; s. 3, ch. 4124, 1893; GS 3271; RGS 5104; CGL 7206; s. 742, ch. 71-136; s. 1, ch. 2016-106.

790.10 Improper exhibition of dangerous weapons or firearms.—If any person having or carrying any dirk, sword, sword cane, firearm, electric weapon or device, or other weapon shall, in the presence of one or more persons, exhibit the same in a rude, careless, angry, or threatening manner, not in necessary self-defense, the person so offending shall be guilty of a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

History.-s. 1, ch. 4532, 1897; GS 3272; RGS 5105; CGL 7207; s. 5, ch. 69-306; s. 743, ch. 71-136; s. 2, ch. 76-165; s. 174, ch. 91-224.

790.115 Possessing or discharging weapons or firearms at a school-sponsored event or on school property prohibited; penalties; exceptions.—

(1) A person who exhibits any sword, sword cane, firearm, electric weapon or device, destructive device, or other weapon as defined in s. 790.001(13), including a razor blade, box cutter, or common pocketknife, except as authorized in support of school-sanctioned activities, in the presence of one or more persons in a rude, careless, angry, or threatening manner and not in lawful self-defense, at a school-sponsored event or on the grounds or facilities of any school, school bus, or school bus stop, or within 1,000 feet of the real property that comprises a public or private elementary school, middle school, or secondary school, during school hours or during the time of a sanctioned school activity, commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084. This subsection does not apply to the exhibition of a firearm or weapon on private real property within 1,000 feet of a school by the owner of such property or by a person whose presence on such property has been authorized, licensed, or invited by the owner.

(2)(a) A person shall not possess any firearm, electric weapon or device, destructive device, or other weapon as defined in s. 790.001(13), including a razor blade or box cutter, except as authorized in support of school-sanctioned activities, at a school-sponsored event or on the property of any

school, school bus, or school bus stop; however, a person may carry a firearm:

1. In a case to a firearms program, class or function which has been approved in advance by the principal or chief administrative officer of the school as a program or class to which firearms could be carried;

2. In a case to a career center having a firearms training range; or

3. In a vehicle pursuant to s. 790.25(5); except that school districts may adopt written and published policies that waive the exception in this subparagraph for purposes of student and campus parking privileges.

For the purposes of this section, "school" means any preschool, elementary school, middle school, junior high school, secondary school, career center, or postsecondary school, whether public or nonpublic.

(b) A person who willfully and knowingly possesses any electric weapon or device, destructive device, or other weapon as defined in s. 790.001(13), including a razor blade or box cutter, except as authorized in support of school-sanctioned activities, in violation of this subsection commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(c)1. A person who willfully and knowingly possesses any firearm in violation of this subsection commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

2. A person who stores or leaves a loaded firearm within the reach or easy access of a minor who obtains the firearm and commits a violation of subparagraph 1. commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083; except that this does not apply if the firearm was stored or left in a securely locked box or container or in a location which a reasonable person would have believed to be secure, or was securely locked with a firearm-mounted push-button combination lock or a trigger lock; if the minor obtains the firearm as a result of an unlawful entry by any person; or to members of the Armed Forces, National Guard, or State Militia, or to police or other law enforcement officers, with respect to firearm possession by a minor which occurs during or incidental to the performance of their official duties.

(d) A person who discharges any weapon or firearm while in violation of paragraph (a), unless discharged for lawful defense of himself or herself or another or for a lawful purpose, commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(e) The penalties of this subsection shall not apply to persons licensed under s. 790.06. Persons licensed under s. 790.06 shall be punished as provided in s. 790.06(12), except that a licenseholder who unlawfully discharges a weapon or firearm on school property as prohibited by this subsection commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(3) This section does not apply to any law enforcement officer as defined in s. 943.10(1), (2), (3),
(4), (6), (7), (8), (9), or (14).

(4) Notwithstanding s. 985.24, s. 985.245, or s. 985.25(1), any minor under 18 years of age who is charged under this section with possessing or discharging a firearm on school property shall be detained in secure detention, unless the state attorney authorizes the release of the minor, and shall be given a probable cause hearing within 24 hours after being taken into custody. At the hearing, the court may order that the minor continue to be held in secure detention for a period of 21 days, during which time the minor shall receive medical, psychiatric, psychological, or substance abuse examinations pursuant to s. 985.18, and a written report shall be completed.

History.-s. 4, ch. 92-130; s. 11, ch. 93-230; s. 1, ch. 94-289; s. 1209, ch. 97-102; s. 20, ch. 97-234; s. 3, ch. 99-284; s. 61, ch. 2004-357; s. 112, ch. 2006-120; s. 2, ch. 2006-186.

790.145 Crimes in pharmacies; possession of weapons; penalties.-

(1) Unless otherwise provided by law, any person who is in possession of a concealed "firearm,"

as defined in s. 790.001(6), or a "destructive device," as defined in s. 790.001(4), within the premises of a "pharmacy," as defined in chapter 465, is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(2) The provisions of this section do not apply:

(a) To any law enforcement officer;

(b) To any person employed and authorized by the owner, operator, or manager of a pharmacy to carry a firearm or destructive device on such premises; or

(c) To any person licensed to carry a concealed weapon.

History.-s. 1, ch. 81-278; s. 2, ch. 90-124; s. 2, ch. 90-176.

790.15 Discharging firearm in public or on residential property.—

(1) Except as provided in subsection (2) or subsection (3), any person who knowingly discharges a firearm in any public place or on the right-of-way of any paved public road, highway, or street, who knowingly discharges any firearm over the right-of-way of any paved public road, highway, or street or over any occupied premises, or who recklessly or negligently discharges a firearm outdoors on any property used primarily as the site of a dwelling as defined in s. 776.013 or zoned exclusively for residential use commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083. This section does not apply to a person lawfully defending life or property or performing official duties requiring the discharge of a firearm or to a person discharging a firearm on public roads or properties expressly approved for hunting by the Fish and Wildlife Conservation Commission or Florida Forest Service.

(2) Any occupant of any vehicle who knowingly and willfully discharges any firearm from the vehicle within 1,000 feet of any person commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(3) Any driver or owner of any vehicle, whether or not the owner of the vehicle is occupying the vehicle, who knowingly directs any other person to discharge any firearm from the vehicle commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(4) Any person who recreationally discharges a firearm outdoors, including target shooting, in an area that the person knows or reasonably should know is primarily residential in nature and that has a residential density of one or more dwelling units per acre, commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083. This subsection does not apply:

(a) To a person lawfully defending life or property or performing official duties requiring the discharge of a firearm;

(b) If, under the circumstances, the discharge does not pose a reasonably foreseeable risk to life, safety, or property; or

(c) To a person who accidentally discharges a firearm.

History.-s. 1, ch. 3289, 1881; RS 2683; GS 3626; RGS 5557; CGL 7743; s. 1, ch. 61-334; s. 745, ch. 71-136; s. 1, ch. 78-17; s. 1, ch. 89-157; s. 229, ch. 99-245; s. 77, ch. 2012-7; s. 3, ch. 2012-108; s. 1, ch. 2016-12.

790.151 Using firearm while under the influence of alcoholic beverages, chemical substances, or controlled substances; penalties.—

(1) As used in ss. 790.151-790.157, to "use a firearm" means to discharge a firearm or to have a firearm readily accessible for immediate discharge.

(2) For the purposes of this section, "readily accessible for immediate discharge" means loaded and in a person's hand.

(3) It is unlawful and punishable as provided in subsection (4) for any person who is under the influence of alcoholic beverages, any chemical substance set forth in s. 877.111, or any substance controlled under chapter 893, when affected to the extent that his or her normal faculties are impaired, to use a firearm in this state.

(4) Any person who violates subsection (3) commits a misdemeanor of the second degree,

punishable as provided in s. 775.082 or s. 775.083.

(5) This section does not apply to persons exercising lawful self-defense or defense of one's property.

History.-s. 1, ch. 91-84; s. 1210, ch. 97-102.

790.153 Tests for impairment or intoxication; right to refuse.—

(1)(a) Any person who uses a firearm within this state shall submit to an approved chemical or physical breath test to determine the alcoholic content of the blood and to a urine test to detect the presence of controlled substances, if there is probable cause to believe that the person was using a firearm while under the influence of alcoholic beverages or controlled substances or that the person is lawfully arrested for any offense allegedly committed while he or she was using a firearm while under the influence of alcoholic beverages or controlled substances. The breath test shall be incidental to a lawful arrest and administered at the request of a law enforcement officer who has probable cause to believe such person was using the firearm within this state while under the influence of alcoholic beverages. The urine test shall be incidental to a lawful arrest and administered at a detention facility, mobile or otherwise, which is equipped to administer such tests at the request of a law enforcement officer who has probable cause to believe such person was using a firearm within this state while under the influence of controlled substances. The urine test shall be administered at a detention facility or any other facility, mobile or otherwise, which is equipped to administer such tests in a reasonable manner that will ensure the accuracy of the specimen and maintain the privacy of the individual involved. The administration of either test shall not preclude the administration of the other test. The refusal to submit to a chemical or physical breath or urine test upon the request of a law enforcement officer as provided in this section shall be admissible into evidence in any criminal proceeding. This section shall not hinder the taking of a mandatory blood test as outlined in s. 790.155.

(b) If the arresting officer does not request a chemical or physical test of the person arrested for any offense allegedly committed while the person was using a firearm while under the influence of alcoholic beverages or controlled substances, such person may request the arresting officer to have a chemical or physical test made of the arrested person's breath for the purpose of determining the alcoholic content of the person's blood or a chemical test of urine or blood for the purpose of determining the presence of controlled substances; and, if so requested, the arresting officer shall have the test performed.

(c) The provisions of s. 316.1932(1)(f), relating to administration of tests for determining the weight of alcohol in the defendant's blood, additional tests at the defendant's expense, availability of test information to the defendant or the defendant's attorney, and liability of medical institutions and persons administering such tests are incorporated into this act.

(2) The results of any test administered pursuant to this section for the purpose of detecting the presence of any controlled substance shall not be admissible as evidence in a criminal prosecution for the possession of a controlled substance.

(3) Notwithstanding any provision of law pertaining to the confidentiality of hospital records or other medical records, information obtained pursuant to this section shall be released to a court, prosecuting attorney, defense attorney, or law enforcement officer in connection with an alleged violation of s. 790.151 upon request for such information.

History.-s. 2, ch. 91-84; s. 1211, ch. 97-102.

790.155 Blood test for impairment or intoxication in cases of death or serious bodily injury; right to use reasonable force.—

(1)(a) Notwithstanding any recognized ability to refuse to submit to the tests provided in s. 790.153, if a law enforcement officer has probable cause to believe that a firearm used by a person

under the influence of alcoholic beverages or controlled substances has caused the death or serious bodily injury of a human being, such person shall submit, upon the request of a law enforcement officer, to a test of his or her blood for the purpose of determining the alcoholic content thereof or the presence of controlled substances therein. The law enforcement officer may use reasonable force if necessary to require such person to submit to the administration of the blood test. The blood test shall be performed in a reasonable manner.

(b) The term "serious bodily injury" means a physical condition which creates a substantial risk of death, serious personal disfigurement, or protracted loss or impairment of the function of any bodily member or organ.

(2) The provisions of s. 316.1933(2), relating to blood tests for impairment or intoxication, are incorporated into this act.

(3)(a) Any criminal charge resulting from the incident giving rise to the officer's demand for testing should be tried concurrently with a charge of any violation of s. 790.151. If such charges are tried separately, the fact that such person refused, resisted, obstructed, or opposed testing shall be admissible at the trial of the criminal offense which gave rise to the demand for testing.

(b) The results of any test administered pursuant to this section for the purpose of detecting the presence of any controlled substance shall not be admissible as evidence in a criminal prosecution for the possession of a controlled substance.

(4) Notwithstanding any provision of law pertaining to the confidentiality of hospital records or other medical records, information obtained pursuant to this section shall be released to a court, prosecuting attorney, defense attorney, or law enforcement officer in connection with an alleged violation of s. 790.151 upon request for such information.

History.-s. 3, ch. 91-84; s. 1212, ch. 97-102.

790.157 Presumption of impairment; testing methods.-

(1) It is unlawful and punishable as provided in s. 790.151 for any person who is under the influence of alcoholic beverages or controlled substances, when affected to the extent that his or her normal faculties are impaired, to use a firearm in this state.

(2) Upon the trial of any civil or criminal action or proceeding arising out of acts alleged to have been committed by any person while using a firearm while under the influence of alcoholic beverages or controlled substances, when affected to the extent that his or her normal faculties were impaired or to the extent that the person was deprived of full possession of his or her normal faculties, the results of any test administered in accordance with s. 790.153 or s. 790.155 and this section shall be admissible into evidence when otherwise admissible, and the amount of alcohol in the person's blood at the time alleged, as shown by chemical analysis of the person's blood or chemical or physical analysis of the person's breath, shall give rise to the following presumptions:

(a) If there was at that time 0.05 percent or less by weight of alcohol in the person's blood, it shall be presumed that the person was not under the influence of alcoholic beverages to the extent that his or her normal faculties were impaired.

(b) If there was at that time in excess of 0.05 percent but less than 0.10 percent by weight of alcohol in the person's blood, such fact shall not give rise to any presumption that the person was or was not under the influence of alcoholic beverages to the extent that his or her normal faculties were impaired, but such fact may be considered with other competent evidence in determining whether the person was under the influence of alcoholic beverages to the extent that his or her normal faculties were the person was under the influence of alcoholic beverages to the extent that his or her normal faculties were impaired.

(c) If there was at that time 0.10 percent or more by weight of alcohol in the person's blood, that fact shall be prima facie evidence that the person was under the influence of alcoholic beverages to the extent that his or her normal faculties were impaired.

The percent by weight of alcohol in the blood shall be based upon grams of alcohol per 100 milliliters of blood. The foregoing provisions of this subsection shall not be construed as limiting the introduction of any other competent evidence bearing upon the question of whether the person was under the influence of alcoholic beverages to the extent that his or her normal faculties were impaired.

(3) A chemical analysis of a person's blood to determine its alcoholic content or a chemical or physical analysis of a person's breath, in order to be considered valid under the provisions of this section, must have been performed substantially in accordance with methods approved by the Florida Department of Law Enforcement and by an individual possessing a valid permit issued by the department for this purpose. Any insubstantial differences between approved techniques and actual testing procedures in an individual case shall not render the test or test results invalid. The Florida Department of Law Enforcement may approve satisfactory techniques or methods, ascertain the qualification and competence of individuals to conduct such analyses, and issue permits which shall be subject to termination or revocation in accordance with rules adopted by the department.

(4) Any person charged with using a firearm while under the influence of alcoholic beverages or controlled substances to the extent that his or her normal faculties were impaired, whether in a municipality or not, shall be entitled to trial by jury according to the Florida Rules of Criminal Procedure.

History.-s. 4, ch. 91-84; s. 1213, ch. 97-102; s. 294, ch. 99-8.

790.16 Discharging machine guns; penalty.-

(1) It is unlawful for any person to shoot or discharge any machine gun upon, across, or along any road, street, or highway in the state; upon or across any public park in the state; or in, upon, or across any public place where people are accustomed to assemble in the state. The discharge of such machine gun in, upon, or across such public street; in, upon, or across such public place, whether indoors or outdoors, including all theaters and athletic stadiums, with intent to do bodily harm to any person or with intent to do damage to property not resulting in the death of another person shall be a felony of the first degree, punishable as provided in s. 775.082. A sentence not exceeding life imprisonment is specifically authorized when great bodily harm to another or serious disruption of governmental operations results.

(2) This section shall not apply to the use of such machine guns by any United States or state militia or by any law enforcement officer while in the discharge of his or her lawful duty in suppressing riots and disorderly conduct and in preserving and protecting the public peace or in the preservation of public property, or when said use is authorized by law.

History.—s. 1, ch. 16111, 1933; CGL 1936 Supp. 7748(1); s. 746, ch. 71-136; s. 5, ch. 72-724; s. 1, ch. 76-38; s. 1214, ch. 97-102.

790.161 Making, possessing, throwing, projecting, placing, or discharging any destructive device or attempt so to do, felony; penalties.—A person who willfully and unlawfully makes, possesses, throws, projects, places, discharges, or attempts to make, possess, throw, project, place, or discharge any destructive device:

(1) Commits a felony of the third degree, punishable as provided in s. 775.082 or s. 775.084.

(2) If the act is perpetrated with the intent to do bodily harm to any person, or with the intent to do property damage, or if the act results in a disruption of governmental operations, commerce, or the private affairs of another person, commits a felony of the second degree, punishable as provided in s. 775.082 or s. 775.084.

(3) If the act results in bodily harm to another person or in property damage, commits a felony of the first degree, punishable as provided in s. 775.082 or s. 775.084.

(4) If the act results in the death of another person, commits a capital felony, punishable as provided in s. 775.082. In the event the death penalty in a capital felony is held to be

unconstitutional by the Florida Supreme Court or the United States Supreme Court, the court having jurisdiction over a person previously sentenced to death for a capital felony shall cause such person to be brought before the court, and the court shall sentence such person to life imprisonment if convicted of murder in the first degree or of a capital felony under this subsection, and such person shall be ineligible for parole. No sentence of death shall be reduced as a result of a determination that a method of execution is held to be unconstitutional under the State Constitution or the Constitution of the United States.

History.-s. 1, ch. 59-29; s. 6, ch. 69-306; s. 1, ch. 70-85; s. 747, ch. 71-136; s. 6, ch. 72-724; s. 2, ch. 76-38; s. 44, ch. 88-381; s. 3, ch. 90-124; s. 3, ch. 90-176; s. 19, ch. 93-406; s. 2, ch. 94-228; s. 3, ch. 98-3.

790.1612 Authorization for governmental manufacture, possession, and use of destructive devices.—The governing body of any municipality or county and the Division of State Fire Marshal of the Department of Financial Services have the power to authorize the manufacture, possession, and use of destructive devices as defined in s. 790.001(4).

History.-s. 6, ch. 90-124; s. 6, ch. 90-176; s. 1905, ch. 2003-261.

790.1615 Unlawful throwing, projecting, placing, or discharging of destructive device or bomb that results in injury to another; penalty.—

(1) A person who perpetrates any unlawful throwing, projecting, placing, or discharging of a destructive device or bomb that results in any bodily harm to a firefighter or any other person, regardless of intent or lack of intent to cause such harm, commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

(2) A person who perpetrates any unlawful throwing, projecting, placing, or discharging of a destructive device or bomb that results in great bodily harm, permanent disability, or permanent disfigurement to a firefighter or any other person, regardless of intent or lack of intent to cause such harm, commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(3) Upon conviction and adjudication of guilt, a person may be sentenced separately, pursuant to s. 775.021(4), for any violation of this section and for any unlawful throwing, projecting, placing, or discharging of a destructive device or bomb committed during the same criminal episode. A conviction for any unlawful throwing, projecting, placing, or discharging of a destructive device or bomb, however, is not necessary for a conviction under this section.

History.-s. 1, ch. 84-23; s. 7, ch. 90-124; s. 7, ch. 90-176.

790.162 Threat to throw, project, place, or discharge any destructive device, felony; penalty.—It is unlawful for any person to threaten to throw, project, place, or discharge any destructive device with intent to do bodily harm to any person or with intent to do damage to any property of any person, and any person convicted thereof commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

History.-s. 2, ch. 59-29; s. 7, ch. 69-306; s. 748, ch. 71-136; s. 45, ch. 88-381; s. 4, ch. 90-124; s. 4, ch. 90-176.

790.163 False report concerning planting a bomb, an explosive, or a weapon of mass destruction, or concerning the use of firearms in a violent manner; penalty.—

(1) It is unlawful for any person to make a false report, with intent to deceive, mislead, or otherwise misinform any person, concerning the placing or planting of any bomb, dynamite, other deadly explosive, or weapon of mass destruction as defined in s. 790.166, or concerning the use of firearms in a violent manner against a person or persons. A person who violates this subsection commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(2) Notwithstanding any other law, adjudication of guilt or imposition of sentence for a violation of this section may not be suspended, deferred, or withheld. However, the state attorney may move

the sentencing court to reduce or suspend the sentence of any person who is convicted of a violation of this section and who provides substantial assistance in the identification, arrest, or conviction of any of his or her accomplices, accessories, coconspirators, or principals.

(3) Proof that a person accused of violating this section knowingly made a false report is prima facie evidence of the accused person's intent to deceive, mislead, or otherwise misinform any person.

(4) In addition to any other penalty provided by law with respect to any person who is convicted of a violation of this section that resulted in the mobilization or action of any law enforcement officer or any state or local agency, a person convicted of a violation of this section may be required by the court to pay restitution for all of the costs and damages arising from the criminal conduct.

History.-s. 3, ch. 59-29; s. 749, ch. 71-136; s. 1, ch. 2002-28; s. 1, ch. 2016-156.

790.164 False reports concerning planting a bomb, explosive, or weapon of mass destruction in, or committing arson against, state-owned property, or concerning the use of firearms in a violent manner; penalty; reward.—

(1) It is unlawful for any person to make a false report, with intent to deceive, mislead, or otherwise misinform any person, concerning the placing or planting of any bomb, dynamite, other deadly explosive, or weapon of mass destruction as defined in s. 790.166, concerning any act of arson or other violence to property owned by the state or any political subdivision, or concerning the use of firearms in a violent manner against a person or persons. A person who violates this subsection commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(2) Notwithstanding any other law, adjudication of guilt or imposition of sentence for a violation of this section may not be suspended, deferred, or withheld. However, the state attorney may move the sentencing court to reduce or suspend the sentence of any person who is convicted of a violation of this section and who provides substantial assistance in the identification, arrest, or conviction of any of his or her accomplices, accessories, coconspirators, or principals.

(3) Proof that a person accused of violating this section knowingly made a false report is prima facie evidence of the accused person's intent to deceive, mislead, or otherwise misinform any person.

(4)(a) There shall be a \$5,000 reward for the giving of information to any law enforcement agency in the state, which information leads to the arrest and conviction of any person violating the provisions of this section. Any person claiming such reward shall apply to the law enforcement agency developing the case and be paid by the Department of Law Enforcement from the deficiency fund.

(b) There shall be only one reward given for each case, regardless of how many persons are arrested and convicted in connection with the case and regardless of how many persons submit claims for the reward.

(c) The Department of Law Enforcement shall establish procedures to be used by all reward applicants, and the circuit judge in whose jurisdiction the action occurs shall review all such applications and make final determination as to those applicants entitled to receive an award.

(d) In addition to any other penalty provided by law with respect to any person who is convicted of a violation of this section that resulted in the mobilization or action of any law enforcement officer or any state or local agency, a person convicted of a violation of this section may be required by the court to pay restitution for all of the costs and damages arising from the criminal conduct.

History.-ss. 2, 2A, ch. 71-306; s. 1, ch. 76-146; s. 236, ch. 77-104; s. 25, ch. 79-8; s. 2, ch. 2002-28; s. 2, ch. 2016-156.

790.165 Planting of "hoax bomb" prohibited; penalties.—

(1) For the purposes of this section, "hoax bomb" means any device or object that by its design, construction, content, or characteristics appears to be, or to contain, or is represented to be or to

contain, a destructive device or explosive as defined in this chapter, but is, in fact, an inoperative facsimile or imitation of such a destructive device or explosive, or contains no destructive device or explosive as was represented.

(2) Any person who, without lawful authority, manufactures, possesses, sells, delivers, sends, mails, displays, uses, threatens to use, attempts to use, or conspires to use, or who makes readily accessible to others, a hoax bomb commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(3) Any person who, while committing or attempting to commit any felony, possesses, displays, or threatens to use any hoax bomb commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084. Notwithstanding any other law, adjudication of guilt or imposition of sentence may not be suspended, deferred, or withheld. However, the state attorney may move the sentencing court to reduce or suspend the sentence of any person who is convicted of a violation of this section and who provides substantial assistance in the identification, arrest, or conviction of any of his or her accomplices, accessories, coconspirators, or principals.

(4) Subsection (2) does not apply to any law enforcement officer, firefighter, person, or corporation licensed pursuant to chapter 493, or member of the armed forces of the United States while engaged in training or other lawful activity within the scope of his or her employment, or to any person properly authorized to test a security system, or to any security personnel, while operating within the scope of their employment, including, but not limited to, security personnel in airports and other controlled access areas, or to any member of a theatrical company or production using a hoax bomb as property during the course of a rehearsal or performance.

(5) In addition to any other penalty provided by law with respect to any person who is convicted of a violation of this section that resulted in the mobilization or action of any law enforcement officer or any state or local agency, a person convicted of a violation of this section may be required by the court to pay restitution for all of the costs and damages arising from the criminal conduct.

History.-s. 39, ch. 87-243; s. 5, ch. 90-124; s. 5, ch. 90-176; s. 20, ch. 93-406; s. 1215, ch. 97-102; s. 3, ch. 2002-28.

790.166 Manufacture, possession, sale, delivery, display, use, or attempted or threatened use of a weapon of mass destruction or hoax weapon of mass destruction prohibited; definitions; penalties.—

(1) As used in this section, the term:

(a) "Weapon of mass destruction" means:

1. Any device or object that is designed or intended to cause death or serious bodily injury to any human or animal, or severe emotional or mental harm to any human, through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors;

2. Any device or object involving a biological agent;

3. Any device or object that is designed or intended to release radiation or radioactivity at a level dangerous to human or animal life; or

4. Any biological agent, toxin, vector, or delivery system.

(b) "Hoax weapon of mass destruction" means any device or object that by its design, construction, content, or characteristics appears to be or to contain, or is represented to be, constitute, or contain, a weapon of mass destruction as defined in this section, but which is, in fact, an inoperative facsimile, imitation, counterfeit, or representation of a weapon of mass destruction which does not meet the definition of a weapon of mass destruction or which does not actually contain or constitute a weapon, biological agent, toxin, vector, or delivery system prohibited by this section.

(c) "Biological agent" means any microorganism, virus, infectious substance, or biological product that may be engineered through biotechnology, or any naturally occurring or bioengineered component of any such microorganism, virus, infectious substance, or biological product, capable of causing:

1. Death, disease, or other biological malfunction in a human, an animal, a plant, or other living organism;

2. Deterioration of food, water, equipment, supplies, or material of any kind; or

3. Deleterious alteration of the environment.

(d) "Toxin" means the toxic material of plants, animals, microorganisms, viruses, fungi, or infectious substances, or a recombinant molecule, whatever its origin or method of reproduction, including:

1. Any poisonous substance or biological product that may be engineered through biotechnology produced by a living organism; or

2. Any poisonous isomer or biological product, homolog, or derivative of such substance.

(e) "Delivery system" means:

1. Any apparatus, equipment, device, or means of delivery specifically designed to deliver or disseminate a biological agent, toxin, or vector; or

2. Any vector.

(f) "Vector" means a living organism or molecule, including a recombinant molecule or biological product that may be engineered through biotechnology, capable of carrying a biological agent or toxin to a host.

(2) A person who, without lawful authority, manufactures, possesses, sells, delivers, sends, mails, displays, uses, threatens to use, attempts to use, or conspires to use, or who makes readily accessible to others a weapon of mass destruction commits a felony of the first degree, punishable by imprisonment for a term of years not exceeding life or as provided in s. 775.082, s. 775.083, or s. 775.084, and if death results, commits a capital felony, punishable as provided in s. 775.082.

(3) Any person who, without lawful authority, manufactures, possesses, sells, delivers, mails, sends, displays, uses, threatens to use, attempts to use, or conspires to use, or who makes readily accessible to others, a hoax weapon of mass destruction commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(4) Any person who, while committing or attempting to commit any felony, possesses, displays, or threatens to use any hoax weapon of mass destruction commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(5) Notwithstanding any other law, adjudication of guilt or imposition of sentence may not be suspended, deferred, or withheld for a violation of this section. However, the state attorney may move the sentencing court to reduce or suspend the sentence of any person who is convicted of a violation of this section and who provides substantial assistance in the identification, arrest, or conviction of any of his or her accomplices, accessories, coconspirators, or principals.

(6) Proof that a device or object described in subparagraph (1)(a)1. caused death or serious bodily injury to a human or animal through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors, is prima facie evidence that the device or object was designed or intended to cause such death or serious bodily injury. Proof that a device or object described in subparagraph (1)(a)3. released radiation or radioactivity at a level dangerous to human or animal life is prima facie evidence that the device or object was designed or intended for such release.

(7) This section does not apply to any member or employee of the Armed Forces of the United States, a federal or state governmental agency, or a private entity who is otherwise engaged in lawful activity within the scope of his or her employment, if such person is otherwise duly authorized or licensed to manufacture, possess, sell, deliver, display, or otherwise engage in activity relative to this section and if such person is in compliance with applicable federal and state law.

(8) For purposes of this section, the term "weapon of mass destruction" does not include:

(a) A device or instrument that emits or discharges smoke or an offensive, noxious, or irritant

liquid, powder, gas, or chemical for the purpose of immobilizing, incapacitating, or thwarting an attack by a person or animal and that is lawfully possessed or used by a person for the purpose of self-protection or, as provided in subsection (7), is lawfully possessed or used by any member or employee of the Armed Forces of the United States, a federal or state governmental agency, or a private entity. A member or employee of a federal or state governmental agency includes, but is not limited to, a law enforcement officer, as defined in s. 784.07; a federal law enforcement officer, as defined in s. 901.1505; and an emergency service employee, as defined in s. 496.404.

(b) The liquid, powder, gas, chemical, or smoke that is emitted or discharged from a device or instrument as specified in paragraph (a).

(9) In addition to any other penalty provided by law with respect to any person who is convicted of a violation of this section that resulted in the mobilization or action of any law enforcement officer or any state or local agency, a person convicted of a violation of this section may be required by the court to pay restitution for all of the costs and damages arising from the criminal conduct. History.-s. 2, ch. 2000-218; s. 4, ch. 2002-28.

Thistory. 5. 2, cm. 2000 210, 5. 1, cm. 2002 20.

790.169 Juvenile offenders; release of names and addresses.—A law enforcement agency may release for publication the name and address of a child who has been convicted of any offense involving possession or use of a firearm.

History.-s. 1, ch. 93-416.

790.17 Furnishing weapons to minors under 18 years of age or persons of unsound mind and furnishing firearms to minors under 18 years of age prohibited.—

(1) A person who sells, hires, barters, lends, transfers, or gives any minor under 18 years of age any dirk, electric weapon or device, or other weapon, other than an ordinary pocketknife, without permission of the minor's parent or guardian, or sells, hires, barters, lends, transfers, or gives to any person of unsound mind an electric weapon or device or any dangerous weapon, other than an ordinary pocketknife, commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

(2)(a) A person may not knowingly or willfully sell or transfer a firearm to a minor under 18 years of age, except that a person may transfer ownership of a firearm to a minor with permission of the parent or guardian. A person who violates this paragraph commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(b) The parent or guardian must maintain possession of the firearm except pursuant to s. 790.22. History.—ss. 1, 2, ch. 3285, 1881; RS 2684; GS 3627; RGS 5558; CGL 7744; s. 1, ch. 65-187; s. 750, ch. 71-136; s. 2, ch. 76-165; s. 175, ch. 91-224; s. 2, ch. 93-416.

790.173 Legislative findings and intent.-

(1) The Legislature finds that a tragically large number of Florida children have been accidentally killed or seriously injured by negligently stored firearms; that placing firearms within the reach or easy access of children is irresponsible, encourages such accidents, and should be prohibited; and that legislative action is necessary to protect the safety of our children.

(2) It is the intent of the Legislature that adult citizens of the state retain their constitutional right to keep and bear firearms for hunting and sporting activities and for defense of self, family, home, and business and as collectibles. Nothing in this act shall be construed to reduce or limit any existing right to purchase and own firearms, or to provide authority to any state or local agency to infringe upon the privacy of any family, home, or business, except by lawful warrant. History.-s. 1, ch. 89-534.

790.174 Safe storage of firearms required.—

(1) A person who stores or leaves, on a premise under his or her control, a loaded firearm, as defined in s. 790.001, and who knows or reasonably should know that a minor is likely to gain access

to the firearm without the lawful permission of the minor's parent or the person having charge of the minor, or without the supervision required by law, shall keep the firearm in a securely locked box or container or in a location which a reasonable person would believe to be secure or shall secure it with a trigger lock, except when the person is carrying the firearm on his or her body or within such close proximity thereto that he or she can retrieve and use it as easily and quickly as if he or she carried it on his or her body.

(2) It is a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083, if a person violates subsection (1) by failing to store or leave a firearm in the required manner and as a result thereof a minor gains access to the firearm, without the lawful permission of the minor's parent or the person having charge of the minor, and possesses or exhibits it, without the supervision required by law:

- (a) In a public place; or
- (b) In a rude, careless, angry, or threatening manner in violation of s. 790.10.

This subsection does not apply if the minor obtains the firearm as a result of an unlawful entry by any person.

 $\frac{1}{3}$ As used in this act, the term "minor" means any person under the age of 16. History.-ss. 2, 7, ch. 89-534; s. 1216, ch. 97-102. Note.-Also published at s. 784.05(4).

790.175 Transfer or sale of firearms; required warnings; penalties.-

(1) Upon the retail commercial sale or retail transfer of any firearm, the seller or transferor shall deliver a written warning to the purchaser or transferee, which warning states, in block letters not less than 1/4 inch in height:

"IT IS UNLAWFUL, AND PUNISHABLE BY IMPRISONMENT AND FINE, FOR ANY ADULT TO STORE OR LEAVE A FIREARM IN ANY PLACE WITHIN THE REACH OR EASY ACCESS OF A MINOR UNDER 18 YEARS OF AGE OR TO KNOWINGLY SELL OR OTHERWISE TRANSFER OWNERSHIP OR POSSESSION OF A FIREARM TO A MINOR OR A PERSON OF UNSOUND MIND."

(2) Any retail or wholesale store, shop, or sales outlet which sells firearms must conspicuously post at each purchase counter the following warning in block letters not less than 1 inch in height:

"IT IS UNLAWFUL TO STORE OR LEAVE A FIREARM IN ANY PLACE WITHIN THE REACH OR EASY ACCESS OF A MINOR UNDER 18 YEARS OF AGE OR TO KNOWINGLY SELL OR OTHERWISE TRANSFER OWNERSHIP OR POSSESSION OF A FIREARM TO A MINOR OR A PERSON OF UNSOUND MIND."

(3) Any person or business knowingly violating a requirement to provide warning under this section commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

History.-ss. 4, 7, ch. 89-534; s. 3, ch. 93-416.

790.18 Sale or transfer of arms to minors by dealers.—It is unlawful for any dealer in arms to sell or transfer to a minor any firearm, pistol, Springfield rifle or other repeating rifle, bowie knife or dirk knife, brass knuckles, or electric weapon or device. A person who violates this section commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

History.-s. 11, ch. 6421, 1913; RGS 5559; CGL 7745; s. 751, ch. 71-136; s. 2, ch. 76-165; s. 176, ch. 91-224; s. 4, ch. 93-416; s. 3, ch. 2016-106.

790.19 Shooting into or throwing deadly missiles into dwellings, public or private buildings, occupied or not occupied; vessels, aircraft, buses, railroad cars, streetcars, or other vehicles.—Whoever, wantonly or maliciously, shoots at, within, or into, or throws any missile or hurls

or projects a stone or other hard substance which would produce death or great bodily harm, at, within, or in any public or private building, occupied or unoccupied, or public or private bus or any train, locomotive, railway car, caboose, cable railway car, street railway car, monorail car, or vehicle of any kind which is being used or occupied by any person, or any boat, vessel, ship, or barge lying in or plying the waters of this state, or aircraft flying through the airspace of this state shall be guilty of a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

History.-s. 2, ch. 3281, 1881; RS 2696; ss. 1, 2, ch. 4987, 1901; ss. 1, 2, ch. 4988, 1901; GS 3628; RGS 5560; CGL 7746; s. 1, ch. 59-458; s. 752, ch. 71-136; s. 1, ch. 74-67.

790.22 Use of BB guns, air or gas-operated guns, or electric weapons or devices by minor under 16; limitation; possession of firearms by minor under 18 prohibited; penalties.—

(1) The use for any purpose whatsoever of BB guns, air or gas-operated guns, or electric weapons or devices, by any minor under the age of 16 years is prohibited unless such use is under the supervision and in the presence of an adult who is acting with the consent of the minor's parent.

(2) Any adult responsible for the welfare of any child under the age of 16 years who knowingly permits such child to use or have in his or her possession any BB gun, air or gas-operated gun, electric weapon or device, or firearm in violation of the provisions of subsection (1) of this section commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

(3) A minor under 18 years of age may not possess a firearm, other than an unloaded firearm at his or her home, unless:

(a) The minor is engaged in a lawful hunting activity and is:

1. At least 16 years of age; or

2. Under 16 years of age and supervised by an adult.

(b) The minor is engaged in a lawful marksmanship competition or practice or other lawful recreational shooting activity and is:

1. At least 16 years of age; or

2. Under 16 years of age and supervised by an adult who is acting with the consent of the minor's parent or guardian.

(c) The firearm is unloaded and is being transported by the minor directly to or from an event authorized in paragraph (a) or paragraph (b).

(4)(a) Any parent or guardian of a minor, or other adult responsible for the welfare of a minor, who knowingly and willfully permits the minor to possess a firearm in violation of subsection (3) commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(b) Any natural parent or adoptive parent, whether custodial or noncustodial, or any legal guardian or legal custodian of a minor, if that minor possesses a firearm in violation of subsection (3) may, if the court finds it appropriate, be required to participate in classes on parenting education which are approved by the Department of Juvenile Justice, upon the first conviction of the minor. Upon any subsequent conviction of the minor, the court may, if the court finds it appropriate, require the parent to attend further parent education classes or render community service hours together with the child.

(c) The juvenile justice circuit advisory boards or the Department of Juvenile Justice shall establish appropriate community service programs to be available to the alternative sanctions coordinators of the circuit courts in implementing this subsection. The boards or department shall propose the implementation of a community service program in each circuit, and may submit a circuit plan, to be implemented upon approval of the circuit alternative sanctions coordinator.

(d) For the purposes of this section, community service may be provided on public property as well as on private property with the expressed permission of the property owner. Any community service provided on private property is limited to such things as removal of graffiti and restoration of vandalized property.

(5)(a) A minor who violates subsection (3) commits a misdemeanor of the first degree; for a first offense, may serve a period of detention of up to 3 days in a secure detention facility; and, in addition to any other penalty provided by law, shall be required to perform 100 hours of community service; and:

1. If the minor is eligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to revoke or to withhold issuance of the minor's driver license or driving privilege for up to 1 year.

2. If the minor's driver license or driving privilege is under suspension or revocation for any reason, the court shall direct the Department of Highway Safety and Motor Vehicles to extend the period of suspension or revocation by an additional period of up to 1 year.

3. If the minor is ineligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to withhold issuance of the minor's driver license or driving privilege for up to 1 year after the date on which the minor would otherwise have become eligible.

(b) For a second or subsequent offense, a minor who violates subsection (3) commits a felony of the third degree and shall serve a period of detention of up to 15 days in a secure detention facility and shall be required to perform not less than 100 nor more than 250 hours of community service, and:

1. If the minor is eligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to revoke or to withhold issuance of the minor's driver license or driving privilege for up to 2 years.

2. If the minor's driver license or driving privilege is under suspension or revocation for any reason, the court shall direct the Department of Highway Safety and Motor Vehicles to extend the period of suspension or revocation by an additional period of up to 2 years.

3. If the minor is ineligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to withhold issuance of the minor's driver license or driving privilege for up to 2 years after the date on which the minor would otherwise have become eligible.

For the purposes of this subsection, community service shall be performed, if possible, in a manner involving a hospital emergency room or other medical environment that deals on a regular basis with trauma patients and gunshot wounds.

(6) Any firearm that is possessed or used by a minor in violation of this section shall be promptly seized by a law enforcement officer and disposed of in accordance with s. 790.08(1)-(6).

(7) The provisions of this section are supplemental to all other provisions of law relating to the possession, use, or exhibition of a firearm.

(8) Notwithstanding s. 985.24 or s. 985.25(1), if a minor is charged with an offense that involves the use or possession of a firearm, including a violation of subsection (3), or is charged for any offense during the commission of which the minor possessed a firearm, the minor shall be detained in secure detention, unless the state attorney authorizes the release of the minor, and shall be given a hearing within 24 hours after being taken into custody. At the hearing, the court may order that the minor continue to be held in secure detention in accordance with the applicable time periods specified in s. 985.26(1)-(5), if the court finds that the minor meets the criteria specified in s. 985.255, or if the court finds by clear and convincing evidence that the minor is a clear and present danger to himself or herself or the community. The Department of Juvenile Justice shall prepare a form for all minors charged under this subsection which states the period of detention and the relevant demographic information, including, but not limited to, the gender, age, and race of the minor; whether or not the minor was represented by private counsel or a public defender; the current offense; and the minor's complete prior record, including any pending cases. The form shall be

provided to the judge for determining whether the minor should be continued in secure detention under this subsection. An order placing a minor in secure detention because the minor is a clear and present danger to himself or herself or the community must be in writing, must specify the need for detention and the benefits derived by the minor or the community by placing the minor in secure detention, and must include a copy of the form provided by the department.

(9) Notwithstanding s. 985.245, if the minor is found to have committed an offense that involves the use or possession of a firearm, as defined in s. 790.001, other than a violation of subsection (3), or an offense during the commission of which the minor possessed a firearm, and the minor is not committed to a residential commitment program of the Department of Juvenile Justice, in addition to any other punishment provided by law, the court shall order:

(a) For a first offense, that the minor shall serve a minimum period of detention of 15 days in a secure detention facility; and

1. Perform 100 hours of community service; and may

2. Be placed on community control or in a nonresidential commitment program.

(b) For a second or subsequent offense, that the minor shall serve a mandatory period of detention of at least 21 days in a secure detention facility; and

1. Perform not less than 100 nor more than 250 hours of community service; and may

2. Be placed on community control or in a nonresidential commitment program.

The minor shall not receive credit for time served before adjudication. For the purposes of this subsection, community service shall be performed, if possible, in a manner involving a hospital emergency room or other medical environment that deals on a regular basis with trauma patients and gunshot wounds.

(10) If a minor is found to have committed an offense under subsection (9), the court shall impose the following penalties in addition to any penalty imposed under paragraph (9)(a) or paragraph (9)(b):

(a) For a first offense:

1. If the minor is eligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to revoke or to withhold issuance of the minor's driver license or driving privilege for up to 1 year.

2. If the minor's driver license or driving privilege is under suspension or revocation for any reason, the court shall direct the Department of Highway Safety and Motor Vehicles to extend the period of suspension or revocation by an additional period for up to 1 year.

3. If the minor is ineligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to withhold issuance of the minor's driver license or driving privilege for up to 1 year after the date on which the minor would otherwise have become eligible.

(b) For a second or subsequent offense:

1. If the minor is eligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to revoke or to withhold issuance of the minor's driver license or driving privilege for up to 2 years.

2. If the minor's driver license or driving privilege is under suspension or revocation for any reason, the court shall direct the Department of Highway Safety and Motor Vehicles to extend the period of suspension or revocation by an additional period for up to 2 years.

3. If the minor is ineligible by reason of age for a driver license or driving privilege, the court shall direct the Department of Highway Safety and Motor Vehicles to withhold issuance of the minor's driver license or driving privilege for up to 2 years after the date on which the minor would otherwise have become eligible.

History.-ss. 1, 2, ch. 26946, 1951; s. 8, ch. 69-306; s. 753, ch. 71-136; s. 2, ch. 76-165; s. 177, ch. 91-224; s. 5, ch. 93-416; s. 29, ch. 95-267; s. 6, ch. 96-398; s. 1817, ch. 97-102; s. 32, ch. 98-136; s. 50, ch. 98-280; s. 1, ch. 99-284; s.

10, ch. 2000-135; s. 113, ch. 2006-120; s. 160, ch. 2010-102; s. 2, ch. 2013-118; s. 9, ch. 2017-164.

790.221 Possession of short-barreled rifle, short-barreled shotgun, or machine gun; penalty.—

(1) It is unlawful for any person to own or to have in his or her care, custody, possession, or control any short-barreled rifle, short-barreled shotgun, or machine gun which is, or may readily be made, operable; but this section shall not apply to antique firearms.

(2) A person who violates this section commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(3) Firearms in violation hereof which are lawfully owned and possessed under provisions of federal law are excepted.

History.-s. 10, ch. 69-306; s. 1, ch. 89-312; s. 21, ch. 93-406; s. 1217, ch. 97-102.

790.222 Bump-fire stocks prohibited.—A person may not import into this state or transfer, distribute, sell, keep for sale, offer for sale, possess, or give to another person a bump-fire stock. A person who violates this section commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084. As used in this section, the term "bump-fire stock" means a conversion kit, a tool, an accessory, or a device used to alter the rate of fire of a firearm to mimic automatic weapon fire or which is used to increase the rate of fire to a faster rate than is possible for a person to fire such semiautomatic firearm unassisted by a kit, a tool, an accessory, or a device.

History.-s. 13, ch. 2018-3.

790.225 Ballistic self-propelled knives; unlawful to manufacture, sell, or possess; forfeiture; penalty.—

(1) It is unlawful for any person to manufacture, display, sell, own, possess, or use a ballistic self-propelled knife which is a device that propels a knifelike blade as a projectile and which physically separates the blade from the device by means of a coil spring, elastic material, or compressed gas. A ballistic self-propelled knife is declared to be a dangerous or deadly weapon and a contraband item. It shall be subject to seizure and shall be disposed of as provided in s. 790.08(1) and (6).

(2) This section shall not apply to:

(a) Any device from which a knifelike blade opens, where such blade remains physically integrated with the device when open.

(b) Any device which propels an arrow, a bolt, or a dart by means of any common bow, compound bow, crossbow, or underwater spear gun.

(3) Any person violating the provisions of subsection (1) is guilty of a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

History.-s. 1, ch. 85-258; s. 178, ch. 91-224; s. 1, ch. 2003-82.

790.23 Felons and delinquents; possession of firearms, ammunition, or electric weapons or devices unlawful.—

(1) It is unlawful for any person to own or to have in his or her care, custody, possession, or control any firearm, ammunition, or electric weapon or device, or to carry a concealed weapon, including a tear gas gun or chemical weapon or device, if that person has been:

(a) Convicted of a felony in the courts of this state;

(b) Found, in the courts of this state, to have committed a delinquent act that would be a felony if committed by an adult and such person is under 24 years of age;

(c) Convicted of or found to have committed a crime against the United States which is designated as a felony;

(d) Found to have committed a delinquent act in another state, territory, or country that would be a felony if committed by an adult and which was punishable by imprisonment for a term exceeding 1 year and such person is under 24 years of age; or (e) Found guilty of an offense that is a felony in another state, territory, or country and which was punishable by imprisonment for a term exceeding 1 year.

(2) This section shall not apply to a person:

- (a) Convicted of a felony whose civil rights and firearm authority have been restored.
- (b) Whose criminal history record has been expunged pursuant to s. 943.0515(1)(b).

(3) Except as otherwise provided in subsection (4), any person who violates this section commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(4) Notwithstanding the provisions of s. 874.04, if the offense described in subsection (1) has been committed by a person who has previously qualified or currently qualifies for the penalty enhancements provided for in s. 874.04, the offense is a felony of the first degree, punishable by a term of years not exceeding life or as provided in s. 775.082, s. 775.083, or s. 775.084.

History.—ss. 1, 2, 3, ch. 29766, 1955; s. 1, ch. 63-31; s. 9, ch. 69-306; s. 754, ch. 71-136; s. 1, ch. 71-318; s. 169, ch. 71-355; s. 2, ch. 76-165; s. 6, ch. 93-416; s. 51, ch. 98-280; s. 39, ch. 99-284; s. 2, ch. 2004-286; s. 2, ch. 2008-238; s. 1, ch. 2016-42.

790.233 Possession of firearm or ammunition prohibited when person is subject to an injunction against committing acts of domestic violence, stalking, or cyberstalking; penalties.—

(1) A person may not have in his or her care, custody, possession, or control any firearm or ammunition if the person has been issued a final injunction that is currently in force and effect, restraining that person from committing acts of domestic violence, as issued under s. 741.30 or from committing acts of stalking or cyberstalking, as issued under s. 784.0485.

(2) A person who violates subsection (1) commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

(3) It is the intent of the Legislature that the disabilities regarding possession of firearms and ammunition are consistent with federal law. Accordingly, this section does not apply to a state or local officer as defined in s. 943.10(14), holding an active certification, who receives or possesses a firearm or ammunition for use in performing official duties on behalf of the officer's employing agency, unless otherwise prohibited by the employing agency.

History.-s. 1, ch. 98-284; s. 5, ch. 2012-153.

790.235 Possession of firearm or ammunition by violent career criminal unlawful; penalty.—

(1) Any person who meets the violent career criminal criteria under s. 775.084(1)(d), regardless of whether such person is or has previously been sentenced as a violent career criminal, who owns or has in his or her care, custody, possession, or control any firearm, ammunition, or electric weapon or device, or carries a concealed weapon, including a tear gas gun or chemical weapon or device, commits a felony of the first degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084. A person convicted of a violation of this section shall be sentenced to a mandatory minimum of 15 years' imprisonment; however, if the person would be sentenced to a longer term of imprisonment under s. 775.084(4)(d), the person must be sentenced under that provision. A person convicted of a violation of this section is not eligible for any form of discretionary early release, other than pardon, executive clemency, or conditional medical release under s. 947.149.

(2) For purposes of this section, the previous felony convictions necessary to meet the violent career criminal criteria under s. 775.084(1)(d) may be convictions for felonies committed as an adult or adjudications of delinquency for felonies committed as a juvenile. In order to be counted as a prior felony for purposes of this section, the felony must have resulted in a conviction sentenced separately, or an adjudication of delinquency entered separately, prior to the current offense, and sentenced or adjudicated separately from any other felony that is to be counted as a prior felony.

(3) This section shall not apply to a person whose civil rights and firearm authority have been restored.

History.-s. 7, ch. 95-182; s. 45, ch. 96-388; s. 6, ch. 99-188; s. 1, ch. 2002-210; s. 3, ch. 2004-286.

790.24 Report of medical treatment of certain wounds; penalty for failure to report.—Any physician, nurse, or employee thereof and any employee of a hospital, sanitarium, clinic, or nursing home knowingly treating any person suffering from a gunshot wound or life-threatening injury indicating an act of violence, or receiving a request for such treatment, shall report the same immediately to the sheriff's department of the county in which said treatment is administered or request therefor received. This section does not affect any requirement that a person has to report abuse pursuant to chapter 39 or chapter 415. Any such person willfully failing to report such treatment or request therefor is guilty of a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

History.-s. 1, ch. 59-35; s. 755, ch. 71-136; s. 1, ch. 99-235.

790.25 Lawful ownership, possession, and use of firearms and other weapons.-

(1) DECLARATION OF POLICY.—The Legislature finds as a matter of public policy and fact that it is necessary to promote firearms safety and to curb and prevent the use of firearms and other weapons in crime and by incompetent persons without prohibiting the lawful use in defense of life, home, and property, and the use by United States or state military organizations, and as otherwise now authorized by law, including the right to use and own firearms for target practice and marksmanship on target practice ranges or other lawful places, and lawful hunting and other lawful purposes.

(2) USES NOT AUTHORIZED.-

(a) This section does not authorize carrying a concealed weapon without a permit, as prohibited by ss. 790.01 and 790.02.

(b) The protections of this section do not apply to the following:

1. A person who has been adjudged mentally incompetent, who is addicted to the use of narcotics or any similar drug, or who is a habitual or chronic alcoholic, or a person using weapons or firearms in violation of ss. 790.07-790.115, 790.145-790.19, 790.22-790.24;

2. Vagrants and other undesirable persons as defined in ¹/_s. 856.02;

3. A person in or about a place of nuisance as defined in s. 823.05, unless such person is there for law enforcement or some other lawful purpose.

(3) LAWFUL USES.—The provisions of ss. 790.053 and 790.06 do not apply in the following instances, and, despite such sections, it is lawful for the following persons to own, possess, and lawfully use firearms and other weapons, ammunition, and supplies for lawful purposes:

(a) Members of the Militia, National Guard, Florida State Defense Force, Army, Navy, Air Force, Marine Corps, Coast Guard, organized reserves, and other armed forces of the state and of the United States, when on duty, when training or preparing themselves for military duty, or while subject to recall or mobilization;

(b) Citizens of this state subject to duty in the Armed Forces under s. 2, Art. X of the State Constitution, under chapters 250 and 251, and under federal laws, when on duty or when training or preparing themselves for military duty;

(c) Persons carrying out or training for emergency management duties under chapter 252;

(d) Sheriffs, marshals, prison or jail wardens, police officers, Florida highway patrol officers, game wardens, revenue officers, forest officials, special officers appointed under the provisions of chapter 354, and other peace and law enforcement officers and their deputies and assistants and full-time paid peace officers of other states and of the Federal Government who are carrying out official duties while in this state;

(e) Officers or employees of the state or United States duly authorized to carry a concealed weapon;

(f) Guards or messengers of common carriers, express companies, armored car carriers, mail carriers, banks, and other financial institutions, while actually employed in and about the shipment,

transportation, or delivery of any money, treasure, bullion, bonds, or other thing of value within this state;

(g) Regularly enrolled members of any organization duly authorized to purchase or receive weapons from the United States or from this state, or regularly enrolled members of clubs organized for target, skeet, or trap shooting, while at or going to or from shooting practice; or regularly enrolled members of clubs organized for modern or antique firearms collecting, while such members are at or going to or from their collectors' gun shows, conventions, or exhibits;

(h) A person engaged in fishing, camping, or lawful hunting or going to or returning from a fishing, camping, or lawful hunting expedition;

(i) A person engaged in the business of manufacturing, repairing, or dealing in firearms, or the agent or representative of any such person while engaged in the lawful course of such business;

(j) A person firing weapons for testing or target practice under safe conditions and in a safe place not prohibited by law or going to or from such place;

(k) A person firing weapons in a safe and secure indoor range for testing and target practice;

(l) A person traveling by private conveyance when the weapon is securely encased or in a public conveyance when the weapon is securely encased and not in the person's manual possession;

(m) A person while carrying a pistol unloaded and in a secure wrapper, concealed or otherwise, from the place of purchase to his or her home or place of business or to a place of repair or back to his or her home or place of business;

(n) A person possessing arms at his or her home or place of business;

(o) Investigators employed by the several public defenders of the state, while actually carrying out official duties, provided such investigators:

1. Are employed full time;

2. Meet the official training standards for firearms established by the Criminal Justice Standards and Training Commission as provided in s. 943.12(5) and the requirements of ss. 493.6108(1)(a) and 943.13(1)-(4); and

3. Are individually designated by an affidavit of consent signed by the employing public defender and filed with the clerk of the circuit court in the county in which the employing public defender resides.

(p) Investigators employed by the capital collateral regional counsel, while actually carrying out official duties, provided such investigators:

1. Are employed full time;

2. Meet the official training standards for firearms as established by the Criminal Justice Standards and Training Commission as provided in s. 943.12(1) and the requirements of ss. 493.6108(1)(a) and 943.13(1)-(4); and

3. Are individually designated by an affidavit of consent signed by the capital collateral regional counsel and filed with the clerk of the circuit court in the county in which the investigator is headquartered.

(4) CONSTRUCTION.—This act shall be liberally construed to carry out the declaration of policy herein and in favor of the constitutional right to keep and bear arms for lawful purposes. This act is supplemental and additional to existing rights to bear arms now guaranteed by law and decisions of the courts of Florida, and nothing herein shall impair or diminish any of such rights. This act shall supersede any law, ordinance, or regulation in conflict herewith.

(5) POSSESSION IN PRIVATE CONVEYANCE.—Notwithstanding subsection (2), it is lawful and is not a violation of s. 790.01 for a person 18 years of age or older to possess a concealed firearm or other weapon for self-defense or other lawful purpose within the interior of a private conveyance, without a license, if the firearm or other weapon is securely encased or is otherwise not readily accessible for immediate use. Nothing herein contained prohibits the carrying of a legal firearm other than a

handgun anywhere in a private conveyance when such firearm is being carried for a lawful use. Nothing herein contained shall be construed to authorize the carrying of a concealed firearm or other weapon on the person. This subsection shall be liberally construed in favor of the lawful use, ownership, and possession of firearms and other weapons, including lawful self-defense as provided in s. 776.012.

History.—s. 1, ch. 65-410; s. 32, ch. 69-216; s. 32, ch. 73-334; s. 2, ch. 77-302; s. 2, ch. 82-131; s. 15, ch. 83-167; ss. 45, 49, ch. 83-334; s. 32, ch. 84-258; s. 68, ch. 85-62; s. 5, ch. 85-332; s. 15, ch. 87-274; s. 2, ch. 87-537; s. 1, ch. 89-60; s. 8, ch. 90-364; s. 1, ch. 93-269; s. 7, ch. 93-416; s. 89, ch. 95-211; s. 1218, ch. 97-102; s. 110, ch. 2006-1; s. 2, ch. 2006-103.

¹Note.-Repealed by s. 3, ch. 72-133.

¹790.251 Protection of the right to keep and bear arms in motor vehicles for self-defense and other lawful purposes; prohibited acts; duty of public and private employers; immunity from liability; enforcement.–

(1) SHORT TITLE.—This section may be cited as the "Preservation and Protection of the Right to Keep and Bear Arms in Motor Vehicles Act of 2008."

(2) DEFINITIONS.—As used in this section, the term:

(a) "Parking lot" means any property that is used for parking motor vehicles and is available to customers, employees, or invitees for temporary or long-term parking or storage of motor vehicles.

(b) "Motor vehicle" means any automobile, truck, minivan, sports utility vehicle, motor home, recreational vehicle, motorcycle, motor scooter, or any other vehicle operated on the roads of this state and required to be registered under state law.

(c) "Employee" means any person who possesses a valid license issued pursuant to s. 790.06 and:

- 1. Works for salary, wages, or other remuneration;
- 2. Is an independent contractor; or
- 3. Is a volunteer, intern, or other similar individual for an employer.

(d) "Employer" means any business that is a sole proprietorship, partnership, corporation, limited liability company, professional association, cooperative, joint venture, trust, firm, institution, or association, or public sector entity, that has employees.

(e) "Invitee" means any business invitee, including a customer or visitor, who is lawfully on the premises of a public or private employer.

As used in this section, the term "firearm" includes ammunition and accoutrements attendant to the lawful possession and use of a firearm.

(3) LEGISLATIVE INTENT; FINDINGS.—This act is intended to codify the long-standing legislative policy of the state that individual citizens have a constitutional right to keep and bear arms, that they have a constitutional right to possess and keep legally owned firearms within their motor vehicles for self-defense and other lawful purposes, and that these rights are not abrogated by virtue of a citizen becoming a customer, employee, or invitee of a business entity. It is the finding of the Legislature that a citizen's lawful possession, transportation, and secure keeping of firearms and ammunition within his or her motor vehicle is essential to the exercise of the fundamental constitutional right to keep and bear arms and the constitutional right of self-defense. The Legislature finds that protecting and preserving these rights is essential to the exercise of freedom and individual responsibility. The Legislature further finds that no citizen can or should be required to waive or abrogate his or her right to possess and securely keep firearms and ammunition locked within his or her motor vehicle by virtue of becoming a customer, employee, or invitee of any employer or business establishment within the state, unless specifically required by state or federal law.

(4) PROHIBITED ACTS.—No public or private employer may violate the constitutional rights of any customer, employee, or invitee as provided in paragraphs (a)-(e):

(a) No public or private employer may prohibit any customer, employee, or invitee from

possessing any legally owned firearm when such firearm is lawfully possessed and locked inside or locked to a private motor vehicle in a parking lot and when the customer, employee, or invitee is lawfully in such area.

(b) No public or private employer may violate the privacy rights of a customer, employee, or invitee by verbal or written inquiry regarding the presence of a firearm inside or locked to a private motor vehicle in a parking lot or by an actual search of a private motor vehicle in a parking lot to ascertain the presence of a firearm within the vehicle. Further, no public or private employer may take any action against a customer, employee, or invitee based upon verbal or written statements of any party concerning possession of a firearm stored inside a private motor vehicle in a parking lot for lawful purposes. A search of a private motor vehicle in the parking lot of a public or private employer to ascertain the presence of a firearm within the vehicle may only be conducted by on-duty law enforcement personnel, based upon due process and must comply with constitutional protections.

(c) No public or private employer shall condition employment upon either:

1. The fact that an employee or prospective employee holds or does not hold a license issued pursuant to s. 790.06; or

2. Any agreement by an employee or a prospective employee that prohibits an employee from keeping a legal firearm locked inside or locked to a private motor vehicle in a parking lot when such firearm is kept for lawful purposes.

(d) No public or private employer shall prohibit or attempt to prevent any customer, employee, or invitee from entering the parking lot of the employer's place of business because the customer's, employee's, or invitee's private motor vehicle contains a legal firearm being carried for lawful purposes, that is out of sight within the customer's, employee's, or invitee's private motor vehicle.

(e) No public or private employer may terminate the employment of or otherwise discriminate against an employee, or expel a customer or invitee for exercising his or her constitutional right to keep and bear arms or for exercising the right of self-defense as long as a firearm is never exhibited on company property for any reason other than lawful defensive purposes.

This subsection applies to all public sector employers, including those already prohibited from regulating firearms under the provisions of s. 790.33.

(5) DUTY OF CARE OF PUBLIC AND PRIVATE EMPLOYERS; IMMUNITY FROM LIABILITY.-

(a) When subject to the provisions of subsection (4), a public or private employer has no duty of care related to the actions prohibited under such subsection.

(b) A public or private employer is not liable in a civil action based on actions or inactions taken in compliance with this section. The immunity provided in this subsection does not apply to civil actions based on actions or inactions of public or private employers that are unrelated to compliance with this section.

(c) Nothing contained in this section shall be interpreted to expand any existing duty, or create any additional duty, on the part of a public or private employer, property owner, or property owner's agent.

(6) ENFORCEMENT.—The Attorney General shall enforce the protections of this act on behalf of any customer, employee, or invitee aggrieved under this act. If there is reasonable cause to believe that the aggrieved person's rights under this act have been violated by a public or private employer, the Attorney General shall commence a civil or administrative action for damages, injunctive relief and civil penalties, and such other relief as may be appropriate under the provisions of s. 760.51, or may negotiate a settlement with any employer on behalf of any person aggrieved under the act. However, nothing in this act shall prohibit the right of a person aggrieved under this act to bring a civil action for violation of rights protected under the act. In any successful action brought by a customer, employee, or invitee aggrieved under this act, the court shall award all reasonable personal costs and losses suffered by the aggrieved person as a result of the violation of rights under

this act. In any action brought pursuant to this act, the court shall award all court costs and attorney's fees to the prevailing party.

(7) EXCEPTIONS.—The prohibitions in subsection (4) do not apply to:

(a) Any school property as defined and regulated under s. 790.115.

(b) Any correctional institution regulated under s. 944.47 or chapter 957.

(c) Any property where a nuclear-powered electricity generation facility is located.

(d) Property owned or leased by a public or private employer or the landlord of a public or private employer upon which are conducted substantial activities involving national defense, aerospace, or homeland security.

(e) Property owned or leased by a public or private employer or the landlord of a public or private employer upon which the primary business conducted is the manufacture, use, storage, or transportation of combustible or explosive materials regulated under state or federal law, or property owned or leased by an employer who has obtained a permit required under 18 U.S.C. s. 842 to engage in the business of importing, manufacturing, or dealing in explosive materials on such property.

(f) A motor vehicle owned, leased, or rented by a public or private employer or the landlord of a public or private employer.

(g) Any other property owned or leased by a public or private employer or the landlord of a public or private employer upon which possession of a firearm or other legal product by a customer, employee, or invitee is prohibited pursuant to any federal law, contract with a federal government entity, or general law of this state.

History.-s. 1, ch. 2008-7.

¹Note.—Section 15, ch. 2011-119, provides that "[t]he amendments made to ss. 509.144 and 932.701, Florida Statutes, and the creation of s. 901.1503, Florida Statutes, by this act do not affect or impede the provisions of s. 790.251, Florida Statutes, or any other protection or right guaranteed by the Second Amendment to the United States Constitution."

790.256 Public service announcements.—The Department of Health shall prepare public service announcements for dissemination to parents throughout the state, of the provisions of chapter 93-416, Laws of Florida.

History.-s. 9, ch. 93-416; s. 295, ch. 99-8.

790.27 Alteration or removal of firearm serial number or possession, sale, or delivery of firearm with serial number altered or removed prohibited; penalties.—

(1)(a) It is unlawful for any person to knowingly alter or remove the manufacturer's or importer's serial number from a firearm with intent to disguise the true identity thereof.

(b) Any person violating paragraph (a) is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(2)(a) It is unlawful for any person to knowingly sell, deliver, or possess any firearm on which the manufacturer's or importer's serial number has been unlawfully altered or removed.

(b) Any person violating paragraph (a) is guilty of a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

(3) This section shall not apply to antique firearms. History.—s. 2, ch. 79-58; s. 179, ch. 91-224.

790.29 Paramilitary training; teaching or participation prohibited.-

(1) This act shall be known and may be cited as the "State Antiparamilitary Training Act."

(2) As used in this section, the term "civil disorder" means a public disturbance involving acts of violence by an assemblage of three or more persons, which disturbance causes an immediate danger of, or results in, damage or injury to the property or person of any other individual within the United States.

(3)(a) Whoever teaches or demonstrates to any other person the use, application, or making of

any firearm, destructive device, or technique capable of causing injury or death to persons, knowing or having reason to know or intending that the same will be unlawfully employed for use in, or in furtherance of, a civil disorder within the United States, is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(b) Whoever assembles with one or more persons for the purpose of training with, practicing with, or being instructed in the use of any firearm, destructive device, or technique capable of causing injury or death to persons, intending to unlawfully employ the same for use in, or in furtherance of, a civil disorder within the United States, is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(4) Nothing contained in this section shall be construed to prohibit any act of a law enforcement officer which is performed in connection with the lawful performance of his or her official duties or to prohibit the training or teaching of the use of weapons to be used for hunting, recreation, competition, self-defense or the protection of one's person or property, or other lawful use. History.—s. 1, ch. 82-5; s. 164, ch. 83-216; s. 1220, ch. 97-102.

790.31 Armor-piercing or exploding ammunition or dragon's breath shotgun shells, bolo shells, or flechette shells prohibited.—

(1) As used in this section, the term:

(a) "Armor-piercing bullet" means any bullet which has a steel inner core or core of equivalent hardness and a truncated cone and which is designed for use in a handgun as an armor-piercing or metal-piercing bullet.

(b) "Exploding bullet" means any bullet that can be fired from any firearm, if such bullet is designed or altered so as to detonate or forcibly break up through the use of an explosive or deflagrant contained wholly or partially within or attached to such bullet. The term does not include any bullet designed to expand or break up through the mechanical forces of impact alone or any signaling device or pest control device not designed to impact on any target.

(c) "Handgun" means a firearm capable of being carried and used by one hand, such as a pistol or revolver.

(d) "Dragon's breath shotgun shell" means any shotgun shell that contains exothermic pyrophoric misch metal as the projectile and that is designed for the sole purpose of throwing or spewing a flame or fireball to simulate a flamethrower.

(e) "Bolo shell" means any shell that can be fired in a firearm and that expels as projectiles two or more metal balls connected by solid metal wire.

(f) "Flechette shell" means any shell that can be fired in a firearm and that expels two or more pieces of fin-stabilized solid metal wire or two or more solid dart-type projectiles.

(2)(a) Any person who manufactures, sells, offers for sale, or delivers any armor-piercing bullet or exploding bullet, or dragon's breath shotgun shell, bolo shell, or flechette shell is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(b) Any person who possesses an armor-piercing bullet or exploding bullet with knowledge of its armor-piercing or exploding capabilities loaded in a handgun, or who possesses a dragon's breath shotgun shell, bolo shell, or flechette shell with knowledge of its capabilities loaded in a firearm, is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(c) Any person who possesses with intent to use an armor-piercing bullet or exploding bullet or dragon's breath shotgun shell, bolo shell, or flechette shell to assist in the commission of a criminal act is guilty of a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(3) This section does not apply to:

(a) The possession of any item described in subsection (1) by any law enforcement officer, when possessed in connection with the performance of his or her duty as a law enforcement officer, or law

enforcement agency.

(b) The manufacture of items described in subsection (1) exclusively for sale or delivery to law enforcement agencies.

(c) The sale or delivery of items described in subsection (1) to law enforcement agencies. History.-s. 1, ch. 83-253; s. 1, ch. 92-141; s. 1221, ch. 97-102.

790.33 Field of regulation of firearms and ammunition preempted.-

(1) PREEMPTION.—Except as expressly provided by the State Constitution or general law, the Legislature hereby declares that it is occupying the whole field of regulation of firearms and ammunition, including the purchase, sale, transfer, taxation, manufacture, ownership, possession, storage, and transportation thereof, to the exclusion of all existing and future county, city, town, or municipal ordinances or any administrative regulations or rules adopted by local or state government relating thereto. Any such existing ordinances, rules, or regulations are hereby declared null and void.

(2) POLICY AND INTENT.-

(a) It is the intent of this section to provide uniform firearms laws in the state; to declare all ordinances and regulations null and void which have been enacted by any jurisdictions other than state and federal, which regulate firearms, ammunition, or components thereof; to prohibit the enactment of any future ordinances or regulations relating to firearms, ammunition, or components thereof unless specifically authorized by this section or general law; and to require local jurisdictions to enforce state firearms laws.

(b) It is further the intent of this section to deter and prevent the violation of this section and the violation of rights protected under the constitution and laws of this state related to firearms, ammunition, or components thereof, by the abuse of official authority that occurs when enactments are passed in violation of state law or under color of local or state authority.

(3) PROHIBITIONS; PENALTIES.-

(a) Any person, county, agency, municipality, district, or other entity that violates the Legislature's occupation of the whole field of regulation of firearms and ammunition, as declared in subsection (1), by enacting or causing to be enforced any local ordinance or administrative rule or regulation impinging upon such exclusive occupation of the field shall be liable as set forth herein.

(b) If any county, city, town, or other local government violates this section, the court shall declare the improper ordinance, regulation, or rule invalid and issue a permanent injunction against the local government prohibiting it from enforcing such ordinance, regulation, or rule. It is no defense that in enacting the ordinance, regulation, or rule the local government was acting in good faith or upon advice of counsel.

(c) If the court determines that a violation was knowing and willful, the court shall assess a civil fine of up to \$5,000 against the elected or appointed local government official or officials or administrative agency head under whose jurisdiction the violation occurred.

(d) Except as required by applicable law, public funds may not be used to defend or reimburse the unlawful conduct of any person found to have knowingly and willfully violated this section.

(e) A knowing and willful violation of any provision of this section by a person acting in an official capacity for any entity enacting or causing to be enforced a local ordinance or administrative rule or regulation prohibited under paragraph (a) or otherwise under color of law shall be cause for termination of employment or contract or removal from office by the Governor.

(f) A person or an organization whose membership is adversely affected by any ordinance, regulation, measure, directive, rule, enactment, order, or policy promulgated or caused to be enforced in violation of this section may file suit against any county, agency, municipality, district, or other entity in any court of this state having jurisdiction over any defendant to the suit for declaratory and injunctive relief and for actual damages, as limited herein, caused by the violation. A

court shall award the prevailing plaintiff in any such suit:

1. Reasonable attorney's fees and costs in accordance with the laws of this state, including a

contingency fee multiplier, as authorized by law; and

2. The actual damages incurred, but not more than \$100,000.

Interest on the sums awarded pursuant to this subsection shall accrue at the legal rate from the date on which suit was filed.

(4) EXCEPTIONS.—This section does not prohibit:

(a) Zoning ordinances that encompass firearms businesses along with other businesses, except that zoning ordinances that are designed for the purpose of restricting or prohibiting the sale, purchase, transfer, or manufacture of firearms or ammunition as a method of regulating firearms or ammunition are in conflict with this subsection and are prohibited;

(b) A duly organized law enforcement agency from enacting and enforcing regulations pertaining to firearms, ammunition, or firearm accessories issued to or used by peace officers in the course of their official duties;

(c) Except as provided in s. 790.251, any entity subject to the prohibitions of this section from regulating or prohibiting the carrying of firearms and ammunition by an employee of the entity during and in the course of the employee's official duties;

(d) A court or administrative law judge from hearing and resolving any case or controversy or issuing any opinion or order on a matter within the jurisdiction of that court or judge; or

(e) The Florida Fish and Wildlife Conservation Commission from regulating the use of firearms or ammunition as a method of taking wildlife and regulating the shooting ranges managed by the commission.

(5) SHORT TITLE.—As created by chapter 87-23, Laws of Florida, this section may be cited as the "Joe Carlucci Uniform Firearms Act."

History.-ss. 1, 2, 3, 4, ch. 87-23; s. 5, ch. 88-183; s. 1, ch. 2011-109.

790.331 Prohibition of civil actions against firearms or ammunition manufacturers, firearms trade associations, firearms or ammunition distributors, or firearms or ammunition dealers.—

(1) The Legislature finds and declares that the manufacture, distribution, or sale of firearms and ammunition by manufacturers, distributors, or dealers duly licensed by the appropriate federal and state authorities is a lawful activity and is not unreasonably dangerous, and further finds that the unlawful use of firearms and ammunition, rather than their lawful manufacture, distribution, or sale, is the proximate cause of injuries arising from their unlawful use.

(2) Except as permitted by this section, a legal action against a firearms or ammunition manufacturer, firearms trade association, firearms or ammunition distributor, or firearms or ammunition dealer on behalf of the state or its agencies and instrumentalities, or on behalf of a county, municipality, special district, or any other political subdivision or agency of the state, for damages, abatement, or injunctive relief resulting from or arising out of the lawful design, marketing, distribution, or sale of firearms or ammunition to the public is prohibited. However, this subsection does not preclude a natural person from bringing an action against a firearms or ammunition manufacturer, firearms trade association, firearms or ammunition distributor, or firearms or ammunition dealer for breach of a written contract, breach of an express warranty, or injuries resulting from a defect in the materials or workmanship in the manufacture of a firearm or ammunition.

(3) A county, municipality, special district, or other political subdivision or agency of the state may not sue for or recover from a firearms or ammunition manufacturer, firearms trade association, firearms or ammunition distributor, or firearms or ammunition dealer damages, abatement, or injunctive relief in any case that arises out of or results from the lawful design, marketing,

distribution, or sale of firearms or ammunition to the public.

(4) This section does not prohibit an action against a firearms or ammunition manufacturer, distributor, or dealer for:

(a) Breach of contract or warranty in connection with a firearm or ammunition purchased by a county, municipality, special district, or other political subdivision or agency of the state.

(b) Injuries resulting from the malfunction of a firearm or ammunition due to a defect in design or manufacture.

(5)(a) For the purposes of this section, the potential of a firearm or ammunition to cause serious injury, damage, or death as a result of normal function does not constitute a defective condition of the product.

(b) A firearm or ammunition may not be deemed defective on the basis of its potential to cause serious injury, damage, or death when discharged legally or illegally.

(6)(a) If a civil action is brought in violation of this section, the defendant may recover all expenses resulting from such action from the governmental entity bringing such action.

(b) In any civil action where the court finds that the defendant is immune as provided in this section, the court shall award the defendant all attorney's fees, costs and compensation for loss of income, and expenses incurred as a result of such action.

(7) This section applies to any action brought on or after the effective date of this section. History.-s. 1, ch. 2001-38.

790.333 Sport shooting and training range protection; liability; claims, expenses, and fees; penalties; preemption; construction.—

(1) LEGISLATIVE FINDINGS.-

(a) The Legislature finds that in excess of 400 sport shooting and training ranges exist on public and private lands throughout this state.

(b) These sport shooting and training ranges are widely used and enjoyed by the residents of this state and are a necessary component of the guarantees of the Second Amendment to the United States Constitution and of s. 8, Art. I of the State Constitution.

(c) Many of these ranges are used by state and local law enforcement agencies for training, practice, and regular mandatory qualification by law enforcement officers; by Fish and Wildlife Conservation Commission hunter safety instructors who teach adults and youngsters in the safe use and handling of firearms in preparation for obtaining hunting licenses; by school boards, colleges, and universities for reserve officer training corps training and activities; by school shooting teams; by Olympic competitors; and by certified instructors who teach the safe use and handling of firearms in preparation for obtaining hunting licenses for lawful self-protection.

(d) The public policy of the State of Florida is to encourage the safe handling and operation of firearms and mandates appropriate training in the safe use and handling of firearms for persons licensed to carry concealed firearms and for persons licensed to hunt in the state. Sport shooting and training ranges throughout this state provide the location at which this important public purpose is served and at which the firearms training mandates are fulfilled.

(e) Projectiles are integral to sport shooting and training range activity and to the ownership and use of firearms.

(f) Over years of operation, projectiles have accumulated in the environment at many ranges. Whether this projectile accumulation has caused or will cause degradation of the environment or harm to human health depends on factors that are site-specific. Therefore, sport shooting and training ranges must be allowed flexibility to apply appropriate environmental management practices at ranges. The use of environmental management practices can be implemented to avoid or reduce any potential for adverse environmental impact.

(g) The Department of Environmental Protection, in collaboration with shooting range owners and

operators, sport shooting organizations, law enforcement representatives, and university researchers, has developed shooting range best management practices in order to minimize any potential for any adverse environmental impact resulting from the operation of shooting ranges.

(h) Appropriate environmental management practices, when implemented where applicable, can minimize or eliminate environmental impacts associated with projectiles. Environmental management practices to maintain or to improve the condition of ranges is evolving and will continue to evolve.

(i) Unnecessary litigation and unnecessary regulation by governmental agencies of sport shooting and training ranges impairs the ability of residents of this state to ensure safe handling of firearms and to enjoy the recreational opportunities ranges provide. The cost of defending these actions is prohibitive and threatens to bankrupt and destroy the sport shooting and training range industry.

(j) The Department of Environmental Protection does not have nor has it ever had authority to force permitting requirements of part IV of chapter 403 on owners and operators of sport shooting and training ranges.

(k) The elimination of sport shooting ranges will unnecessarily impair the ability of residents of this state to exercise and practice their constitutional guarantees under the Second Amendment to the United States Constitution and under s. 8, Art. I of the State Constitution.

(2) LEGISLATIVE INTENT.—The Legislature intends to protect public and private sport shooting or training range owners, operators, users, employees, agents, contractors, customers, lenders, and insurers from lawsuits and other legal actions by the state, special purpose districts, or political subdivisions and to promote maximum flexibility for implementation of environmental management practices and of the principles of risk-based corrective action pursuant to s. 376.30701. It is also the intent of the Legislature that legal action against sport shooting and training ranges will only be a last-resort option and be available only to the department and only after all reasonable efforts to resolve disputes at shooting ranges, including compliance assistance, negotiations, and alternative dispute resolution, have been attempted.

(3) DEFINITIONS.—As used in this act:

(a) "Department" means the Department of Environmental Protection.

(b) "Operator" means any person who operates or has operated a sport shooting or training range.

(c) "Owner" means any person who owns or has owned a sport shooting or training range or any interest therein.

(d) "Projectile" means any object expelled, propelled, discharged, shot, or otherwise released from a firearm, BB gun, airgun, or similar device, including, but not limited to, gunpowder, ammunition, lead, shot, skeet, and trap targets and associated chemicals, derivatives, and constituents thereof.

(e) "Environmental management practices" includes but is not limited to Best Management Practices for Environmental Stewardship of Florida Shooting Ranges as developed by the Department of Environmental Protection. Such practices include, but are not limited to, control and containment of projectiles, prevention of the migration of projectiles and their constituents to ground and surface water, periodic removal and recycling of projectiles, and documentation of actions taken.

(f) "Environment" means the air, water, surface water, sediment, soil, and groundwater and other natural and manmade resources of this state.

(g) "User" means any person, partner, joint venture, business or social entity, or corporation, or any group of the foregoing, organized or united for a business, sport, or social purpose.

(h) "Sport shooting and training range" or "range" means any area that has been designed, or operated for the use of, firearms, rifles, shotguns, pistols, silhouettes, skeet, trap, black powder, BB guns, airguns, or similar devices, or any other type of sport or training shooting.

(4) DUTIES.-

(a) No later than January 1, 2005, the department shall make a good faith effort to provide copies

of the Best Management Practices for Environmental Stewardship of Florida Shooting Ranges to all owners or operators of sport shooting or training ranges. The department shall also provide technical assistance with implementing environmental management practices, which may include workshops, demonstrations, or other guidance, if any owner or operator of sport shooting or training ranges requests such assistance.

(b) No later than January 1, 2006, sport shooting or training range owners, operators, tenants, or occupants shall implement situation appropriate environmental management practices.

(c) If contamination is suspected or identified by any owner, operator, tenant, or occupant of sport shooting or training ranges, any owner, operator, tenant, or occupant of sport shooting or training ranges may request that the department assist with or perform contamination assessment, including, but not limited to, assistance preparing and presenting a plan to confirm the presence and extent of contamination.

(d) If contamination is suspected or identified by a third-party complaint or adjacent property sampling events, the department shall give 60 days' notice to the sport shooting or training range owner, operator, tenant, or occupant of the department's intent to enter the site for the purpose of investigating potential sources of contamination. The department may assist with or perform contamination assessment, including, but not limited to, assistance preparing and presenting a plan to confirm the presence and extent of contamination.

(e) If the department confirms contamination under paragraph (c) or paragraph (d), principles of risk-based corrective action pursuant to s. 376.30701 shall be applied to sport shooting or training ranges. Application of the minimum risk-based corrective action principles shall be the primary responsibility of the sport shooting range or training range owner or operator for implementation, however, the department may assist in these efforts. Risk-based corrective action plans used for these cleanups shall be based upon the presumption that the sport shooting or training range is an industrial use and not a residential use and will continue to be operated as a sport shooting or training range.

(5) SPORT SHOOTING AND TRAINING RANGE PROTECTION.-

(a) Notwithstanding any other provision of law, any public or private owner, operator, employee, agent, contractor, customer, lender, insurer, or user of any sport shooting or training range located in this state shall have immunity from lawsuits and other legal actions from the state and any of its agencies, special purpose districts, or political subdivisions for any claims of any kind associated with the use, release, placement, deposition, or accumulation of any projectile in the environment, on or under that sport shooting or training range, or any other property over which the range has an easement, leasehold, or other legal right of use, if the sport shooting or training range owner or operator has made a good faith effort to comply with subsection (4).

(b) Nothing in this act is intended to impair or diminish the private property rights of owners of property adjoining a sport shooting or training range.

(c) The sport shooting and training range protections provided by this act are supplemental to any other protections provided by general law.

(6) WITHDRAWALS OF CLAIMS AND RECOVERY OF EXPENSES AND ATTORNEY'S FEES.-

(a) Within 90 days after the effective date of this act becoming law, all claims by the state and any of its agencies, special purpose districts, or political subdivisions against sport shooting or training ranges pending in any court of this state or before any administrative agency on January 1, 2004, shall be withdrawn. The termination of such cases shall have no effect on the defendant's cause of action for damages, reasonable attorney's fees, and costs.

(b) In any action filed in violation of this act after the effective date of this act, the defendant shall recover all expenses resulting from such action from the governmental body, person, or entity bringing such unlawful action.

(7) PENALTIES.—Any official, agent, or employee of a county, municipality, town, special purpose district, or other political subdivision or agent of the state, while he or she was acting in his or her official capacity and within the scope of his or her employment or office, who intentionally and maliciously violates the provisions of this section or is party to bringing an action in violation of this section commits a misdemeanor of the first degree, punishable as provided in ss. 775.082 and 775.083.

(8) PREEMPTION.—Except as expressly provided by general law, the Legislature hereby declares that it is occupying the whole field of regulation of firearms and ammunition use at sport shooting and training ranges, including the environmental effects of projectile deposition at sport shooting and training ranges.

(9) The provisions of this act shall supersede any conflicting provisions of chapter 376 or chapter 403.

(10) CONSTRUCTION.—This act shall be liberally construed to effectuate its remedial and deterrent purposes.

History.-s. 1, ch. 2004-56.

790.335 Prohibition of registration of firearms; electronic records.-

(1) LEGISLATIVE FINDINGS AND INTENT.-

(a) The Legislature finds and declares that:

1. The right of individuals to keep and bear arms is guaranteed under both the Second Amendment to the United States Constitution and s. 8, Art. I of the State Constitution.

2. A list, record, or registry of legally owned firearms or law-abiding firearm owners is not a law enforcement tool and can become an instrument for profiling, harassing, or abusing law-abiding citizens based on their choice to own a firearm and exercise their Second Amendment right to keep and bear arms as guaranteed under the United States Constitution. Further, such a list, record, or registry has the potential to fall into the wrong hands and become a shopping list for thieves.

3. A list, record, or registry of legally owned firearms or law-abiding firearm owners is not a tool for fighting terrorism, but rather is an instrument that can be used as a means to profile innocent citizens and to harass and abuse American citizens based solely on their choice to own firearms and exercise their Second Amendment right to keep and bear arms as guaranteed under the United States Constitution.

4. Law-abiding firearm owners whose names have been illegally recorded in a list, record, or registry are entitled to redress.

(b) The Legislature intends through the provisions of this section to:

1. Protect the right of individuals to keep and bear arms as guaranteed under both the Second Amendment to the United States Constitution and s. 8, Art. I of the State Constitution.

2. Protect the privacy rights of law-abiding firearm owners.

(2) PROHIBITIONS.—No state governmental agency or local government, special district, or other political subdivision or official, agent, or employee of such state or other governmental entity or any other person, public or private, shall knowingly and willfully keep or cause to be kept any list, record, or registry of privately owned firearms or any list, record, or registry of the owners of those firearms.

(3) EXCEPTIONS.—The provisions of this section shall not apply to:

(a) Records of firearms that have been used in committing any crime.

(b) Records relating to any person who has been convicted of a crime.

(c) Records of firearms that have been reported stolen that are retained for a period not in excess of 10 days after such firearms are recovered. Official documentation recording the theft of a recovered weapon may be maintained no longer than the balance of the year entered, plus 2 years.

(d) Firearm records that must be retained by firearm dealers under federal law, including copies of such records transmitted to law enforcement agencies. However, no state governmental agency or

local government, special district, or other political subdivision or official, agent, or employee of such state or other governmental entity or any other person, private or public, shall accumulate, compile, computerize, or otherwise collect or convert such written records into any form of list, registry, or database for any purpose.

(e)1. Records kept pursuant to the record keeping provisions of s. 790.065; however, nothing in this section shall be construed to authorize the public release or inspection of records that are made confidential and exempt from the provisions of s. 119.07(1) by s. 790.065(4)(a).

2. Nothing in this paragraph shall be construed to allow the maintaining of records containing the names of purchasers or transferees who receive unique approval numbers or the maintaining of records of firearm transactions.

(f) Firearm records, including paper pawn transaction forms and contracts on firearm transactions, required by chapters 538 and 539.

1. Electronic firearm records held pursuant to chapter 538 may only be kept by a secondhand dealer for 30 days after the date of the purchase of the firearm by the secondhand dealer.

2. Electronic firearm records held pursuant to chapter 539 may only be kept by a pawnbroker for 30 days after the expiration of the loan that is secured by a firearm or 30 days after the date of purchase of a firearm, whichever is applicable.

3. Except as required by federal law, any firearm records kept pursuant to chapter 538 or chapter 539 shall not, at any time, be electronically transferred to any public or private entity, agency, business, or enterprise, nor shall any such records be copied or transferred for purposes of accumulation of such records into lists, registries, or databases.

4. Notwithstanding subparagraph 3., secondhand dealers and pawnbrokers may electronically submit firearm transaction records to the appropriate law enforcement agencies as required by chapters 538 and 539; however, the law enforcement agencies may not electronically submit such records to any other person or entity and must destroy such records within 60 days after receipt of such records.

5. Notwithstanding subparagraph 3., secondhand dealers and pawnbrokers may electronically submit limited firearms records consisting solely of the manufacturer, model, serial number, and caliber of pawned or purchased firearms to a third-party private provider that is exclusively incorporated, exclusively owned, and exclusively operated in the United States and that restricts access to such information to only appropriate law enforcement agencies for legitimate law enforcement purposes. Such records must be destroyed within 30 days by the third-party provider. As a condition of receipt of such records, the third-party provider must agree in writing to comply with the requirements of this section. Any pawnbroker or secondhand dealer who contracts with a third-party provider other than as provided in this act or electronically transmits any records of firearms transactions to any third-party provider other than the records specifically allowed by this paragraph commits a felony of the second degree, punishable as provided in s. 775.082 or s. 775.083.

(g) Records kept by the Department of Law Enforcement of NCIC transactions to the extent required by federal law and a log of dates of requests for criminal history record checks, unique approval and nonapproval numbers, license identification numbers, and transaction numbers corresponding to such dates.

(h) Records of an insurer that, as a condition to providing insurance against theft or loss of a firearm, identify such firearm. Such records may not be sold, commingled with records relating to other firearms, or transferred to any other person or entity. The insurer may not keep a record of such firearm more than 60 days after the policy of insurance expires or after notification by the insured that the insured is no longer the owner of such firearm.

(i) Lists of customers of a firearm dealer retained by such dealer, provided that such lists do not disclose the particular firearms purchased. Such lists, or any parts thereof, may not be sold,

commingled with records relating to other firearms, or transferred to any other person or entity.

(j) Sales receipts retained by the seller of firearms or by a person providing credit for such purchase, provided that such receipts shall not serve as or be used for the creation of a database for registration of firearms.

(k) Personal records of firearms maintained by the owner of such firearms.

(l) Records maintained by a business that stores or acts as the selling agent of firearms on behalf of the lawful owner of the firearms.

(m) Membership lists of organizations comprised of firearm owners.

(n) Records maintained by an employer or contracting entity of the firearms owned by its officers, employees, or agents, if such firearms are used in the course of business performed on behalf of the employer.

(o) Records maintained pursuant to s. 790.06 by the Department of Agriculture and Consumer Services of a person who was a licensee within the prior 2 years.

(p) Records of firearms involved in criminal investigations, criminal prosecutions, criminal appeals, and postconviction motions, civil proceedings relating to the surrender or seizure of firearms including protective injunctions, Baker Act commitments, and sheriff's levies pursuant to court judgments, and voluntary surrender by the owner or custodian of the firearm.

(q) Paper documents relating to firearms involved in criminal cases, criminal investigations, and criminal prosecutions, civil proceedings relating to the surrender or seizure of firearms including protective injunctions, Baker Act commitments, and sheriff's levies pursuant to court judgments, and voluntary surrender by the owner or custodian of the firearm.

(r) Noncriminal records relating to the receipt, storage or return of firearms, including, but not limited to, records relating to firearms impounded for storage or safekeeping, receipts proving that a firearm was returned to the rightful owner and supporting records of identification and proof of ownership, or records relating to firearms impounded pursuant to levies or court orders, provided, however, that such records shall not be compiled, sorted, or otherwise arranged into any lists, indexes, or registries of firearms or firearms owners.

(4) PENALTIES.-

(a) Any person who, or entity that, violates a provision of this section commits a felony of the third degree, punishable as provided in s. 775.082 or s. 775.083.

(b) Except as required by the provisions of s. 16, Art. I of the State Constitution or the Sixth Amendment to the United States Constitution, no public funds shall be used to defend the unlawful conduct of any person charged with a violation of this section, unless the charges against such person are dismissed or such person is determined to be not guilty at trial. Notwithstanding this paragraph, public funds may be expended to provide the services of the office of public defender or court-appointed conflict counsel as provided by law.

(c) The governmental entity, or the designee of such governmental entity, in whose service or employ a list, record, or registry was compiled in violation of this section may be assessed a fine of not more than \$5 million, if the court determines that the evidence shows that the list, record, or registry was compiled or maintained with the knowledge or complicity of the management of the governmental entity. The Attorney General may bring a civil cause of action to enforce the fines assessed under this paragraph.

(d) The state attorney in the appropriate jurisdiction shall investigate complaints of criminal violations of this section and, where evidence indicates a violation may have occurred, shall prosecute violators.

(5) ELECTRONIC RECORDS.—Secondhand dealers and pawnbrokers who electronically submit firearms transaction records to the appropriate law enforcement agencies as required by chapters 538 and 539 shall submit the name of the manufacturer and caliber information of each firearm in Florida

Crime Information Center coding, and shall include the model and serial number of each firearm.

(6) CONSTRUCTION.—This section shall be construed to effectuate its remedial and deterrent purposes. This section may not be construed to grant any substantive, procedural privacy right or civil claim to any criminal defendant, and a violation of this section may not be grounds for the suppression of evidence in any criminal case.

History.-s. 1, ch. 2004-59; s. 9, ch. 2006-201; s. 1, ch. 2009-229; s. 33, ch. 2018-3.

790.336 Lists, records, or registries to be destroyed.—Any list, record, or registry maintained or under construction on the effective date of this act shall be destroyed, unless prohibited by law, within 60 calendar days after this act becomes law. Thereafter, failure to destroy any such list, record, or registry may result in prosecution under this act.

History.-s. 2, ch. 2004-59.

790.338 Medical privacy concerning firearms; prohibitions; penalties; exceptions.-

(1) A health care practitioner licensed under chapter 456 or a health care facility licensed under chapter 395 may not intentionally enter any disclosed information concerning firearm ownership into the patient's medical record if the practitioner knows that such information is not relevant to the patient's medical care or safety, or the safety of others.

(2) A health care practitioner licensed under chapter 456 or a health care facility licensed under chapter 395 shall respect a patient's right to privacy and should refrain from making a written inquiry or asking questions concerning the ownership of a firearm or ammunition by the patient or by a family member of the patient, or the presence of a firearm in a private home or other domicile of the patient or a family member of the patient. Notwithstanding this provision, a health care practitioner or health care facility that in good faith believes that this information is relevant to the patient's medical care or safety, or the safety of others, may make such a verbal or written inquiry.

(3) Any emergency medical technician or paramedic acting under the supervision of an emergency medical services medical director under chapter 401 may make an inquiry concerning the possession or presence of a firearm if he or she, in good faith, believes that information regarding the possession of a firearm by the patient or the presence of a firearm in the home or domicile of a patient or a patient's family member is necessary to treat a patient during the course and scope of a medical emergency or that the presence or possession of a firearm would pose an imminent danger or threat to the patient or others.

(4) A patient may decline to answer or provide any information regarding ownership of a firearm by the patient or a family member of the patient, or the presence of a firearm in the domicile of the patient or a family member of the patient. A patient's decision not to answer a question relating to the presence or ownership of a firearm does not alter existing law regarding a physician's authorization to choose his or her patients.

(5) A health care practitioner licensed under chapter 456 or a health care facility licensed under chapter 395 may not discriminate against a patient based solely upon the patient's exercise of the constitutional right to own and possess firearms or ammunition.

(6) A health care practitioner licensed under chapter 456 or a health care facility licensed under chapter 395 shall respect a patient's legal right to own or possess a firearm and should refrain from unnecessarily harassing a patient about firearm ownership during an examination.

(7) An insurer issuing any type of insurance policy pursuant to chapter 627 may not deny coverage, increase any premium, or otherwise discriminate against any insured or applicant for insurance on the basis of or upon reliance upon the lawful ownership or possession of a firearm or ammunition or the lawful use or storage of a firearm or ammunition. Nothing herein shall prevent an insurer from considering the fair market value of firearms or ammunition in the setting of premiums for scheduled personal property coverage.

(8) Violations of the provisions of subsections (1)-(4) constitute grounds for disciplinary action under ss. 456.072(2) and 395.1055.

History.-s. 1, ch. 2011-112.

¹790.401 Risk protection orders.–

(1) DEFINITIONS.—As used in this section, the term:

(a) "Petitioner" means a law enforcement officer or a law enforcement agency that petitions a court for a risk protection order under this section.

(b) "Respondent" means the individual who is identified as the respondent in a petition filed under this section.

(c) "Risk protection order" means a temporary ex parte order or a final order granted under this section.

(2) PETITION FOR A RISK PROTECTION ORDER.—There is created an action known as a petition for a risk protection order.

(a) A petition for a risk protection order may be filed by a law enforcement officer or law enforcement agency.

(b) An action under this section must be filed in the county where the petitioner's law enforcement office is located or the county where the respondent resides.

(c) Such petition for a risk protection order does not require either party to be represented by an attorney.

(d) Notwithstanding any other law, attorney fees may not be awarded in any proceeding under this section.

(e) A petition must:

1. Allege that the respondent poses a significant danger of causing personal injury to himself or herself or others by having a firearm or any ammunition in his or her custody or control or by purchasing, possessing, or receiving a firearm or any ammunition, and must be accompanied by an affidavit made under oath stating the specific statements, actions, or facts that give rise to a reasonable fear of significant dangerous acts by the respondent;

2. Identify the quantities, types, and locations of all firearms and ammunition the petitioner believes to be in the respondent's current ownership, possession, custody, or control; and

3. Identify whether there is a known existing protection order governing the respondent under s. 741.30, s. 784.046, or s. 784.0485 or under any other applicable statute.

(f) The petitioner must make a good faith effort to provide notice to a family or household member of the respondent and to any known third party who may be at risk of violence. The notice must state that the petitioner intends to petition the court for a risk protection order or has already done so and must include referrals to appropriate resources, including mental health, domestic violence, and counseling resources. The petitioner must attest in the petition to having provided such notice or must attest to the steps that will be taken to provide such notice.

(g) The petitioner must list the address of record on the petition as being where the appropriate law enforcement agency is located.

(h) A court or a public agency may not charge fees for filing or for service of process to a petitioner seeking relief under this section and must provide the necessary number of certified copies, forms, and instructional brochures free of charge.

(i) A person is not required to post a bond to obtain relief in any proceeding under this section.

- (j) The circuit courts of this state have jurisdiction over proceedings under this section.
- (3) RISK PROTECTION ORDER HEARINGS AND ISSUANCE.-

(a) Upon receipt of a petition, the court must order a hearing to be held no later than 14 days after the date of the order and must issue a notice of hearing to the respondent for the same.

1. The clerk of the court shall cause a copy of the notice of hearing and petition to be forwarded

on or before the next business day to the appropriate law enforcement agency for service upon the respondent as provided in subsection (5).

2. The court may, as provided in subsection (4), issue a temporary ex parte risk protection order pending the hearing ordered under this subsection. Such temporary ex parte order must be served concurrently with the notice of hearing and petition as provided in subsection (5).

3. The court may conduct a hearing by telephone pursuant to a local court rule to reasonably accommodate a disability or exceptional circumstances. The court must receive assurances of the petitioner's identity before conducting a telephonic hearing.

(b) Upon notice and a hearing on the matter, if the court finds by clear and convincing evidence that the respondent poses a significant danger of causing personal injury to himself or herself or others by having in his or her custody or control, or by purchasing, possessing, or receiving, a firearm or any ammunition, the court must issue a risk protection order for a period that it deems appropriate, up to and including but not exceeding 12 months.

(c) In determining whether grounds for a risk protection order exist, the court may consider any relevant evidence, including, but not limited to, any of the following:

1. A recent act or threat of violence by the respondent against himself or herself or others, whether or not such violence or threat of violence involves a firearm.

2. An act or threat of violence by the respondent within the past 12 months, including, but not limited to, acts or threats of violence by the respondent against himself or herself or others.

3. Evidence of the respondent being seriously mentally ill or having recurring mental health issues.

4. A violation by the respondent of a risk protection order or a no contact order issued under s. 741.30, s. 784.046, or s. 784.0485.

5. A previous or existing risk protection order issued against the respondent.

6. A violation of a previous or existing risk protection order issued against the respondent.

7. Whether the respondent, in this state or any other state, has been convicted of, had adjudication withheld on, or pled nolo contendere to a crime that constitutes domestic violence as defined in s. 741.28.

8. Whether the respondent has used, or has threatened to use, against himself or herself or others any weapons.

9. The unlawful or reckless use, display, or brandishing of a firearm by the respondent.

10. The recurring use of, or threat to use, physical force by the respondent against another person or the respondent stalking another person.

11. Whether the respondent, in this state or any other state, has been arrested for, convicted of, had adjudication withheld on, or pled nolo contendere to a crime involving violence or a threat of violence.

12. Corroborated evidence of the abuse of controlled substances or alcohol by the respondent.

13. Evidence of recent acquisition of firearms or ammunition by the respondent.

14. Any relevant information from family and household members concerning the respondent.

15. Witness testimony, taken while the witness is under oath, relating to the matter before the court.

(d) A person, including an officer of the court, who offers evidence or recommendations relating to the cause of action either must present the evidence or recommendations in writing to the court with copies to each party and his or her attorney, if one is retained, or must present the evidence under oath at a hearing at which all parties are present.

(e) In a hearing under this section, the rules of evidence apply to the same extent as in a domestic violence injunction proceeding under s. 741.30.

(f) During the hearing, the court must consider whether a mental health evaluation or chemical

dependency evaluation is appropriate and, if such determination is made, may order such evaluations, if appropriate.

(g) A risk protection order must include all of the following:

1. A statement of the grounds supporting the issuance of the order;

2. The date the order was issued;

3. The date the order ends;

4. Whether a mental health evaluation or chemical dependency evaluation of the respondent is required;

5. The address of the court in which any responsive pleading should be filed;

6. A description of the requirements for the surrender of all firearms and ammunition that the respondent owns, under subsection (7); and

7. The following statement:

"To the subject of this protection order: This order will last until the date noted above. If you have not done so already, you must surrender immediately to the (insert name of local law enforcement agency) all firearms and ammunition that you own in your custody, control, or possession and any license to carry a concealed weapon or firearm issued to you under s. 790.06, Florida Statutes. You may not have in your custody or control, or purchase, possess, receive, or attempt to purchase or receive, a firearm or ammunition while this order is in effect. You have the right to request one hearing to vacate this order, starting after the date of the issuance of this order, and to request another hearing after every extension of the order, if any. You may seek the advice of an attorney as to any matter connected with this order."

(h) If the court issues a risk protection order, the court must inform the respondent that he or she is entitled to request a hearing to vacate the order in the manner provided by subsection (6). The court shall provide the respondent with a form to request a hearing to vacate.

(i) If the court denies the petitioner's request for a risk protection order, the court must state the particular reasons for the denial.

(4) TEMPORARY EX PARTE RISK PROTECTION ORDERS.-

(a) A petitioner may request that a temporary ex parte risk protection order be issued before a hearing for a risk protection order, without notice to the respondent, by including in the petition detailed allegations based on personal knowledge that the respondent poses a significant danger of causing personal injury to himself or herself or others in the near future by having in his or her custody or control, or by purchasing, possessing, or receiving, a firearm or ammunition.

(b) In considering whether to issue a temporary ex parte risk protection order under this section, the court shall consider all relevant evidence, including the evidence described in paragraph (3)(c).

(c) If a court finds there is reasonable cause to believe that the respondent poses a significant danger of causing personal injury to himself or herself or others in the near future by having in his or her custody or control, or by purchasing, possessing, or receiving, a firearm or ammunition, the court must issue a temporary ex parte risk protection order.

(d) The court must hold a temporary ex parte risk protection order hearing in person or by telephone on the day the petition is filed or on the business day immediately following the day the petition is filed.

- (e) A temporary ex parte risk protection order must include all of the following:
- 1. A statement of the grounds asserted for the order;
- 2. The date the order was issued;
- 3. The address of the court in which any responsive pleading may be filed;
- 4. The date and time of the scheduled hearing;
- 5. A description of the requirements for the surrender of all firearms and ammunition that the

respondent owns, under subsection (7); and

6. The following statement:

"To the subject of this protection order: This order is valid until the date noted above. You are required to surrender all firearms and ammunition that you own in your custody, control, or possession. You may not have in your custody or control, or purchase, possess, receive, or attempt to purchase or receive, a firearm or ammunition while this order is in effect. You must surrender immediately to the (insert name of local law enforcement agency) all firearms and ammunition in your custody, control, or possession and any license to carry a concealed weapon or firearm issued to you under s. 790.06, Florida Statutes. A hearing will be held on the date and at the time noted above to determine if a risk protection order should be issued. Failure to appear at that hearing may result in a court issuing an order against you which is valid for 1 year. You may seek the advice of an attorney as to any matter connected with this order."

(f) A temporary exparte risk protection order ends upon the hearing on the risk protection order.

(g) A temporary ex parte risk protection order must be served by a law enforcement officer in the same manner as provided for in subsection (5) for service of the notice of hearing and petition and must be served concurrently with the notice of hearing and petition.

(h) If the court denies the petitioner's request for a temporary ex parte risk protection order, the court must state the particular reasons for the denial.

(5) SERVICE.-

(a) The clerk of the court shall furnish a copy of the notice of hearing, petition, and temporary ex parte risk protection order or risk protection order, as applicable, to the sheriff of the county where the respondent resides or can be found, who shall serve it upon the respondent as soon thereafter as possible on any day of the week and at any time of the day or night. When requested by the sheriff, the clerk of the court may transmit a facsimile copy of a temporary ex parte risk protection order or a risk protection order that has been certified by the clerk of the court, and this facsimile copy may be served in the same manner as a certified copy. Upon receiving a facsimile copy, the sheriff must verify receipt with the sender before attempting to serve it upon the respondent. The clerk of the court shall be responsible for furnishing to the sheriff information on the respondent's physical description and location. Notwithstanding any other provision of law to the contrary, the chief judge of each circuit, in consultation with the appropriate sheriff, may authorize a law enforcement agency within the jurisdiction to effect service. A law enforcement agency effecting service pursuant to this section shall use service and verification procedures consistent with those of the sheriff. Service under this section takes precedence over the service of other documents, unless the other documents are of a similar emergency nature.

(b) All orders issued, changed, continued, extended, or vacated after the original service of documents specified in paragraph (a) must be certified by the clerk of the court and delivered to the parties at the time of the entry of the order. The parties may acknowledge receipt of such order in writing on the face of the original order. If a party fails or refuses to acknowledge the receipt of a certified copy of an order, the clerk shall note on the original order that service was effected. If delivery at the hearing is not possible, the clerk shall mail certified copies of the order to the parties at the last known address of each party. Service by mail is complete upon mailing. When an order is served pursuant to this subsection, the clerk shall prepare a written certification to be placed in the court file specifying the time, date, and method of service and shall notify the sheriff.

(6) TERMINATION AND EXTENSION OF ORDERS.-

(a) The respondent may submit one written request for a hearing to vacate a risk protection order issued under this section, starting after the date of the issuance of the order, and may request another hearing after every extension of the order, if any.

1. Upon receipt of the request for a hearing to vacate a risk protection order, the court shall set a date for a hearing. Notice of the request must be served on the petitioner in accordance with subsection (5). The hearing must occur no sooner than 14 days and no later than 30 days after the date of service of the request upon the petitioner.

2. The respondent shall have the burden of proving by clear and convincing evidence that the respondent does not pose a significant danger of causing personal injury to himself or herself or others by having in his or her custody or control, purchasing, possessing, or receiving a firearm or ammunition. The court may consider any relevant evidence, including evidence of the considerations listed in paragraph (3)(c).

3. If the court finds after the hearing that the respondent has met his or her burden of proof, the court must vacate the order.

4. The law enforcement agency holding any firearm or ammunition or license to carry a concealed weapon or firearm that has been surrendered pursuant to this section shall be notified of the court order to vacate the risk protection order.

(b) The court must notify the petitioner of the impending end of a risk protection order. Notice must be received by the petitioner at least 30 days before the date the order ends.

(c) The petitioner may, by motion, request an extension of a risk protection order at any time within 30 days before the end of the order.

1. Upon receipt of the motion to extend, the court shall order that a hearing be held no later than 14 days after the date the order is issued and shall schedule such hearing.

a. The court may schedule a hearing by telephone in the manner provided by subparagraph (3) (a)3.

b. The respondent must be personally serviced in the same manner provided by subsection (5).

2. In determining whether to extend a risk protection order issued under this section, the court may consider all relevant evidence, including evidence of the considerations listed in paragraph (3) (c).

3. If the court finds by clear and convincing evidence that the requirements for issuance of a risk protection order as provided in subsection (3) continue to be met, the court must extend the order. However, if, after notice, the motion for extension is uncontested and no modification of the order is sought, the order may be extended on the basis of a motion or affidavit stating that there has been no material change in relevant circumstances since entry of the order and stating the reason for the requested extension.

4. The court may extend a risk protection order for a period that it deems appropriate, up to and including but not exceeding 12 months, subject to an order to vacate as provided in paragraph (a) or to another extension order by the court.

(7) SURRENDER OF FIREARMS AND AMMUNITION.-

(a) Upon issuance of a risk protection order under this section, including a temporary ex parte risk protection order, the court shall order the respondent to surrender to the local law enforcement agency all firearms and ammunition owned by the respondent in the respondent's custody, control, or possession except as provided in subsection (9), and any license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent.

(b) The law enforcement officer serving a risk protection order under this section, including a temporary ex parte risk protection order, shall request that the respondent immediately surrender all firearms and ammunition owned by the respondent in his or her custody, control, or possession and any license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent. The law enforcement officer shall take possession of all firearms and ammunition owned by the respondent and any license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent and any license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent and any license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent and any license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent, which are surrendered. Alternatively, if personal service by a law enforcement

officer is not possible or is not required because the respondent was present at the risk protection order hearing, the respondent must surrender any firearms and ammunition owned by the respondent and any license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent, in a safe manner to the control of the local law enforcement agency immediately after being served with the order by service or immediately after the hearing at which the respondent was present. Notwithstanding ss. 933.02 and 933.18, a law enforcement officer may seek a search warrant from a court of competent jurisdiction to conduct a search for firearms or ammunition owned by the respondent if the officer has probable cause to believe that there are firearms or ammunition owned by the respondent in the respondent's custody, control, or possession which have not been surrendered.

(c) At the time of surrender, a law enforcement officer taking possession of any firearm or ammunition owned by the respondent, or a license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent shall issue a receipt identifying all firearms and the quantity and type of ammunition that have been surrendered, and any license surrendered and shall provide a copy of the receipt to the respondent. Within 72 hours after service of the order, the law enforcement officer serving the order shall file the original receipt with the court and shall ensure that his or her law enforcement agency retains a copy of the receipt.

(d) Notwithstanding ss. 933.02 and 933.18, upon the sworn statement or testimony of any person alleging that the respondent has failed to comply with the surrender of firearms or ammunition owned by the respondent, as required by an order issued under this section, the court shall determine whether probable cause exists to believe that the respondent has failed to surrender all firearms or ammunition owned by the respondent in the respondent's custody, control, or possession. If the court finds that probable cause exists, the court must issue a warrant describing the firearms or ammunition owned by the respondent and authorizing a search of the locations where the firearms or ammunition owned by the respondent are reasonably believed to be found and the seizure of any firearms or ammunition owned by the respondent discovered pursuant to such search.

(e) If a person other than the respondent claims title to any firearms or ammunition surrendered pursuant to this section and he or she is determined by the law enforcement agency to be the lawful owner of the firearm or ammunition, the firearm or ammunition shall be returned to him or her, if:

1. The lawful owner agrees to store the firearm or ammunition in a manner such that the respondent does not have access to or control of the firearm or ammunition.

2. The firearm or ammunition is not otherwise unlawfully possessed by the owner.

(f) Upon the issuance of a risk protection order, the court shall order a new hearing date and require the respondent to appear no later than 3 business days after the issuance of the order. The court shall require proof that the respondent has surrendered any firearms or ammunition owned by the respondent in the respondent's custody, control, or possession. The court may cancel the hearing upon a satisfactory showing that the respondent is in compliance with the order.

(g) All law enforcement agencies must develop policies and procedures regarding the acceptance, storage, and return of firearms, ammunition, or licenses required to be surrendered under this section.

(8) RETURN AND DISPOSAL OF FIREARMS AND AMMUNITION.-

(a) If a risk protection order is vacated or ends without extension, a law enforcement agency holding a firearm or any ammunition owned by the respondent or a license to carry a concealed weapon or firearm issued under s. 790.06, held by the respondent, that has been surrendered or seized pursuant to this section must return such surrendered firearm, ammunition, or license to carry a concealed weapon or firearm issued under s. 790.06, as requested by a respondent only after confirming through a background check that the respondent is currently eligible to own or possess firearms and ammunition under federal and state law and after confirming with the court that the

risk protection order has been vacated or has ended without extension.

(b) If a risk protection order is vacated or ends without extension, the Department of Agriculture and Consumer Services, if it has suspended a license to carry a concealed weapon or firearm pursuant to this section, must reinstate such license only after confirming that the respondent is currently eligible to have a license to carry a concealed weapon or firearm pursuant to s. 790.06.

(c) A law enforcement agency must provide notice to any family or household members of the respondent before the return of any surrendered firearm and ammunition owned by the respondent.

(d) Any firearm and ammunition surrendered by a respondent pursuant to subsection (7) which remains unclaimed for 1 year by the lawful owner after an order to vacate the risk protection order shall be disposed of in accordance with the law enforcement agency's policies and procedures for the disposal of firearms in police custody.

(9) TRANSFER OF FIREARMS AND AMMUNITION.—A respondent may elect to transfer all firearms and ammunition owned by the respondent that have been surrendered to or seized by a local law enforcement agency pursuant to subsection (7) to another person who is willing to receive the respondent's firearms and ammunition. The law enforcement agency must allow such a transfer only if it is determined that the chosen recipient:

(a) Currently is eligible to own or possess a firearm and ammunition under federal and state law after confirmation through a background check;

(b) Attests to storing the firearms and ammunition in a manner such that the respondent does not have access to or control of the firearms and ammunition until the risk protection order against the respondent is vacated or ends without extension; and

(c) Attests not to transfer the firearms or ammunition back to the respondent until the risk protection order against the respondent is vacated or ends without extension.

(10) REPORTING OF ORDERS.-

(a) Within 24 hours after issuance, the clerk of the court shall enter any risk protection order or temporary ex parte risk protection order issued under this section into the uniform case reporting system.

(b) Within 24 hours after issuance, the clerk of the court shall forward a copy of an order issued under this section to the appropriate law enforcement agency specified in the order. Upon receipt of the copy of the order, the law enforcement agency shall enter the order into the Florida Crime Information Center and National Crime Information Center. The order must remain in each system for the period stated in the order, and the law enforcement agency may only remove an order from the systems which has ended or been vacated. Entry of the order into the Florida Crime Information Center and National Crime Information Center constitutes notice to all law enforcement agencies of the existence of the order. The order is fully enforceable in any county in this state.

(c) The issuing court shall, within 3 business days after issuance of a risk protection order or temporary ex parte risk protection order, forward all available identifying information concerning the respondent, along with the date of order issuance, to the Department of Agriculture and Consumer Services. Upon receipt of the information, the department shall determine if the respondent has a license to carry a concealed weapon or firearm. If the respondent does have a license to carry a concealed weapon or firearm must immediately suspend the license.

(d) If a risk protection order is vacated before its end date, the clerk of the court shall, on the day of the order to vacate, forward a copy of the order to the Department of Agriculture and Consumer Services and the appropriate law enforcement agency specified in the order to vacate. Upon receipt of the order, the law enforcement agency shall promptly remove the order from any computer-based system in which it was entered pursuant to paragraph (b).

(11) PENALTIES.-

(a) A person who makes a false statement, which he or she does not believe to be true, under

oath in a hearing under this section in regard to any material matter commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(b) A person who has in his or her custody or control a firearm or any ammunition or who purchases, possesses, or receives a firearm or any ammunition with knowledge that he or she is prohibited from doing so by an order issued under this section commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

(12) LAW ENFORCEMENT RETAINS OTHER AUTHORITY.—This section does not affect the ability of a law enforcement officer to remove a firearm or ammunition or license to carry a concealed weapon or concealed firearm from any person or to conduct any search and seizure for firearms or ammunition pursuant to other lawful authority.

(13) LIABILITY.—Except as provided in subsection (8) or subsection (11), this section does not impose criminal or civil liability on any person or entity for acts or omissions related to obtaining a risk protection order or temporary ex parte risk protection order, including, but not limited to, providing notice to the petitioner, a family or household member of the respondent, and any known third party who may be at risk of violence or failure to provide such notice, or reporting, declining to report, investigating, declining to investigate, filing, or declining to file, a petition under this section.

(14) INSTRUCTIONAL AND INFORMATIONAL MATERIAL.-

(a) The Office of the State Courts Administrator shall develop and prepare instructions and informational brochures, standard petitions and risk protection order forms, and a court staff handbook on the risk protection order process. The standard petition and order forms must be used after January 1, 2019, for all petitions filed and orders issued pursuant to this section. The office shall determine the significant non-English-speaking or limited English-speaking populations in the state and prepare the instructions and informational brochures and standard petitions and risk protection order forms in such languages. The instructions, brochures, forms, and handbook must be prepared in consultation with interested persons, including representatives of gun violence prevention groups, judges, and law enforcement personnel. Materials must be based on best practices and must be available online to the public.

1. The instructions must be designed to assist petitioners in completing the petition and must include a sample of a standard petition and order for protection forms.

2. The instructions and standard petition must include a means for the petitioner to identify, with only layman's knowledge, the firearms or ammunition the respondent may own, possess, receive, or have in his or her custody or control. The instructions must provide pictures of types of firearms and ammunition that the petitioner may choose from to identify the relevant firearms or ammunition, or must provide an equivalent means to allow petitioners to identify firearms or ammunition without requiring specific or technical knowledge regarding the firearms or ammunition.

3. The informational brochure must describe the use of and the process for obtaining, extending, and vacating a risk protection order under this section and must provide relevant forms.

4. The risk protection order form must include, in a conspicuous location, notice of criminal penalties resulting from violation of the order and the following statement: "You have the sole responsibility to avoid or refrain from violating this order's provisions. Only the court can change the order and only upon written request."

5. The court staff handbook must allow for the addition of a community resource list by the clerk of the court.

(b) Any clerk of court may create a community resource list of crisis intervention, mental health, substance abuse, interpreter, counseling, and other relevant resources serving the county in which the court is located. The court may make the community resource list available as part of or in addition to the informational brochures described in paragraph (a).

(c) The Office of the State Courts Administrator shall distribute a master copy of the petition and

order forms, instructions, and informational brochures to the clerks of court. Distribution of all documents shall, at a minimum, be in an electronic format or formats accessible to all courts and clerks of court in the state.

(d) Within 90 days after receipt of the master copy from the Office of the State Courts Administrator, the clerk of the court shall make available the standardized forms, instructions, and informational brochures required by this subsection.

(e) The Office of the State Courts Administrator shall update the instructions, brochures, standard petition and risk protection order forms, and court staff handbook as necessary, including when changes in the law make an update necessary.

History.-s. 16, ch. 2018-3.

Note.-Section 14, ch. 2018-3, provides that:

"(1) Section 790.401, Florida Statutes, is intended to temporarily prevent individuals who are at high risk of harming themselves or others from accessing firearms or ammunition by allowing law enforcement officers to obtain a court order when there is demonstrated evidence that a person poses a significant danger to himself or herself or others, including significant danger as a result of a mental health crisis or violent behavior.

"(2) The purpose and intent of s. 790.401, Florida Statutes, is to reduce deaths and injuries as a result of certain individuals' use of firearms while respecting constitutional rights by providing a judicial procedure for law enforcement officers to obtain a court order temporarily restricting a person's access to firearms and ammunition. The process established by s. 790.401, Florida Statutes, is intended to apply only to situations in which the person poses a significant danger of harming himself or herself or others by possessing a firearm or ammunition and to include standards and safeguards to protect the rights of respondents and due process of law."

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Tab 3

State Reports



Analysis of Florida's Defense Incentives, Including a Review of the Defense and Space Industries

Submitted: December 28, 2018

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EXECUTIVE SUMMARY

Background and Purpose

Legislation enacted in 2013 directs the Office of Economic and Demographic Research (EDR) and the Office of Program Policy Analysis and Government Accountability (OPPAGA) to analyze and evaluate state economic development incentive programs on a recurring three-year schedule.¹ EDR is required to evaluate the economic benefits of each program, using project data from the most recent three-year period, and to provide an explanation of the model used in its analysis and the model's key assumptions. Economic Benefit is defined as "the direct, indirect, and induced gains in state revenues as a percentage of the state's investment" – which includes "state grants, tax exemptions, tax refunds, tax credits, and other state incentives."² EDR's evaluation also requires identification of jobs created, the increase or decrease in personal income, and the impact on state Gross Domestic Product (GDP) for each program.

Explanation of Return-on-Investment

In this report, the term Return-on-Investment (ROI) is synonymous with economic benefit, and is used in lieu of the statutory term. This measure does not address issues of overall effectiveness or societal benefit; instead, it focuses on tangible financial gains or losses to state revenues, and is ultimately conditioned by the state's tax policy.

The ROI is developed by summing state revenues generated by a program less state expenditures invested in the program, and dividing that calculation by the state's investment. It is most often used when a project is to be evaluated strictly on a monetary basis, and externalities and social costs and benefits—to the extent they exist—are excluded from the evaluation. The basic formula is:

(Increase in State Revenue – State Investment) State Investment

Since EDR's Statewide Model³ is used to develop these computations and to model the induced and indirect effects, EDR is able to simultaneously generate State Revenue and State Investment from the model so all feedback effects mirror reality. The result (a net number) is used in the final ROI calculation.

The review period covers Fiscal Years 2014-15, 2015-16, and 2016-17. In this report, the following programs are under review:

- The Military Base Protection Grant Program MBP;
- Defense Infrastructure Grant Program DIG;
- Defense Reinvestment Grant Program DRG;
- Florida Defense Task Force Grants Task Force Grants;
- Qualified Defense Contractor and Space Flight Business Tax Refund Program QDSC; and
- Sales Tax Exemption for Manufacturing and Equipment Used in the Semiconductor, Defense, or Space Technology Production SDST.

¹ Section 288.0001, F.S., as created by s. 1, ch.2013-39, Laws of Florida & s. 1, ch.2013-42, Laws of Florida.

² Section 288.005(1), F.S.

³ See section on Statewide Model for more details.

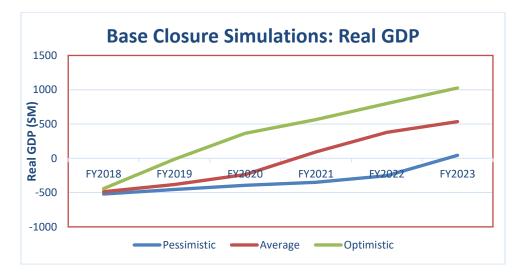
Overall Results and Conclusions

Florida is home to 20 military installations and some of the largest defense contractors in the country. In Federal Fiscal Year 2015, total federal spending on defense contracts and payroll amounted to over \$17.6 billion.⁴ Nationally, Florida is ranked 5th in the country in total defense spending.⁵

In the first section of the report, the analysis reviews 4 programs that consist of activities and strategies intended to preserve or expand the U.S. military base presence throughout the state, or to mitigate the impact to the local economy should bases be realigned or closed. The programs reviewed were the Military Base Protection Grant Program, the Defense Reinvestment Grant Program, the Defense Infrastructure Grant Program and the Florida Defense Task Force Grants.

The Return-on-Investment for these programs and strategies is unknown because of the difficulty in measuring the effectiveness of these programs. The programs' main goal is to prevent any significant realignment or base closure from occurring in Florida. However, there has not been a Military Base Realignment and Closure (BRAC) process since 2005. Therefore, it is impossible to evaluate how well these programs have done to prevent a BRAC base closure in Florida. In addition, no evidence was found in the academic literature to suggest that state-funded advocacy programs are effective in preventing BRAC base closures, or that the negative repercussions of a base closure are persistent over the long term.

The analysis did use the Statewide Model to estimate the economic impact of a military base closure on the Florida economy in the 6 years following the closure. The analysis ran 3 different scenarios through the Statewide Model, because the economic impact of a base closure can vary significantly. The variance is due to several factors. These include the amount of civilian job loss from the military base, the strength and diversity of the local economy, whether the base closure occurs in a rural or urban area, and the pace of the base redevelopment.⁶ The graph below shows the impact to state GDP from a military base closure for all 3 scenarios.



⁴ U.S. Department of Defense Office of Economic Adjustment, "Defense Spending by State, Fiscal Year 2015", 18.

⁵ Ibid.

⁶ A more detailed review of each factor can be found in the "The Economic Impact of Military Bases in Florida" section of the report.

As illustrated by the graph, the closure of a military base can lead to significantly different economic outcomes. The pessimistic scenario represents the "worst case" scenario, where the economic conditions are unfavorable for a recovery. In the pessimistic scenario, Florida's GDP doesn't recover until Year 6. The optimistic scenario is the "best case" scenario. All the economic factors are advantageous for a quick recovery from a base closure. By Year 3, the Florida GDP has recovered and grows stronger due to new business growth at the closed base. The average scenario represents the likeliest scenario after the closure of a military base. The average scenario estimates negative GDP growth until Year 4.

The second section of the report reviews the Qualified Defense Contractor and Space Flight Business Tax Refund Program (QDSC) and the Sales Tax Exemption for Manufacturing and Equipment Used in the Semiconductor, Defense, or Space Technology Production (SDST).⁷ Both of these programs provide incentives to contractors to perform defense work in Florida. The ROI of these programs is indeterminate because it cannot be reasonably assumed that the incentives were the primary factor in the defense contractor's ability to be awarded the defense contract or the subsequent decision to complete the contract work in Florida.

Instead, the analysis looked at the economic impact of federal defense contracts to the Florida economy. The analysis shocked the Statewide Model by removing defense contracts from the state economy. The results (see the table below) show that the defense contracts contributed, on average, over \$9.8 billion annually to Florida' Real Gross Domestic Product, nearly \$8.0 billion annually in real Disposable Personal Income, and \$171.3 million annually in state revenue. All of these numbers are higher than the results from December 2015. On average, Department of Defense contracts help employ over 20 thousand workers every year.

Statewide Economic Model Impact of the DEFENSE CONTRACTS (FY2014-2016)									
	Units	2014-2015	2015-2016	2016-2017	Total	Average per Year			
Real Disposable Personal Income	Fixed 2010-11 \$ (M)	7,310.7	8,038.1	8,585.1	23,933.8	7,977.9			
Real Gross Domestic Product	Fixed 2010-11 \$ (M)	9,919.3	9,756.2	9,752.4	29,427.9	9,809.3			
		Average Per							
	Units	Year							
Total Employment	Jobs	20,341							
Total State Revenues	Nominal \$ (M)	171							

Finally, the analysis provides a review of the current state of the space industry in Florida. Because the space industry is inextricably intertwined with aerospace and other industries, it is challenging to carve out a separate identity unique to space. A more defined vision may be needed, that includes an emphasis on shared public-private research and development, as well as specialized training opportunities.

⁷ While the QDSC program expired on 7/1/2014, the program continued to distribute incentive payments to projects that were pre-qualified before the expiration of the program.

THE ECONOMIC IMPACT OF MILITARY BASES IN FLORIDA

The U.S. Military has a significant presence in Florida. As of 2017, the U.S. Military operated 20 major installations within the state.⁸ The installations cover over 521 thousand acres of land (approximately 1.2 percent of the state) and contain over 6 thousand buildings.⁹ To successfully operate the bases, the military deploys over 56 thousand active duty personnel, over 36 thousand National Guard and reserve personnel and employs over 38 thousand civilians.¹⁰ The military bases are scattered throughout the state, but personnel is heavily concentrated in four counties: Duval, Escambia, Okaloosa and Hillsborough.¹¹



⁸ Enterprise Florida, "Florida's Military Profile", (March 2018).

⁹ Enterprise Florida, "Florida Defense Factbook 2017", (December 2017):1.

¹⁰ Ibid.

¹¹ U.S. Department of Defense Office of Economic Adjustment, "Defense Spending by State, Fiscal Year 2015", 18.

Top Military Personnel Locations in						
Florida, 2015						
County Total Personne						
Duval	20,180					
Escambia	19,900					
Okaloosa	14,048					
Hillsborough	12,509					
Santa Rosa	7,466					
Вау	6,448					
Orange	5,962					
Brevard	5,103					
Miami-Dade	4,366					
Broward	3,007					

Florida military bases play an important role in the state's economy. Military bases employ local civilians; military personnel purchase homes, local goods and services; and the military bases purchase supplies from Florida businesses. The majority of a base's economic impact will occur in the local communities surrounding each Florida military base. In Federal Fiscal Year 2015, Florida was ranked 5th in the nation in total defense spending. Virginia, California, Texas, and Maryland were the only states that ranked higher.¹² However, when measured as a percent of state GDP, Florida ranks closer to the U.S average. The spending includes approximately \$6.6 billion on payroll and billions more in private contracts for construction projects, services, supplies, and equipment at the military bases.¹³ With respect to total payroll, Florida ranks 6th in the nation, coming in behind California, Maryland, Texas, Virginia and North Carolina.¹⁴

Base Realignment and Closure (BRAC)

The Base Realignment and Closure process is the current federal procedure for closing and disposing of federal military base installations in the United States. The BRAC process requires the Secretary of Defense to prepare and submit a list of military bases for closure or realignment to a BRAC commission. The BRAC commission is an independent committee composed of former lawmakers and retired military officials. The BRAC commission reviews the Defense Secretary's recommendations and submits a report that accepts, reject or modifies the base closure recommendations. Both the President and Congress have two choices – either completely accept or reject the base closure recommendations. Since 1988, the U.S. government has enacted five rounds of U.S military closures under the BRAC process.

In total, 11 Florida military facilities have been closed as a result of the 5 BRACs that occurred in 1988, 1991, 1993, 1995 and 2005.¹⁵ These facilities have included data processing centers, a naval hospital, research laboratories, and naval air stations. The two most notable and largest closures have been the Orlando Naval Training Center and the Naval Air Station at Cecil Field. This count does not include any major realignment of forces, partial base closures or divisional restructuring that may have impacted Florida.¹⁶ In comparison to other states, Florida has been successful in avoiding large scale base closures.

¹² U.S. Department of Defense Office of Economic Adjustment, "Defense Spending by State, Fiscal Year 2015": 63.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ The Defense Base Closure and Realignment Comission,"2005 Defense Base Closure and Realignment Commission Report", (September 2005): Appendix J.

¹⁶ Partial base closures and realigned bases can significantly change both the total military deployment levels and the civilian employment levels at the affected base. Eglin Air Force Base was a beneficiary of a significant realignment in the 2005 BRAC

For example, California has experienced 48 facility closures with 25 of the closures being large military bases.¹⁷

The Economic Impact of Military Base Closures

The closure of a military base negatively impacts the local economy. However, the severity and length of the economic impact is indeterminate in advance of the event. Most academic research has found military base closures lead to an increase in local unemployment, slower or negative population growth and a negative impact on the local housing market. However, the economic impact is usually mild, very localized, and can be offset by macroeconomic factors like positive GDP growth, population growth, or a booming housing market.

In a RAND Corporation study of 3 California military base closures, researchers found the local economy around the military base were only moderately impacted by the base closure.¹⁸ The study compared the economic health of the local area around the base with county-wide economic data. The study found slower growth; but, in general, the area around the military base performed comparably similar to the rest of the county. This led the researchers to conclude that the effects of base closure are heavily localized and do not broadly impact the regional economy. Additionally, the researchers concluded that the underlying long-term economic factors of the region play a larger role in the economic health of the local area than the local military base.

A 2005 Government Accountability Office (GAO) report on BRAC came to a similar conclusion. The report found that almost 80% of all private employment lost during the base closure had been replaced by new private sector jobs at the redeveloped base.¹⁹ The GAO report examined both the unemployment rate and income growth rate of the counties affected by military base closures and found that these counties had, on average, both lower unemployment rates and higher income growth rates than the U.S. average since 1997.²⁰

Econometric research supports both the GAO report and the RAND study. Several studies have examined the local macroeconomic effect of military base closures and have found only minimal impacts to the local economy.²¹ A 1999 research paper looked at U.S. military base closures over 24 year period and found that the closure of military bases did not lead to any long-term unemployment in the local area.²² In addition, the 1999 research paper found, on average, local per-capita income was not adversely impacted by the military base closures.²³ A 1998 U.S. Census research paper of California

process when the Army's 7th Special Forces Group moved from Fort Bragg, North Carolina to Eglin Air Force Base in Okaloosa County.

¹⁷ The Defense Base Closure and Realignment Comission, "2005 Defense Base Closure and Realignment Commission Report", (September 2005): Appendix J.

¹⁸ M. Dardia, K. McCarthy, J. Malkin, and G. Vernez, "The Effects of Military Base Closures on Local Communities" National Defense Research Institute, 1996.

¹⁹ United State Government Accountibility Office, "Military Base Closures: Observations on Prior and Current BRAC Rounds", (May 2005): 31.

²⁰ Ibid. 34.

²¹ A. Hultquist and T. Petras, "An Examination of Local Economic Impacts of Military Base Closures", *Economic Development Quarterly*. Vol 26(2), pg.151-161.

²² M. Hooker and M. Knetter, "Measuring the Economic Effects of Military Base Closures", *National Bureau of Economic Research*, Working Paper 6941. 1999.

military base closures found local employment prospects actually improved after a military base closure, with the only negative impact being an increase in business turnover.²⁴

A 2003 paper examining military base realignments and closures found civilian employment increased in local areas immediately after the BRAC closure.²⁵ The researcher attributed it to federal assistance to the local community after the closure and the successful redevelopment of the military base. Ironically, the same study found employment loss in communities that experienced only a force reduction, not a full-base closure. The researcher speculated that these communities were harmed because they did not qualify for the same federal assistance, nor experience the base redevelopment that benefits the BRAC communities.²⁶

Similar findings exist internationally as well. One study of 105 German military base closures over a period of 4 years found a very minimal impact on the local economy.²⁷ A study of military base closures in Sweden found no impact on local income or population growth.²⁸ The study concluded that civilian personnel at the military bases successfully transitioned to private market employment without having to migrate outside the local area.

In contrast, two empirical studies that are more recent have found short-run economic impacts from the closure of U.S. military bases. In a 2018 study of the 2005 BRAC, researchers found negative employment and income effects in the counties that experienced a military base closure.²⁹ The study found military bases with a significant amount of civilian employees and private contractors had more severe economic impacts. In a 2012 study, the researcher found that every civilian job lost due to a base closure led to 0.14 civilian jobs being lost in the local area. It should be noted that both studies found no effects outside the immediate county and that neighboring counties were not impacted at all by the base closure.³⁰

There are several reasons why empirical research has found ambiguous short-term impacts and no longterm impacts from military base closures. The first reason is the economic impact of military base spending is less than a comparable amount of spending from a private firm. This is due to military bases having fewer backward linkages to the local economy than the average private company.

Similarly, military bases can be relatively isolated economies that import a high percentage of both personnel and supplies from outside the local community. ³¹ A 1993 study of military bases in California found that only 2.6% of the total non-payroll base budget was used to purchase supplies in the local

²⁴ C.J. Krizan, "Localized Effects of California's Military Base Realignments: Evidence from Multi-Sector Longitudinal Microdata", Center for Economic Studies: U.S Bureau of the Census. 1999.

²⁵ H. Herzog and P. Poppert, "Force Reduction, Base Closure, and the Indirect Effects of Military Installations on Local Employment Growth", *Journal of Regional Science*. Vol 43, 2003: 459-481.

²⁶ Ibid.

²⁷ A. Payolo, C. Vance, and M. Vorell, "The Regional Effects of Military Base Realignments and Closures in Germany", *Defence and Peace Economics*. Vol 21. 2010: 567-579.

²⁸ L. Andersson, J. Lundberg, and M. Sjostrom," Regional Effects of Military Base Closures: The Case of Sweden", *Defence and Peace Economics*. Vol 18. 2007:87-97.

²⁹ Jim Lee, "The Regional Economic Effects of Military Base Realignments and Closures", *Defence and Peace Economics*, Vol 29. 2018: 294-311.

³⁰ A. Hultquist and T. Petras, "An Examination of Local Economic Impacts of Military Base Closures", *Economic Development Quarterly*. Vol 26(2). 2012: 151-161.

³¹ T. Cowen and B. Webel, "Military Base Closure: Socioeconomic Impacts", CRS Report for Congress. May 2005.

county.³² Another study found that many military bases are not only weakly integrated into the local economy, but a significant majority of the income is spent at or through the base and not in the local area.³³ In the German study, the researcher concluded that the self-sufficient and autonomous nature of the German military bases was a reason why no negative economic impact was found after a closure of a base.³⁴

Another reason why negative economic impacts have been difficult to detect is that a significant amount of purchases shift away from the military base to local private markets after a base closure.³⁵ This helps mitigate the negative impact because private market spending benefits the local communities more than if the spending stayed on the military base. In the 1999 paper³⁶, the researcher argues a base closure leads local military retirees to shift purchases of goods and healthcare services to the private market because the retirees no longer have access to the base's commissary and on-base healthcare services. This shift in spending helps stabilize the local economy.

Further, any redevelopment of the closed base helps mitigate the base closure's economic impact. Infrastructure and construction employment created by the redevelopment counter the civilian employment lost when the base closed. Once completed, the redeveloped base contributes to the state economy through new economic output and employment. On average, a redeveloped base and a former military base have similar levels of civilian employment.³⁷

In conclusion, a representative military base closure generally does not lead to catastrophic consequences for the local economy. Most of the academic research has found only moderate, negative short-run economic impacts. There is no evidence that these impacts last in the long-run. However, the economic impact of every base closure is different. Based on the literature review, the factors listed below determine the magnitude of the economic impact.

- 1. The Percentage of the Local Community Employed at the Military Base: Military bases that employ a relatively high percentage of the local community lead to a greater economic impact when closed. The local community experiences higher unemployment rate and a larger drop in local income. This reverberates through the local economy as consumer spending falls and businesses cut back operations due to lower demand.
- 2. **The Diversity of the Local Economy**: Local communities that have a diverse economy will be more immune to a base closure. A diverse economy minimizes the economic impact because the unrelated military industries provide income and employment to sustain the local community as the base is redeveloped. In addition, the other industries are both logical tenants for the vacant base and potential employers for the recently unemployed civilians.

³² R. Kleinhenz and A. Puri, "Negative Peace Dividend? The Economic Impact of the El Toro Base Closure and Defense Spending Cuts in Orange County", *Institute for Economic and Environmental* Studies (September 2003).

³³ T. Muller, R. Hansen, and R. A. Hutchinson, "The Local Economic and Fiscal Impact of New DOD Facilities: A Retrospective Analysis", *Logistics Management Institute.* (1991).

³⁴ A. Payolo, C. Vance, and M. Vorell, "The Regional Effects of Military Base Realignments and Closures in Germany", *Defence and Peace Economics*. Vol 21. 2010: 567-579.

³⁵ T. Bradshaw, "Communities Not Fazed: Why Military Base Closures May Not Be Catastrophic", *American Planning Association Journal. Vol 65(2). 1999:* 193-206.

³⁶ Ibid.

³⁷ United State Government Accountibility Office, "Military Base Closures: Observations on Prior and Current BRAC Rounds", (May 2005): 31.

- 3. Rural vs Urban Military Base Location: Rural communities usually experience greater economic distress than urban communities when a military base closes. Military bases in rural areas will likely be the area's main employer. In contrast, military base closures in metropolitan areas may be beneficial to the local economy as it opens up the land to more economically productive enterprises. This is especially true in urban areas where undeveloped land is limited and land prices are high.³⁸
- 4. The Redevelopment of the Military Base: The redevelopment of a military base minimizes the negative economic impact of a base closure. A successful redevelopment will replace the lost civilian jobs, diversify the local economy, and increase the local tax base. In addition, the construction spending and jobs associated with the redevelopment activity can act as a short-term stimulus to the local economy.

Unfortunately, a successful redevelopment process is not easy. Most redevelopment projects will encounter financial, environmental, and political challenges that delay the redevelopment. Successful redevelopments start immediately after the transfer of the land from the federal government and are completed within a couple of years. An unsuccessful redevelopment experiences an extended lag that lasts 5 to 10 years before the redevelopment project is agreed upon and construction starts.

The case studies below provide two examples of military base closures in Florida: the Naval Training Center (NTC) in Orlando and the Truman Annex Naval Station (TANS) in Key West. The NTC Orlando redevelopment has been considered a success by both the local community and urban planners. The TANS Key West redevelopment has been used as a case study of an unsuccessful military base redevelopment.

The Base Closure and Redevelopment of the Naval Training Center (NTC) in Orlando

As part of the 1993 BRAC, NTC Orlando was slated for closure due to the Navy's excess capacity for training functions. It was estimated that the Navy had two to three times the needed training capacity. The Secretary of Defense stated that there were greater economic efficiencies to be gained by consolidating training functions at the NTC in Great Lakes, Illinois. The Secretary of Defense estimated that annual savings of \$75 million would result from the NTC Orlando closure.³⁹ The BRAC Commission agreed with the Secretary of Defense and recommended the closure of the Naval Training Center.

The Naval Training Center was a 1,000 plus acreage site located a few miles from downtown Orlando. The NTC was originally established in 1968 and was one of the three training facilities in the U.S. for Navy recruits. Around 650,000 recruits were trained at the facility during its tenure.⁴⁰ The NTC was formally closed by the 1993 BRAC process, but the actual shutdown was more gradual. The last recruits graduated in 1994, but the Navy retained a limited presence at the facility until 1999 when all military operations ceased on the property.

The city of Orlando received ownership of the land immediately after the operations ceased (1999). However, the redevelopment planning for the property conversion had been going on for years prior.

³⁸ M. Hooker and M. Knetter, "Measuring the Economic Effects of Military Base Closures", National Bureau of Economic Research, Working Paper 6941. 1999.

³⁹ The Defense Base Closure and Realignment Comission,"1993 Report to the President", (July 1993): 1-37.

⁴⁰ City of Orlando, "Baldwin Park/NTC Main Base: A Brief History", (July 2014): 1.

The city eventually decided on a mixed-use plan of single-family units, multi-family units (townhomes, condominiums, and apartment homes), a commercial downtown of retail and office complexes, and city parks. The development was referred to as Baldwin Park.⁴¹ The redevelopment of any military base does not occur immediately. It can take years to mitigate the environmental hazards and to safely demolish the military buildings. Baldwin Park did not see any residents until 2002, and Baldwin Park's downtown did not open until December 2003. Ultimately, Baldwin Park's residential build-out took 6 years to complete and the commercial component took 10 years to finish.⁴²

Orlando NTC was transformed into a private development that contained over 3,500 residential units, over 2 million square feet of retail and commercial space and 564 thousand feet of civic space.⁴³ The Orange County Property Appraiser estimates the total market value of Baldwin Park at \$1.46 billion, over 3% of Orange County's total market value.⁴⁴

The Orlando NTC redevelopment represents a successful BRAC transition. The redevelopment was successful for several reasons. First, the base was located in an urban zone with a diverse economy which could readily absorb and repurpose the Orlando NTC land. Second, the City of Orlando achieved a consensus on the development plan and moved quickly after the land was transferred over to the city.

The Base Closure and Redevelopment of the Truman Annex Naval Station (TANS) in Key West

TANS Key West was established in 1823 and remained an active military base until the Navy closed it in 1974.⁴⁵ When the military base closed, the Navy transferred the remaining 3,356 military personnel to other locations and laid off over 560 civilian workers.⁴⁶ The military base was located in downtown Key West making it a desirable property for both commercial and residential development.

Unfortunately, the redevelopment took over 20 years to complete. The redevelopment was plagued by persistent political and financial problems. First, the redevelopment agency was never able to establish a healthy relationship with the Navy. This delayed the land transfer by over 3 years and resulted in the Navy reclaiming about half the land 8 years after the initial closing due to allegations of corruption within the redevelopment agency (RDA).⁴⁷ In addition, the redevelopment agency was unable to build a consensus regarding its reuse plan. The redevelopment agency wanted luxury hotels and housing, while the community wanted public spaces and affordable housing. The resulting impasse led to the folding of the RDA and seizure of the entire property by the federal government.

In 1987, the federal government auctioned off the land to the private sector. However, redevelopment was further delayed due to environmental issues, a weak real estate market, and financial difficulties. These issues eventually led to the developer declaring bankruptcy in 1990.⁴⁸ The redevelopment started up again in 1992 when a new private development team took over. The redevelopment was finally completed in 1996. The redevelopment consisted of over 400 housing units, a hotel and commercial

PowerPoint Presentation. Retrieved from: <u>http://www.fora.org/Presentations/RBernhardt-presentation.pdf</u>

⁴¹ Ibid.

⁴² Fort Ord Reuse Authority, "Baldwin Park- Orlando Naval Training Center: Building a Sustainable Community",

⁴³ Ibid.

⁴⁴ U.S. Department of Defense Office of Economic Adjustment, "Naval Training Center/Naval Hospital Orlando, Florida", (October 2017). *Retrieved from <u>http://www.oea.gov/project/naval-training-centernaval-hospital-orlando</u>*

⁴⁵ Catherine Hill, "Measuring Success in the Redevelopment of Former Military Bases: Evidence From Case Study of the Truman Annex in Key West, Florida", *Economic and Development Quarterly*. Vol.14 (3): 267-275.

⁴⁶ Ibid: 267.

⁴⁷ Ibid.269.

⁴⁸ Ibid. 270.

space. While ultimately completed, the TANS Key West redevelopment took over 22 years to complete. This prolonged delay meant that the base sat empty and economically unproductive for those 22 years.

Tyndall Air Force Base Closure

The destruction of the Tyndall Air Force Base due to Hurricane Michael has led to a temporary closure of the base. The base closure has caused reassignments of both aircraft and military personnel away from the base. Additionally, there is uncertainty whether the Air Force will ever resume full operations at the military base. There has been a commitment by the federal government to rebuild.⁴⁹ However, two recent studies have suggested that it may be in the interest of the Department of Defense to either close Tyndall or only perform a partial rebuild of the base. The first study was a 2017 Department of Defense report that found that the Air Force had an excess infrastructure capacity of 32%.⁵⁰ The second study was a GAO report that recommended a reorganization of the F-22 fleet into larger squadrons.⁵¹ This recommendation could be achieved by the reassignment of the F-22 squadron away from the Tyndall Air Force Base.

As of late December 2018, the United States Air Force has requested supplemental funds to rebuild Tyndall Air Force Base.⁵² The proposed base rebuild would shift the base's mission away from housing F-22 squadrons in order to accommodate up to three future F-35 squadrons. The Air Force's plan estimates the rebuilding process to take more than 5 years and cost about \$3 billion dollars.⁵³ There has been no discussion on whether total base and civilian personnel levels will be adjusted due to the changing base mission. In addition, the U.S. Congress will need to approve and appropriate the money for the proposed plan.

It is hard to estimate the economic impact of the temporary or, possibly, permanent Tyndall Air Force Base closure. As discussed already, most military base closures lead only to a short-run negative economic impact. However, this negative impact can be masked by outside economic factors. In this case, the reconstruction of the Panama City area will cause an economic stimulus to the local area and would mitigate the economic impact of the temporary base closure. In addition, if the Department of Defense decides to partially or completely rebuild the base, the additional \$3 billion of reconstruction money will flow into the local economy.⁵⁴ The long-run economic impact is difficult to estimate as well. The most problematic scenario is a partial rebuild of the military base. In this scenario, Tyndall's economic impact is smaller due to a reduction in total personnel and base activity. Also, since the base remains open, no private redevelopment of the base can occur that would help mitigate the smaller base's economic losses.

⁴⁹ "Mike Pence pledge to rebuild Tyndall Air Force Base after Hurricane Michael" *Pensacola News Journal*. October 25, 2018. *Retrieved from <u>www.pnj.com</u>*

⁵⁰ Department of Defense, "Department of Defense Infrastructure Capacity" October 2017.3.

⁵¹ United States Government Accountability Office, "Force Structure: F-22 Organization and Utilization Changes could Improve Aircraft Availability and Pilot Training" *Report to Congressional Committees*, July 2018.

⁵² Department of Defense, "Air Force proposes to base F-35s at Tyndall, Supplemental Funds need to Build Advanced Fighter Base" Secretary of the Air Force Public Affairs. December 07, 2018. Retrieved from www.af.mil.

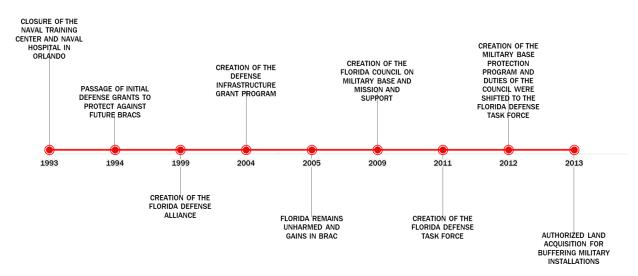
⁵³ Ed Adamczyk, "Air Force established offices at Tyndall AFB to guide five-year rebuilding process" United Press International. December 26, 2018. Retrieved from <u>www.upi.com</u>.

⁵⁴ Ibid.

THE MILITARY BASE PROTECTION PROGRAM

The Military Base Protection Program consists of activities and strategies intended to preserve or expand the U.S. military base presence throughout the state, or to mitigate the impact to the local economy should bases be realigned or closed.⁵⁵

The impetus of the program was the 1993 BRAC process that saw both the Orlando Naval Training Center and the Orlando Naval Hospital recommended for closure. The Florida Legislature created several grant programs to support Florida's military installations and to help shield them from the adverse effects of future federal base realignment and closure actions. These grants have been in existence since 1994 (See the timeline below). Whether administered through the former Florida Department of Commerce; the former Office of Tourism, Trade, and Economic Development (OTTED); or the current Department of Economic Opportunity, grants have continued to exist, although the specific guidelines have varied. Some of these programs included the Defense Related Business Adjustment Program, the Florida Defense Planning Grant Program, the Florida Defense Implementation Grant Program, the Florida Military Reuse Planning and Marketing Grant Program, and the Retention of Military Installation Program.



Today, the Military Base Protection Program consists of 4 grant and expenditure programs that are reviewed in this report. The programs are:

- The Military Base Protection Grant Program (MBP)
- Defense Infrastructure Grant Program (DIG)
- Defense Reinvestment Grant Program (DRG
- Florida Defense Task Force Grants and Expenditures

The Military Base Protection Grant Program

In 2012, the Legislature created the Military Base Protection Program. The program has two purposes: (1) to provide funding to defense-dependent communities to secure non-conservation lands to serve as

⁵⁵ Section 288.980(1)(a), F.S.

a buffer against encroachment for military installations, and (2) to support local community efforts to engage in service partnerships with military installations. The program also has the discretion to award grants that help address emergent needs relating to mission sustainment, encroachment reduction or prevention, and base retention.

During Fiscal Year 2014-15 through Fiscal Year 2016-17, the program did not award any grants or distribute payments to any projects. In Fiscal Year 2014-15, the Florida Legislature earmarked \$7.49 million to purchase 3 non-conservation lands adjacent to military bases for encroachment reasons. During the review period, sales for 2 of these non-conservation lands were completed; however, these land purchases were not made through the MBP Program and have not been included in the totals.

Payments by State Fiscal Year							
FY2	2014-15	015-16	FY	2016-17		Total	
\$	-	\$	-	\$	-	\$	-

The Defense Infrastructure Grant Program

In 2004, the Legislature created the Defense Infrastructure Grant Program (DIG) in order to support local infrastructure projects deemed to have a positive impact on the military value of installations within the state. In 2015, the Department of Economic Opportunity took over administration of the grant program from Enterprise Florida (EFI). Funds are to be used for projects that benefit both the local community and the military installation. DEO accepts applications from the governing board of a county, municipality, special district, or state agency that will maintain the project upon completion. In addition, the local authority must secure matching funds equal to 30% of the grant award.

During Fiscal Year 2014-15 through Fiscal Year 2016-17, the state approved 24 DIG grants. However, due to the program's structure, the majority of the \$3.97 million in DIG payments went to grant recipients approved prior to the review period. The table below summarizes the payouts by fiscal year.

Payments by State Fiscal Year						
FY2014-15	FY2015-16	FY2016-17	Total			
\$ 632,709.72	\$ 2,084,433	\$ 1,251,799	\$ 3,968,943			

The Defense Infrastructure Grant provides support for local infrastructure projects that address one or more of seven designated issues: encroachment, transportation and access, utilities, communications, housing, environment, and security. While these issues are designated in statute, the grant is not limited to these issues alone. In 2012, the grant also included construction, land purchases, and easements.

Examples of projects receiving funding by type of use are as follows:

<u>Encroachment</u>: encroachment prevention and sustainability of Avon Park Air Force Range; Joint Land Use Plan Acquisition Funding

<u>Transportation and Access</u>: design and construction of a turn lane; procurement and installation of traffic signal system

Utilities: grant to support defense infrastructure program

<u>Communications</u>: further develop and modernize the Federal, State University Network <u>Environment</u>: shoal river military installation buffering project

Defense Reinvestment Grant Program

In 2012, the Defense Reinvestment Grant Program (DRG) was established to replace some of the early defense-related grant programs. The DRG's purpose is to help defense-dependent communities develop strategies that would help the community protect its existing military installations. The grant is also available to help transform the economy of a defense-dependent community to a nondefense economy. Eligible applicants include cities, counties, Chambers of Commerce, or an economic development entity where the military installation is located. A 30% match is required by the local community. Activities funded can include studies, presentations, analyses, plans, marketing, modeling, and reasonable travel costs. In 2015, the Department of Economic Opportunity took over administration of the grant program from Enterprise Florida (EFI).

During State Fiscal Years 2014-15 through 2016-17, the state paid out approximately \$2.0 million to 31 grant recipients.

Payments by State Fiscal Year							
F	FY2014-15 FY2015-16 FY2016-17 Total						Total
\$	49,995.00	\$	696,832	\$	1,286,204	\$	2,033,031

The Defense Reinvestment Grant provides support for community based activities that address one of three designated issues: protection of military installations, diversification of a defense dependent community; or the development of plans for the reuse of a closed or realigned military installation.

During the review period, the majority of DRG dollars were spent on projects related to the protection of existing military installations. Projects related to the diversification of a defense-dependent community comprised the remaining amount. No funds were expended for projects to develop plans for the reuse of a closed or realigned military installation.

Examples of projects receiving funding by type of use are as follows:

<u>Protecting existing military installations</u>: Strategy, analysis and support for Force Growth of the Military; Team Eglin and military collaborative community support program; Team Eglin and military veteran collaborative community support program; facilitate Department of Defense investment and improve the quality of life for military members.

<u>Diversify the economy of a defense-dependent community</u>: support for Team Orlando Partnership in modeling, simulation, and training; support for economic diversification of Walton County; support of MacDill Air Force Base and local defense oriented industries.

Florida Defense Task Force Grants

In 2009, the Legislature created the Florida Council on Military Base and Mission Support. The council was charged with providing oversight and direction for initiatives and actions to protect Florida's military bases from budget cuts or closures, including identifying opportunities to expand the mission of

the state's military installations. In 2012, the duties of the Florida Council on Military Base and Mission Support were transferred to the Florida Defense Task Force, which was created in law in 2011. The Task Force was charged with making recommendations for preparing the state to effectively compete in any federal base realignment and closure action, for supporting the state's position in research and development related to or arising out of military missions and contracting, and for improving the state's military friendly environment for service members, military dependents, military retirees, and businesses that bring military and base-related jobs to the state.

Grants administered by the Task Force do not require matching funds, and there are no imposed caps. Grant applications must be sponsored by a Task Force member, and the Task Force is responsible for deciding grant awards.

During Fiscal Years 2014-15 through 2016-17, Enterprise Florida paid out approximately \$6.9 million to 24 recipients. Twenty-two of these grants were awarded in the review period. Two additional grants were awarded but did not receive any funds during the review period.

Payments by State Fiscal Year							
FY2014-15 FY2015-16				FY2016-17	Total		
\$ 3,510,797	\$	2,490,392	\$	996,521	\$ 6,997,709		

Task Force grants provide support for local infrastructure projects that address one or more of six designated issues: economic and product research and development, joint planning with host communities to accommodate military missions and prevent base encroachment, advocacy on the state's behalf to federal civilian and military officials, assistance to school districts in providing a smooth transition for large numbers of additional military-related students, job training and placement for military spouses in communities with large shares of active duty military personnel, or promotion of the state to military and related contractors and employers. While these issues are designated in statute, the grant is not limited to these issues alone.

Examples of projects receiving funding by type of use are as follows:

<u>Economic and product research and development</u>: an economic impact analysis of Florida's military and defense industry.

Joint planning with host communities to accommodate military missions and prevent base <u>encroachment</u>: purchase of 410 acres adjacent to Camp Blanding to provide a buffer from incompatible development and encroachment.

<u>Advocacy on the state's behalf to federal civilian and military officials</u>: contract with the Principi Group to advocate in Washington, D.C. for Florida's military missions and installations.

<u>Job training and placement for military spouses in communities with large shares of active duty</u> <u>military personnel</u>: comprehensive plan to support military and veteran-connected children and families in the state of Florida. <u>Promotion of the state to military and related contractors and employers</u>: marketing program targeted to aerospace and defense industries to bring jobs for veterans to Northwest Florida.

<u>Other</u>: establishment of a local defense community organization; construction of a seawall adjoining a military base; support for wounded service personnel to return to active duty; feasibility study of dredging the turning basin to allow safe transit for larger Navy vessels.

Comparable State Programs

In comparison to other states, Florida is perceived to be one of the leaders in the provision of statesponsored military support.⁵⁶ In this regard, Florida offers more military assistance programs and spends more than the average across all states. The Association of Defense Communities Annual Report has a list of the 10 best practices a state can implement to support the military.⁵⁷ Florida has implemented 9 of these best practices.⁵⁸ Only South Dakota and Massachusetts received a similar ranking by the Association. The one best practice not implemented by Florida is funding for on-base infrastructure improvements. Examples of on-base infrastructure improvements include state-funded runway improvements or utility upgrades. The Table below compares Florida's best practices' ranking relative to 3 other comparable states in population size.

State-Funded Programs	Florida	California	Pennsylvania	Texas
Economic Impact/Strategic Planning Study	Х	Х		Х
Encroachment Mitigation Planning	Х	Х	Х	Х
Funding for Encroachment Efforts	Х	Х	Х	Х
Funding For Off-Base Infrastructure Projects	Х		Х	Х
Funding for On-Base Infrastructure Projects		Х		Х
Support Community-Installation Partnerships	Х	Х		Х
Coordination with Local Organizations	Х	Х	Х	Х
Funding for Local Organizations	Х		Х	
Employ Lobbying Group	Х			
Military Family and Veteran Issues	Х	Х	Х	Х
Source: 2006 State of Support, Association of Defens	e Commun	ities		

Program Effectiveness and Conclusions

Since there has been no formal BRAC since 2005, it is challenging to measure the effectiveness of the 4 military grant and expenditure programs. Historically, Florida has experienced fewer military base closures than comparable states. One could argue that the enactment of the military programs in 1999 led to the 2005 BRAC having favorable results for Florida. However, this favorable treatment was also true in earlier BRACs that preceded the enactment of military assistance programs. The table below compares major military closures in the 5 most populous states in the nation. In comparison to these other states, Florida has witnessed the fewest number of major closures since the start of the BRAC program in 1988.

⁵⁶ Association of Defense Communities, "State of Support 2016: Highlifhts of State Support for Defense Installations", July 2016. ⁵⁷ Ibid.

⁵⁸ Ibid.

	BRAC Major Closures									
BRAC Year	ar Florida California Pennsylvania New York Texa									
1988	2	6	12	6	1					
1991	0	11	2	0	3					
1993	7	18	6	6	6					
1995	2	11	7	6	3					
2005	0	2	1	0	3					
Total:	11	48	28	18	16					

It is difficult to measure the persuasive power exerted by these grants on the Department of Defense's decision to close a military base. The decision to close a military base is at the discretion of the Department of Defense Secretary, using the military's current 20-year strategic plan as guidance. Generally, the BRAC committee agrees with the Defense Secretary's recommendations with limited modifications to the original realignment and base closure plan. Whether the Defense Secretary is aware of state endeavors to prevent military base closures and takes them into consideration has not been studied. The formal BRAC committees do consider how the base closure would impact the local community; however, military value is given priority consideration, and local impacts are only an ancillary consideration.

Additionally, the report found no concrete evidence that lobbying by local communities is effective in preventing a base closure. Many communities spend a considerable amount of money and time on lobbying and hold large public rallies to prevent base closure with mixed results. The city of Charleston unsuccessfully spent over \$600,000 to prevent the closure of the Charleston Naval Shipyards in 1993.⁵⁹ In a review of the 2005 BRAC report, the committee had several stated reasons to prevent base closures, none of which related exclusively to lobbying by a local community. This is not to discount local community support, but there is no evidence to suggest that it actually prevents base closures.

⁵⁹ W. Claiborne and K. Jenkins, "Charleston Hit Hard By Military Base-Closing Panel" Washington Post, June 25, 1993.

METHODOLOGY

The evidence shows that a military base closure leads to a negative short-run economic impact. However, the severity and length of the impact is determined by several factors: the percentage of local civilians employed at the military base, the diversity of the local economy, whether the military base is located in a rural or urban area, and the pace of the redevelopment of the military base.⁶⁰

The analysis ran 3 different scenarios through the Statewide Model to demonstrate how military base closures can lead to widely different economic outcomes for Florida. Each scenario involved the closure of a large military base followed by a 6-year simulation of the Florida economy after the military base's closure.

The assumptions listed below are identical for all 3 scenarios.

- The military base closure consisted of the out-of-state relocation of 9,646 military personnel and the loss of 6,711 civilian jobs at the military base. The numbers are based on the average size of the 8 military bases in Florida.⁶¹
- Each scenario assumes a permanent loss of spending associated with departing military personnel. According to Bradshaw, 10% of military employee income is spent in the local economy.⁶² Military employee spending is estimated based on the 2015 Defense Spending by State, published by the U.S. Department of Defense.
- Each scenario assumes a permanent loss of federal spending associated with the operations and maintenance of the military base. The analysis assumes that 5.2% of all operations and maintenance expenditures are spent locally.⁶³ Operations and maintenance expense is estimated using the 2015 Defense Spending by State report, published by the U.S. Department of Defense.
- Each scenario assumes a temporary loss of income caused by the loss of jobs for civilian personnel previously working at the base. The reemployment rate of civilian personnel is different for each scenario, but is benchmarked on the latest Bureau of Labor Statistics study on national reemployment rates of displaced workers.⁶⁴
- Each scenario assumes that the base redevelopment construction expenditures will nullify the loss of federal spending associated with the operations and maintenance of the closed military base. However, each scenario is different regarding when the base redevelopment begins. The construction expenditures only last for 3 years, while the loss of federal spending lasts the entire 6 years.
- Each scenario assumes that the base redevelopment will employ 5,368 civilians when completed. This employment level follows the findings of the 2005 GAO study.⁶⁵ The full

⁶⁰ A more detailed review of these 4 factors can be found in the "The Economic Impact of Military Bases in Florida" section of the paper.

⁶¹ Individual base deployment and employment numbers obtained through the Department of Defense's Military Installations website. The directory can be found at: <u>http://www.militaryinstallations.dod.mil</u>

⁶² T. Bradshaw, "Communities Not Fazed: Why Military Base Closures May Not Be Catastrophic", American Planning Association Journal. Vol 65(2). 1999: 193-206.

⁶³ The percentage was based-on work done in T. Muller, R. Hansen, and R. A. Hutchinson, "The Local Economic and Fiscal Impact of New DOD Facilities: A Retrospective Analysis", *Logistics Management Institute*. (1991) which estimated that only 2.6% of all base expenditures were spent locally. The EDR analysis doubled the 2.6% to account for a larger geographic location (Florida), not just the local community around the military base.

⁶⁴ The latest BLS displaced workers summary can be found at <u>https://www.bls.gov/news.release/disp.nr0.htm</u>.

⁶⁵ United State Government Accountability Office, "Military Base Closures: Observations on Prior and Current BRAC Rounds",

redevelopment takes 5 years from the start of construction to occupancy. In each year, the number of jobs is increased by 20%. The redevelopment contains a mixture of aerospace, retail and professional employment. The analysis used the redevelopment of Cecil Field and NTC Orlando as models for the industry mix.

The economic impact of the base closure will be different for each scenario. A description of all 3 scenarios and the different assumptions used for each is provided below.

The Pessimistic Scenario: The pessimistic scenario is a "worst case" simulation. In this scenario, the military base is located in a rural Florida county without a diversified economy. The redevelopment of the military base is delayed significantly and does not occur until the 5th year of the simulation. In this scenario, the local economy experiences sustained unemployment and income loss as the reemployment rates for former civilian workers is one-half the national average.

The Average Scenario: This simulation represents the most probable scenario to occur if a military base closes in Florida. In this scenario, the military base closes in a rural area with a diverse economy. The redevelopment of the military base begins 3 years after closing. In this simulation, the local economy recovers at a moderate pace. The reemployment rate of former base workers follows the national average rate. Additionally, the base redevelopment quickens the pace of the recovery through construction expenditures and new employment at the redeveloped base.

The Optimistic Scenario: This simulation represents a best case scenario after the closure of a military base in Florida. The base closure occurs in an urban environment with a diverse economy. The base redevelopment occurs within a year after the base closure. In this scenario, the reemployment rate is double the national average due to the strong, local economy. The short-run unemployment and income impacts are further minimized by the immediate initiation of construction expenditures and new employment opportunities at the redeveloped base.

⁽May 2005): 31.

THE STATEWIDE MODEL

Statewide Model

EDR used the Statewide Model to simulate the economic impact of a military base closure in Florida. The Statewide Model is a dynamic computable general equilibrium (CGE) model that simulates Florida's economy and government finances.⁶⁶ The Statewide Model is enhanced and adjusted each year to reliably and accurately model Florida's economy. These enhancements include updating the base year the model uses, as well as adjustments to how the model estimates tax collections and distributions.⁶⁷

Among other things, the Statewide Model captures the indirect and induced economic activity resulting from the closure of a military base. This is accomplished by using large amounts of data specific to the Florida economy and fiscal structure. Mathematical equations⁶⁸ are used to account for the relationships (linkages and interactions) between the various economic agents, as well as likely responses by businesses and households to changes in the economy.⁶⁹ The model also has the ability to estimate the impact of economic changes on state revenue collections and state expenditures in order to maintain a balanced budget by fiscal year.

When using the Statewide Model to evaluate a military base closure, the model is shocked⁷⁰ using static analysis to develop the initial or direct effects attributable to the closure. In this analysis, the annual direct effects (shocks) of the military base closure took the form of:

- Removal of spending associated with the military base procurement contracts
- Removal of spending associated with military personnel
- Removal of income associated with the loss of civilian employment at the military base

The amount of these annual negative direct effects differs for each of the 3 scenarios.

The removal of both spending and income is slowly mitigated over the 6-year time period by direct effects (positive shocks) from:

- Construction spending associated with the redevelopment of the military base
- Output associated with new employment at the redeveloped base.

The amount of the annual positive direct effects differs for each of the 3 scenarios.

In conjunction with the direct effects, the model estimates the additional—indirect and induced economic effects generated by the military base closure and base redevelopment. This includes the

⁶⁶ The statewide economic model was developed using GEMPACK software with the assistance of the Centre of Policy Studies (CoPS) at Monash University (Melbourne, Australia).

⁶⁷ Reports prior to January 1, 2017 have used 2009 as the base year. Reports as of January 1, 2017 have used 2011 as the base year.

⁶⁸ These equations represent the behavioral responses to economic stimuli – to changes in economic variables.

⁶⁹ The business reactions simulate the supply-side responses to the new activity (e.g., changes in investment and labor demand).

⁷⁰ In economics, a shock typically refers to an unexpected or unpredictable event that affects the economy, either positively or negatively. In this regard, a shock refers to some action that affects the current equilibrium or baseline path of the economy. It can be something that affects demand, such as a shift in the export demand equation; or, it could be something that affects the price of a commodity or factor of production, such as a change in tax rates.

supply-side responses to the base closure, where the supply-side responses are changes in investment and labor demand arising from the closure. Indirect effects are the changes in employment, income, and output by local supplier industries that provide goods and services to support the direct economic activity. Induced effects are the changes in spending by households whose income is affected by the direct and indirect activity.

All of these effects can be measured by changes (relative to the baseline) in the following outcomes:

- Personal income
- Florida Gross Domestic Product
- Gross output
- Household and Government consumption

Key Assumptions

The following key assumptions are used in the Statewide Model to determine the outcomes of the scenarios. Some of the assumptions are used to resolve ambiguities in the literature, while others conform to the protocols and procedures adopted for the Statewide Model.

- The analysis assumes the data used to estimate military base employment, wages, and spending is accurate and a reasonable approximation when used to simulate a military base closure. The data comes from multiple sources including the Department of Defense Office of Economic Adjustment, the Government Accountability Office, and academic research. The data was not independently audited or verified by EDR.
- 2. The analysis assumes the data used to estimate base redevelopment expenditures and the reemployment of civilian personnel is accurate and a reasonable approximation when used to simulate Florida's recovery from a military base closure. The data comes from multiple sources including the Department of Defense Office of Economic Adjustment, the Government Accountability Office and academic research. The data was not independently audited or verified by EDR.
- 3. The analysis assumes, given the time span under review, applying discount rates would not prove material to the outcome.
- 4. The analysis assumes a 6-year time period for each scenario.
- 5. The analysis assumes all military personnel at the military base will be relocated immediately after the base closure to a base outside of Florida. In addition, the employment openings associated with the spouses of departing military personnel will be taken by Florida residents without any time lag.
- 6. The analysis assumes the relevant geographic region is the whole state, not individual counties or regions. The model takes account of and makes adjustments for the fact that industries within the state cannot supply all of the goods, services, capital, and labor needed to produce the state's output.

Key Terms

In the pages that follow, diagnostic tables describing the composition and statistics of the military base closure analysis precede the discussion. Key terms used in the tables are described below:

<u>Personal Income (Nominal (M))</u> – Income received by persons from all sources. It includes income received from participation in production as well as from government and business transfer payments. It is the sum of compensation of employees (received), supplements to wages and salaries, proprietors' income with inventory valuation adjustment (IVA) and capital consumption adjustment (<u>CCAdj</u>), rental income of persons with <u>CCAdj</u>, personal income receipts on assets, and personal current transfer receipts, less contributions for government social insurance.

<u>Real Disposable Personal Income (Fixed 2011 \$(M))</u> – Total after-tax income received by persons; it is the income available to persons for spending or saving.

<u>Real Gross Domestic Product (Fixed 2011 (M))</u> – A measurement of the state's output; it is the sum of value added from all industries in the state. GDP by state is the state counterpart to the Nation's gross domestic product.

<u>Consumption by Households and Government (Fixed 2011 \$(M))</u> –The goods and services purchased by persons plus expenditures by governments consisting of compensation of general government employees, consumption of fixed capital (CFC), and intermediate purchases of goods and services less sales to other sectors and own-account production of structures and software. It excludes current transactions of government enterprises, interest paid or received by government, and subsidies.

<u>Real Output (Fixed 2011 \$(M))</u> – Consists of sales, or receipts, and other operating income, plus commodity taxes and changes in inventories.

PROGRAM FINDINGS

The Pessimistic Scenario

		FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Total
Personal Income	Nominal \$ (M)	(758.0)	(700.0)	(640.0)	(583.0)	(489.0)	(235.0)	(2,647.0
Real Disposable Personal Income	Fixed 2010-11 \$ (M)	(691.5)	(627.8)	(567.8)	(511.5)	(422.5)	(212.7)	(2,342.4
Real Gross Domestic Product	Fixed 2010-11 \$ (M)	(413.6)	(356.7)	(308.8)	(271.0)	(190.9)	(44.4)	(1,171.8
Consumption by Households and Government	Fixed 2010-11 \$ (M)	(737.5)	(669.7)	(605.4)	(553.1)	(464.2)	(246.2)	(2,538.6
Real Output	Fixed 2010-11 \$ (M)	(520.9)	(454.9)	(393.5)	(348.9)	(254.7)	43.9	(1,408.0

The pessimistic scenario represents a "worst case" scenario. The Florida economy does not recover in the 6-year period after the base closure. The recovery is stalled due to several reasons. First, the local community was too dependent on base employment and did not have other industries to quickly rehire laid-off civilian base workers. This situation prolonged local unemployment and the drop in local income.

Second, the pessimistic scenario assumes a significant delay in the redevelopment of the base. The base redevelopment does not start until the fifth year. As discussed previously, the redevelopment of the base can act as an economic stimulus through the introduction of new construction expenditures. In addition, the completed redevelopment contributes new output and employment to the local economy. The delay meant that the economic benefits did not start appearing in the simulation until the very end of the period. Please note that by Year 6, the economy is showing signs of a recovery as real output is positive and real GDP is close to 0.

The Average Scenario

Statewide Economic Model Impact of the Military Base Closure and Redevelopment (FY2018-2023)

		FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Total
Personal Income	Nominal \$ (M)	(703.0)	(588.0)	(439.0)	(157.0)	97.0	233.0	(854.0)
Real Disposable Personal Income	Fixed 2010-11 \$ (M)	(641.4)	(527.1)	(390.8)	(150.3)	62.5	168.5	(837.2)
Real Gross Domestic Product	Fixed 2010-11 \$ (M)	(382.8)	(297.9)	(183.4)	54.4	257.0	361.8	191.9
Consumption by Households and Government	Fixed 2010-11 \$ (M)	(686.4)	(568.2)	(424.8)	(169.6)	48.9	152.0	(961.7)
Real Output	Fixed 2010-11 \$ (M)	(486.9)	(381.8)	(237.6)	93.4	378.3	535.1	387.4

The average scenario represents what EDR believes to be the most probable scenario after a military base closure. The Florida economy experiences a short-run negative impact followed by an economic recovery. The recovery accelerates in Year 3 with the redevelopment of the military base. An economic boost is experienced in subsequent years through new output and jobs at the redeveloped base. Compared to the pessimistic scenario, the average scenario's economic downturn is not as severe in Year 1 and Year 2, because former base employees find new employment at a quicker rate. Therefore, income loss is not as large in the average scenario as it is in the pessimistic scenario.

The Optimistic Scenario

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Total
Nominal \$ (M)	(678.0)	(274.0)	91.0	267.0	472.0	687.0	1,243.0
Fixed 2010-11 \$ (M)	(621.2)	(258.3)	57.4	202.6	367.4	532.6	901.7
Fixed 2010-11 \$ (M)	(348.0)	(26.6)	249.8	380.7	543.8	704.9	1,852.7
Fixed 2010-11 \$ (M)	(661.4)	(279.8)	46.8	187.1	355.6	527.1	836.8
Fixed 2010-11 \$ (M)	(442.2)	(12.5)	364.0	565.8	797.6	1,026.3	2,741.2
	Fixed 2010-11 \$ (M) Fixed 2010-11 \$ (M) Fixed 2010-11 \$ (M)	Nominal \$ (M) (678.0) Fixed 2010-11 \$ (M) (621.2) Fixed 2010-11 \$ (M) (348.0) Fixed 2010-11 \$ (M) (661.4)	Nominal \$ (M) (678.0) (274.0) Fixed 2010-11 \$ (M) (621.2) (258.3) Fixed 2010-11 \$ (M) (348.0) (26.6) Fixed 2010-11 \$ (M) (661.4) (279.8)	Nominal \$ (M) (678.0) (274.0) 91.0 Fixed 2010-11 \$ (M) (621.2) (258.3) 57.4 Fixed 2010-11 \$ (M) (348.0) (26.6) 249.8 Fixed 2010-11 \$ (M) (661.4) (279.8) 46.8	Nominal \$ (M) (678.0) (274.0) 91.0 267.0 Fixed 2010-11 \$ (M) (621.2) (258.3) 57.4 202.6 Fixed 2010-11 \$ (M) (348.0) (26.6) 249.8 380.7 Fixed 2010-11 \$ (M) (6661.4) (279.8) 46.8 187.1	Nominal \$ (M) (678.0) (274.0) 91.0 267.0 472.0 Fixed 2010-11 \$ (M) (621.2) (258.3) 57.4 202.6 367.4 Fixed 2010-11 \$ (M) (348.0) (26.6) 249.8 380.7 543.8 Fixed 2010-11 \$ (M) (661.4) (279.8) 46.8 187.1 355.6	Nominal \$ (M) (678.0) (274.0) 91.0 267.0 472.0 687.0 Fixed 2010-11 \$ (M) (621.2) (258.3) 57.4 202.6 367.4 532.6 Fixed 2010-11 \$ (M) (348.0) (26.6) 249.8 380.7 543.8 704.9 Fixed 2010-11 \$ (M) (661.4) (279.8) 46.8 187.1 355.6 527.1

Statewide Economic Model Impact of the Military Base Closure and Redevelopment (FY2018-2023)

The optimistic scenario is a 'best case" scenario. The economy is only negatively impacted for the first two-years after the base closure. Afterwards, the base redevelopment, which starts early in Year 1, and the output associated with new firms at the redeveloped base boost the Florida economy. In addition, the initial negative impacts are not nearly as severe when compared to the average and pessimistic scenarios. This is due to the laid-off civilian base employees finding alternative employment at a rate higher than the national average. This helps prevent a large drop in personal income.

The optimistic scenario can be achieved in Florida if certain factors are present. First, the local area economy must be strong and diverse. A diverse economy minimizes the economic impact because the non-military industries provide employment opportunities for laid-off civilian base employees and are the natural tenants for any redeveloped base. In urban areas where undeveloped land is scarce and expensive, a military base closure can be beneficial as it opens up new land for firms wanting to expand, potentially relieving commercial rent costs.

Second, the base redevelopment needs to be initiated immediately. Base redevelopments act as minor economic stimuluses to the local area and help offset the negative impacts from the base closure. In the Orlando NTC case study, the city of Orlando had already developed a comprehensive development plan for the closed base. When the base actually closed and the land was transferred over to the city, the redevelopment started immediately.

Florida's military base protection programs address both of the issues discussed above. Defense Reinvestment Program's grants can be used for projects that diversify the economy of defensedependent community or projects that develop plans for the reuse of a closed or realigned military installation. In EDR's review period, some of the grants funded diversification projects. No grants were used for base reuse; however, this should not be surprising since Florida has not experienced a base closure since the 1990s.

THE ECONOMIC IMPACT OF THE DEFENSE INDUSTRY IN FLORIDA

Florida's defense industry is one of the largest in the country. According to the latest report by the Department of Defense, Florida defense contractors received approximately \$11 billion in contracts in Federal Fiscal Year 2015.⁷¹ The table below lists both the defense contractor and the amount awarded to that contractor. Approximately two-thirds of all private defense contracts in Florida are assigned to Orange, Brevard or Okaloosa Counties. The Lockheed Martin Group is Florida's largest defense contractor. The company has over a dozen locations in Florida, including a significant location in Orange County that specializes in missile and fire control systems.

Contractor	Amount Awarded in FFY2015
Lockheed Martin	\$2.5B
Raytheon	\$576.1M
General Dynamics	\$526.6M
Huntington Ingalls	\$507.5 M
Harris	\$225.1 M
Jacobs Engineering Group	\$195.2 M
Honeywell	\$178.0 M
Hellfire Systems	\$160.9 M
Indyne	\$142.7 M
Finmeccanica	\$140.2 M

Florida ranked 6th in total defense contracts awarded in Federal Fiscal Year 2015.⁷² Two of the states ranked higher than Florida, Virginia and Maryland, had the geographic advantage of being close to Washington D.C.

	Amount Awarded
State	in FFY2015
Virginia	\$36.0 B
California	\$34.7 B
Texas	\$27.4 B
Maryland	\$13.6 B
Massachusetts	\$11.2 B
Florida	\$11.0 B
Pennsylvania	\$10.3 B
Alabama	\$9.2 B
Missouri	\$9.1 B
Connecticut	\$9.0 B

 ⁷¹ U.S. Department of Defense Office of Economic Adjustment, "Defense Spending by State, Fiscal Year 2015", 18.
 ⁷² Ibid.

The private sector defense industry contributes significantly to the Florida economy. This is due both to its relatively large presence in Florida and the types of employment. A 2016 aerospace and defense labor market study estimated that over 57,000 Floridians with average annual salaries of over \$80,000 are employed in the private defense industry.^{73,74} In addition, this industry is concentrated in sectors of the economy which typically have large indirect and induced impacts like manufacturing and research and development. The 2016 labor market study estimated that the indirect and induced effect of the defense industry created over 134,000 additional jobs in Florida.

The Qualified Defense Contractor and Space Flight Business Tax Refund Program

The Qualified Defense Contractor and Space Flight Business Tax Refund Program (QDSC) was established in 1996 to encourage the creation and/or retention of high-wage jobs (defined as 115 percent or more of the area or statewide annual wage) in the defense and space industries.⁷⁵ Incentive awards range from \$3,000 to \$8,000 per job.⁷⁶ Unless waived by DEO, 20 percent of the award must be provided by the city or county government in which the project is located. The QDSC program expired July 1, 2014.⁷⁷

The QDSC program was a performance-based incentive tied directly to defense or space flight business contracts. Businesses qualified for the program in three ways: (1) contract or subcontract consolidations that resulted in either a 25 percent increase in employment or at least 80 new Florida jobs; (2) defense production conversion projects that resulted in a net increase in nondefense employment at the applicant's facilities in Florida; or (3) reuse projects that resulted in the creation of at least 100 jobs for contracts with a duration of two or more years.

QDSC Per-Job Award Thresholds							
		Eligible Award	State Liability				
Base Award with Minimum Wage Criteria, or		\$3,000	\$2,400				
Base Award if Located in a Rural County		\$6,000	\$4,800				
If Wage is 150% of Average Annual Wage, or	+	\$1,000	\$800				
If Wage is 200% of Average Annual Wage	+	\$2,000	\$1,600				
Maximum Per-Job Award		\$8,000	\$6,400				
Maximum Award Per-Business, Every Year			\$2,500,000				

The QDSC program was a grant program subject to annual appropriation, with the grant award determined by the interaction between the number of qualifying employees, geographic location of the jobs, and certain taxes paid to both state and local governments. Each QDSC project had a performance-

⁷³ In comparison, the average annual salary in Florida was around \$44,050 in 2016.

⁷⁴ Deloitte, "US Aerospace & Defense Labor Market Study, February 2016.

⁷⁵ For review of the space industry, please see next section.

⁷⁶ Section 288.1045, F.S. The per-job award increases from the \$3,000 base when wages exceed 150 percent of the area or statewide annual wage, and when projects are located in specified locations. These included a rural county, an Enterprise Zone, or until 6/30/14, in any of the eight counties that were disproportionately affected by the BP Gulf Oil Spill: Bay, Escambia, Franklin, Gulf, Okaloosa, Santa Rosa, Walton and Wakulla Counties. From 7/1/11 through 6/30/14, DEO could waive wage or local financial support eligibility requirements for Disproportionately Affected Counties.

⁷⁷ While the QDSC program expired on 7/1/2014, the program continued to distribute incentive payments to projects that were pre-qualified before the expiration of the program.

based contract, which outlined specific milestones that had to be achieved and verified by the state prior to payment of funds.

During the review period, the QDSC program paid out over \$2.2 million to projects that were prequalified prior to the expiration of the program.

Payments by State Fiscal Year						
FY2014-15	FY2014-15 FY2015-16 FY2016-17 Total					
\$545,000	\$1,180,000	\$549,233	\$2,274,233			

Conclusions

The analysis does not include a return on investment for QDSC two reasons. First, the QDSC program expired before the start of the review period, with all payments going toward projects that were prequalified outside the study window. Second, the program failed the same "but for" requirement that prevented a return on investment analysis from being done in the prior report. In this regard, the "but for" test cannot reasonably be met because the state incentive cannot be deemed the primary or even the determining factor in the federal government's or private business' decision to engage in a defense contract in Florida. This assertion fails because the businesses engaged in applying for the incentive are not making job creation or retention decisions based solely on the incentive award. These businesses are engaged in bidding for a variety of federal and/or private procurement contracts, and this bidding likely would not cease if the incentive was not offered. To this point, businesses are still engaged in bidding for federal contracts even though the QDSC program expired in 2014. While the QDSC award reduces a business' operating costs and allows for a more competitive bid, it is likely the incentive is paying for jobs that would have been created or retained in the state anyway.

Sales Tax Exemption for Machinery and Equipment Used in the Semiconductor, Defense, or Space Technology Production (SDST) Program

The Sales Tax Exemption for Machinery and Equipment Used in the Semiconductor, Defense, or Space Technology Production (SDST) was first created in 1997.⁷⁸ When it was originally established, the exemption was limited to silicon technology production and research and development. In 2000, the law was amended⁷⁹ to remove any reference to silicon technology, and to add semiconductor, defense, or space technology production and research and development to the exemption. Research and development was removed from this part of the statute in 2006. The current program exempts sales tax on the purchase of machinery and equipment used in the production processes of businesses engaged in the production of semiconductor, defense, or space technology products for sale or use.

In order to be granted an SDST exemption, a business must first apply to DEO. DEO reviews the application and, if approved, forwards an approval certification to DOR. DOR then issues the tax exemption certificate to the business. The SDST exemption is available for two calendar years and can be used retroactively for the three years prior to the date the application was submitted. Businesses may request a renewal of the exemption every two years by submitting a letter to DEO, certifying under oath, that there has been no material change in the conditions or circumstances entitling the business to the original certification. A business certified to receive this exemption may elect to designate one or

⁷⁸ Section 288.012(5)(j), F.S., Ch. 97-278 s.11, Laws of Florida.

⁷⁹ Ch. 2000-351, Laws of Florida.

more state universities or community colleges as recipients of up to 100 percent of the amount of the exemption for which they qualify.

Industrial machinery and equipment used in semiconductor, defense, or space technology facilities to design, manufacture, assemble, process, compound, or produce semiconductor, defense, or space technology products for sale or for use by these facilities are exempt from 100 percent of the sales tax imposed. Section 212.08(5)(j)(7), F.S., defines the following:

- "Semiconductor technology products" means raw semiconductor wafers or semiconductor thin films that are transformed into semiconductor memory or logic wafers, including wafers containing mixed memory and logic circuits; related assembly and test operations; active-matrix flat panel displays; semiconductor chips; semiconductor lasers; optoelectronic elements; and related semiconductor technology products as determined by DEO.
- "Defense technology products" means products that have a military application, including, but not limited to, weapons, weapons systems, guidance systems, surveillance systems, communications or information systems, munitions, aircraft, vessels, or boats, or components thereof, which are intended for military use and manufactured in performance of a contract with the United States Department of Defense or the military branch of a recognized foreign government or a subcontract which relates to matters of national defense.
- "Space technology products" means products that are specifically designed or manufactured for application in space activities, including, but not limited to, space launch vehicles, space flight vehicles, missiles, satellites or research payloads, avionics, and associated control systems and processing systems. The term does not include products that are designed or manufactured for general commercial aviation or other uses even though those products may also serve an incidental use in space applications.

During the review period, 17 different companies used a SDST exemption. Out of the 17 companies, 12 of them were in the defense industry, 1 was in the space industry and 4 were in the semi-conductor industry. The total value of the tax exemptions was \$19,971,742.

Total Tax Exemption by Calendar Year							
CY 2014	CY2015	CY2017	Total				
\$7,409,767	\$8,691,994	\$1,906,468	\$1,963,514	\$19,971,743			

While the state cost for the exemptions is estimated to be \$19.97 million during the period, it is likely that this is an understatement due to the reporting cycle of the businesses. Renewal applicants are required to submit the value of any tax exempt purchase, of which the exempt amount is calculated, for the two calendar years prior to requesting the renewal. Given that not all businesses are required to report every year and not all businesses renew every two years, there are years when a business may not report any purchases to DEO. This results in gaps in actual purchases, which can be seen when looking at the annual totals of taxes exempted. While spending appears higher in calendar years 2014 and 2015 than the later years, this may be a function of the reporting cycle of the businesses and not a reduction in overall usage of the SDST exemption

The primary beneficiaries of the SDST exemption are businesses involved in the production of defense technology products. Defense technology facilities accounted for \$15.12 million or 75 percent of all taxes exempted. Semiconductor facilities accounted for approximately \$1.99 million or 10 percent.

Program Effectiveness and Conclusions

Similar to the QDSC analysis, the analysis does not include a return on investment for the SDST exemption. This incentive is eligible to any business in Florida that is engaged in the production of semiconductor, defense, or space technology products. There are no other requirements to obtain the exemption, and it is not contingent upon the "but for" criteria required in many of the state's economic development incentive programs. The SDST exemption cannot reasonably be deemed the primary or even the determining factor in the business' decision to purchase machinery and equipment. To remain competitive in the industry, these businesses need to maintain existing capacity and/or upgrade their machinery and equipment as technology changes or conditions otherwise warrant. Moreover, the majority of businesses who have applied for and been granted the exemption are federal contractors; meaning that their machinery and equipment purchases are directly related to the federal contracts that they are awarded. As stated earlier, the competitive advantage yielded by the amount of the forgone state taxes to any one business is unlikely to be a determining factor in the federal government's decision to award a procurement contract. Further, other state incentives exist that provide viable alternatives for at least some of the participants.

Observations Regarding Defense Incentives in Other States

Two of Florida's largest competitors for defense contracts are California and Texas. In Federal Fiscal Year 2015, California received \$34.7 billion and Texas received \$27.4 billion in defense contracts. Neither California nor Texas have economic programs that exclusively target defense contractors; however, each state does offer incentives that are used by defense firms. Similar to SDST, both states offer a sales tax exemption on machinery and equipment used in the manufacturing of defense goods. The California exemption includes R&D costs, which until 2006, SDST also exempted.

Programs comparable to QDSC include the Texas Enterprise Fund and the California Competes Tax Credit Program. The Texas Enterprise Fund is a "deal-closing" cash grant program to companies considering a new project site where Texas is competing with other out-of-state sites. Since FY2006, the Texas Enterprise Fund has awarded \$41 million to defense contractors. The California Competes Tax Credit Program is an income tax credit for businesses considering a significant investment in California. Between FY's 2013-14 through FY 2016-17, the program has awarded over \$25 million in tax credits to defense contractors in California.

METHODOLOGY

Both programs provided incentives to the private sector defense industry to retain and expand their operations in Florida. While this analysis does not include a ROI for either of these programs, EDR believes a simulation of the defense industry's economic impact to the state is a useful alternative. To this end, the simulation looks at the economic impact of the annual contracts from the Department of Defense to Florida's defense businesses.

The analysis relied on USASpending.gov website to run data queries on defense contracts that were performed in Florida during Fiscal Years 2014-15, 2015-16 and 2016-17. During all 3 Fiscal Years, Florida defense contractors were awarded over \$10 billion in defense contracts. The contracts were heavily concentrated in the aerospace industry, computer systems technology industry and professional services industry. However, 53 out of the 62 private industry categories in the Statewide Model were affected by at least one defense contract award during the review period.

THE STATEWIDE MODEL

Statewide Model

EDR used the Statewide Model to simulate the economic impact of defense contracts in Florida. The Statewide Model is a dynamic computable general equilibrium (CGE) model that simulates Florida's economy and government finances.⁸⁰ The Statewide Model is enhanced and adjusted each year to reliably and accurately model Florida's economy. These enhancements include updating the base year the model uses, as well as adjustments to how the model estimates tax collections and distributions.⁸¹

Among other things, the Statewide Model captures the indirect and induced economic activity resulting from defense contracts in Florida. This is accomplished by using large amounts of data specific to the Florida economy and fiscal structure. Mathematical equations⁸² are used to account for the relationships (linkages and interactions) between the various economic agents, as well as likely responses by businesses and households to changes in the economy.⁸³ The model also has the ability to estimate the impact of economic changes on state revenue collections and state expenditures in order to maintain a balanced budget by fiscal year.

When using the Statewide Model to evaluate the defense industry in Florida, the model is shocked⁸⁴ using static analysis to develop the initial or direct effects attributable to defense-related contracts. In this analysis, the annual direct effects (shocks) of the defense contracts took the form of:

• Removal of Florida-based Department of Defense contracts.

In conjunction with the direct effects, the model estimates the additional—indirect and induced economic effects generated by the defense contracts. This includes the supply-side responses to the existence of contracts where the supply-side responses are changes in investment and labor demand. Indirect effects are the changes in employment, income, and output by local supplier industries that provide goods and services to support the direct economic activity. Induced effects are the changes in spending by households whose income is affected by the direct and indirect activity.

All of these effects can be measured by changes (relative to the baseline) in the following outcomes:

- State government revenues and expenditures
- Jobs
- Personal income
- Florida Gross Domestic Product
- Gross output

⁸⁰ The statewide economic model was developed using GEMPACK software with the assistance of the Centre of Policy Studies (CoPS) at Monash University (Melbourne, Australia).

⁸¹ Reports prior to January 1, 2017 have used 2009 as the base year. Reports as of January 1, 2017 have used 2011 as the base year.

⁸² These equations represent the behavioral responses to economic stimuli – to changes in economic variables.

⁸³ The business reactions simulate the supply-side responses to the new activity (e.g., changes in investment and labor demand).

⁸⁴ In economics, a shock typically refers to an unexpected or unpredictable event that affects the economy, either positive or negative. In this regard, a shock refers to some action that affects the current equilibrium or baseline path of the economy. It can be something that affects demand, such as a shift in the export demand equation; or, it could be something that affects the price of a commodity or factor of production, such as a change in tax rates.

- Household consumption
- Population

Key Assumptions

The following key assumptions are used in the Statewide Model to determine the outcomes of defense contracts. Some of the assumptions are used to resolve ambiguities in the literature, while others conform to the protocols and procedures adopted for the Statewide Model.

- The analysis assumes that the data used to estimate total defense contracts in Florida is accurate and a reasonable approximation. The data comes from USASpending.gov, which is the official source for U.S. Government contracts. The data was not independently audited or verified by EDR.
- 2. The analysis assumes that given the time span under review, applying discount rates would not prove material to the outcome.
- 3. The analysis assumes the relevant geographic region is the whole state, not individual counties or regions. The model accounts and makes adjustments for the fact that industries within the state cannot supply all of the goods, services, capital, and labor needed to produce the state's output.

Key Terms

In the pages that follow, diagnostic tables describing the composition and statistics of the analysis precede the discussion. Key terms used in the tables are described below:

<u>Personal Income (Nominal \$(M))</u> – Income received by persons from all sources. It includes income received from participation in production as well as from government and business transfer payments. It is the sum of compensation of employees (received), supplements to wages and salaries, proprietors' income with inventory valuation adjustment (IVA) and capital consumption adjustment (<u>CCAdj</u>), rental income of persons with <u>CCAdj</u>, personal income receipts on assets, and personal current transfer receipts, less contributions for government social insurance.

<u>Real Disposable Personal Income (Fixed 2011 (M))</u> – Total after-tax income received by persons; it is the income available to persons for spending or saving.

<u>Real Gross Domestic Product (Fixed 2011 (M))</u> – A measurement of the state's output; it is the sum of value added from all industries in the state. GDP by state is the state counterpart to the Nation's gross domestic product.

<u>Consumption by Households and Government (Fixed 2011 \$(M))</u> –The goods and services purchased by persons plus expenditures by governments consisting of compensation of general government employees, consumption of fixed capital (CFC), and intermediate purchases of goods and services less sales to other sectors and own-account production of structures and software. It excludes current transactions of government enterprises, interest paid or received by government, and subsidies.

<u>Real Output (Fixed 2011 \$(M))</u> – Consists of sales, or receipts, and other operating income, plus commodity taxes and changes in inventories.

<u>Total Employment (Jobs)</u> – This comprises estimates of the number of jobs, full time plus part time, by place of work. Full time and part time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included.

PROGRAM FINDINGS

		2014-2015	2015-2016	2016-2017	Total	Average per Year
Personal Income	Nominal \$ (M)	8,935.0	9,861.0	10,571.0	29,367.0	9,789.0
Real Disposable Personal Income	Fixed 2010-11 \$ (M)	7,310.7	8,038.1	8,585.1	23,933.8	7,977.9
Real Gross Domestic Product	Fixed 2010-11 \$ (M)	9,919.3	9,756.2	9,752.4	29,427.9	9,809.3
Consumption by Households and Government	Fixed 2010-11 \$ (M)	8,539.1	8,772.8	9,102.5	26,414.5	8,804.8
Real Output	Fixed 2010-11 \$ (M)	14,664.7	13,999.4	13,983.0	42,647.1	14,215.7
						Average
		2014-2015	2015-2016	2016-2017	Total	per Year
Total State Revenues	Nominal \$ (M)	171.9	163.1	179.0	514.0	171.3
Average Employment	Jobs	20,341.0				

Statewide Economic Model Impact of the Florida Defense Contracts (FY2014-2016)

The Department of Defense contracts contributed, on average, over \$9.8 billion annually to Florida' Real Gross Domestic Product, \$7.9 billion annually in real Disposable Personal Income, and \$171.3 million annually in state revenue. These contracts, annually, amounted to about 1.09% of Florida's total GDP and .88% of Florida's total real Disposable Personal Income. Additionally, defense firms employed around 20 thousand individuals to fulfill the defense contracts awarded in Florida every year.

The defense contracts benefitted Florida due primarily through the sheer volume of contracts and the total annual amount awarded to Florida-based companies. In the 3 fiscal years, this amounted to over \$30 billion worth of contracts. In comparison to the rest of the nation, Florida ranked 6th in the total amount of contracts awarded by state.⁸⁵

Additionally, Florida's economy benefitted by the concentration of defense contracts in aerospace manufacturing. Aerospace manufacturing firms have larger economic multipliers than the average Florida company. Larger economic multipliers means more indirect and induced economic impacts in Florida from every dollar spent on aerospace manufacturing contracts.

⁸⁵ U.S. Department of Defense Office of Economic Adjustment, "Defense Spending by State, Fiscal Year 2015", 18.

THE SPACE INDUSTRY IN FLORIDA

History

Florida's space industry started in the early 1960s when NASA and the Department of Defense established a space center (subsequently named John F. Kennedy Space Center (KSC)) in Brevard County. The KSC was the primary launch base and control center for NASA space vehicles. The KSC control center handled the launches of NASA space vehicles, while the Mission Control Center in Houston, Texas controlled the space vehicles after liftoff. The NASA missions at KSC included the Mercury program (1959-1963), Gemini program (1963-1966), Apollo program (1961-1972), and the Space Shuttle program (1981-2011).

In 2004, the federal government initiated the end of the Space Shuttle program as part of a larger plan to replace the shuttle with a different space program called Constellation. However, the Constellation was eventually cancelled in 2011 and a new vision of space exploration was announced that placed an emphasis on public-private partnerships and the encouragement of a private, commercial space industry.

This new vision of space exploration led to significant changes at KSC. Historically, the space industry was driven by federal funding of NASA with most space industry employees being federal employees. The partial privatization of the industry led to a significant reduction of the NASA workforce in Brevard County. Additionally, Florida started competing with other states to attract the growing private, commercial space industry.

Florida Initiatives

The Florida Legislature has enacted a number of laws to maintain Florida's position as a leader in the space industry. These programs include economic incentives to the space industry and the expansion of Space Florida, the state's economic development organization for the space industry.

Florida offers specific incentives to the space industry. The Qualified Defense Contractor and Space Flight Business Tax Refund Program (QDSC) was established in 1996 to encourage the creation and/or retention of high-wage jobs (defined as 115 percent or more of the area or statewide annual wage) in the defense and space industries. Incentive awards ranged from \$3,000 to \$8,000 per job and payments were made over four years. The QDSC program expired on July 1, 2014.

The Sales Tax Exemption for Machinery and Equipment Used in Semiconductor, Defense, or Space Technology Production (SDST) was first created in 1997.⁸⁶ When it was originally established, the exemption was limited to silicon technology production and research and development. In 2000, the law was amended⁸⁷ to remove any reference to silicon technology and to add semiconductor, defense, or space technology production and research and development to the exemption.⁸⁸ The present day exemption is for the purchase of machinery and equipment used in the production processes of businesses engaged in the production of semiconductor, defense, or space technology products for sale or use. In the review period, one company in the space industry used this exemption.

⁸⁶ Section 288.012(5)(j), F.S., Ch. 97-278 s.11, Laws of Florida.

⁸⁷ Ch. 2000-351, Laws of Florida.

⁸⁸ Research and development was removed from this part of the statute in 2006. Ch. 2006-57, Laws of Florida.

The Manufacturing and Spaceport Investment Incentive (MSII) Program was created in 2010 to encourage capital investment and job creation in manufacturing and spaceport activities in the state. The program was intended to relieve a portion of the sales tax burden on existing manufacturers that were not eligible for the standard manufacturing machinery and equipment sales tax exemption. The latter program had requirements for increased productive output that some manufacturers were unable to meet. The MSII program offered a refund of sales taxes paid on purchases of eligible equipment placed into service in Florida in excess of the entity's base year purchases (2008). The MSII program was a temporary program that was only available from July 1, 2010, to June 30, 2012. The program received an allocation of \$19 million for sales tax refunds in Fiscal Year 2010-11 and \$24 million in Fiscal Year 2011-12, for a total of \$43 million.

Space companies receive other Florida incentives. These incentives are not specifically targeted to the space industry, but many space companies qualify for them. During the review period, one space company qualified for the Quick Action Closing Fund Program. In addition, space companies have received financial incentives from local economic development agencies.⁸⁹

Space Florida

In 2006, the Florida Legislature passed the Space Florida Act, which consolidated Florida's existing space entities (Florida Space Authority, Florida Space Research Institute and the Florida Aerospace Finance Corporation) into one organization named Space Florida. Space Florida's mission is to promote aerospace commercial development by facilitating necessary financing, spaceport facilities and operations, research and development, workforce development and education programs.⁹⁰

Space Florida has been given multiple authorities and tools to achieve its mission. First, Space Florida has financing tools that can lower a company's overhead and operating costs. An example of this type of financing is a synthetic lease. A synthetic lease is an operating lease where the asset can be taken off the company's balance sheet and the lease payments recorded as an expense. However, the company can still gain the tax benefits from depreciating the asset. This financial tool allows the company to show a lower liability on its financial statements, but still receive the tax benefits from depreciating the property.

Second, Space Florida finances facilities and machinery and equipment of new or expanding aerospace companies. In conjunction with commercial banks, Space Florida will finance 20 to 25 percent of the project, while the bank finances the remaining balance. Space Florida can also provide assistance in obtaining an operating lease (under Financial Accounting Standards number 13) for the financed assets.

Finally, Space Florida works in conjunction with The Florida Department of Transportation (FDOT) for needed space infrastructure. As NASA and the United States Air Force (USAF) have been reducing their use of the Kennedy Space Center and other installations at Cape Canaveral, the unused facilities have been repurposed for commercial space activity.⁹¹ Space Florida issues a "Call for Projects" in April of every year and matches private funding dollar-for-dollar. FDOT designates space flights and spaceports as a mode of transportation and gives them the same designation within FDOT as existing modes of transportation like roads and airports. FDOT can fund spaceport projects through the Spaceport

⁸⁹ Both Blue Origin and Embraer received financial incentives from Brevard County.

⁹⁰ Ch. 2006-60, Laws of Florida.

⁹¹ Florida Spaceport Improvement Program, FDOT – 2017 Project Handbook

Improvement Program or through other programs such as the economic development transportation projects under s. 339.2821, F.S. The current FDOT work program anticipates funding \$250 million in spaceport projects for the period Fiscal Year 2018-19 through Fiscal Year 2022-23.⁹² The Spaceport Improvement Program facilitates and funds projects that do the following:

- Improve aerospace transportation facilities
- Integrate airports and spaceports
- Improve space transportation efficiency and capacity

The following table reflects the state funded FDOT adopted work program for Spaceport projects:

Florida Department of Transportation Workmix - 8883 Spaceport Capacity Projects

State Funded

As of July 1, 2018							
Description	2018	2019	2020	2021	2022	2023	Total
Spaceport Planning and Development		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Brevard - Space FL Horizontal Launch Cargo Processing		\$8,600,000					\$8,600,000
Statewide Spaceport Program Development	\$2,400,000	\$1,500,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$11,900,000
Brevard - Space FL Launch Complex Improvements	\$28,500,000	\$5,000,000					\$33,500,000
Brevard - Space FL Shuttle Landing Facility Improvements		\$5,000					\$5,000
Brevard - Space FL Processing & Range Facility Improvements		\$24,300,000	\$7,000,000	\$5,000,000	\$6,000,000	\$5,000,000	\$47,300,000
Brevard - Space FL Common Use Infrastructure		\$37,566,110	\$5,000,000	\$5,500,000	\$7,274,302	\$9,723,172	\$65,063,584
Brevard - Space FL Launch Complex Improvements & Passenger/Cargo		\$9,000,000	\$5,000,000	\$4,000,000	\$2,000,000	\$5,000,000	\$25,000,000
Brevard - Space FL Horizontal Launch/Landing Facilities		\$1,639,800	\$5,000,000	\$5,500,000	\$10,000,000	\$10,000,000	\$32,139,800
Spaceport		\$18,563,307			\$3,000,000	\$100,000	\$21,663,307
Total	\$30,900,000	\$107,174,217	\$25,000,000	\$23,000,000	\$31,274,302	\$32,823,172	\$250,171,691

Space Florida currently operates, has helped finance and/or owns multiple facilities that are used by both private and public space entities. These facilities⁹³ include:

- The Reusable Launch Vehicle Hangar a partnership with NASA
- Protection and storage of ISS hardware, shuttle equipment, Orbiter satellites, and the Columbia Space Shuttle
- Embraer Engineering & Technology Center
- Exploration Park
- Northrop Grumman expansion in Brevard County
- One Web Satellite Manufacturing Plant
- Apollo Saturn Center
- Space Shuttle Atlantis Center
- Horizontal Integration Facility (HIF)
- Launch Complex 41
- Operations and Checkout Facility at Kennedy Space Center
- Shuttle Launch Experience at Kennedy Space Center

⁹² Florida Department of Transportation, "FDOT FY19-FY23 Adopted Work Program" 07/01/2018.

⁹³ http://www.spaceflorida.gov/facilities

Observations Regarding Other States

Every state offers incentives to attract businesses and promote economic growth. Specific Industries are targeted with incentives provided on a local level as well as on a state level. Incentives can be tailored to the individual company or more generally. Most incentives are financial, like offering businesses lower taxes and decreased costs associated with conducting business, but there are also regulatory incentives like those used by Virginia and Florida. In 2007, Virginia was the first state to offer the Space Industry regulatory incentive and in 2008 Florida quickly followed suit with the Informed Consent for Spaceflight Act which, in the event of an accident or incident, limits the spaceflight provider's liability.⁹⁴

The Federal Aviation Administration (FAA) has licensed 11 sites nationally for commercial launch and reentry sites. The sites are located in California, Virginia, Alaska, Florida, New Mexico, Oklahoma, Colorado and Texas.⁹⁵ There are multiple factors that can persuade a company to location in a particular location.⁹⁶

States can develop a university/industry development zone, which encourage companies and universities to locate in close proximity and shared facilities and infrastructure and personnel. Companies have also worked in conjunction with local and state governments to create training facilities to meet the unique instruction needs. For example, Alabama, nine universities and community colleges and Airbus worked together to create the Alabama Aviation Education Center to develop the aviation and aerospace workforce and encourage youths to pursue careers in aerospace.⁹⁷ Another example of a collaborative public and private facility can be found at the Advanced Manufacturing Research Centre (AMRC) at The University of Sheffield in England. The AMRC is a research facility that partners with the university and Boeing and other companies to provide research, training and apprenticeships that meet the needs of the aerospace industry.

Another tool is a space authority that can have unique assets or authority and serve as an advocate for the space industry to state and federal authorities. Spaceports are not an incentive, but can be the most persuasive factor in deciding a location due to their subsidized cost-savings for business and the preference for a coastal location.

Florida enjoys the benefit of having a developed space transportation industry and the advantage of location. The following chart compares states with licensed spaceports and each state's relative advantages for the space industry:

State	Coastal State	Space Authority	Spaceport	Legislative Incentives	Space Trans. Applicable Incentives
Alaska	Х	Х	Х		Х
California	Х	Х	Х	Х	Х
Colorado			Х		Х
Florida	х	х	х	х	х
New Mexico		Х	Х	Х	Х
Oklahoma		Х	Х		
Texas	Х	Х	Х	Х	Х
Virginia	Х	Х	Х	Х	Х

Source: Federal Aviation Administration's report, State Support for Commercial Space Activities; 2017 Texas Aerospace, Aviation and Defense

⁹⁴ Unlike Virginia law, the Florida law has no sunset date.

⁹⁵ https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=19074 accessed 09/14/2018

⁹⁶ State Support for Commercial Space Activities – Federal Aviation Administration

⁹⁷ http://www.madeinalabama.com/2017/05/alabama-aviation-education-center/ accessed 09/26/2018

While most states have some form of space authority, almost none have the reach and flexibility of Space Florida.⁹⁸ Because of its longstanding spaceflight tradition and history, its existing infrastructure, geographical location, space authority and transportation program, Florida is a leading state for the space industry.

The State of the Space Industry in Florida

The space industry contributes to the Florida economy. NASA currently has over 2,000 employees in Florida.⁹⁹ The KSC visitor center is a popular tourism destination and attracts over 1.7 million tourists annually.¹⁰⁰ The popularity of the space center benefits Florida through additional tourism spending in the state.

Several top space companies launch rockets out of Florida and are currently establishing manufacturing facilities in Florida. The larger space companies in Florida include Blue Origin, SpaceX, Boeing, One Web and Lockheed Martin. A list of notable projects can be found below:

- Lockheed Martin is contracting with NASA to assemble the Orion Spacecraft at Kennedy Space Center. Orion is a crew vehicle to be used for deep space exploration. The first unmanned mission is expected in 2019, and the first crewed flight in 2021.¹⁰¹
- Boeing has upgraded and utilized the Orbiter Processing Facility for the USAF X-37 Program. The X-37 program is a space plane used for low orbit missions.¹⁰² All X-37 mission have launched from the Cape Canaveral Air Force Base.
- SpaceX has developed and launched the Falcon 9. The Falcon 9 is a reusable rocket for cargo transport.¹⁰³ The Falcon 9 is launched from the Cape Canaveral Air Force Base.
- Boeing has contracted to develop the CST-100 Starliner.¹⁰⁴ The Starliner is a commercial low orbit crew vehicle. The Starliner will be launched from the Cape Canaveral Air Force Base.
- Blue Origin is building a \$200 million space launch and manufacturing facility at Exploration Park in Brevard County.¹⁰⁵ Blue Origin will launch its New Glenn Orbital Rocket from the Cape Canaveral Air Force Base.¹⁰⁶
- OneWeb is building a high-volume satellite manufacturing facility at Exploration Park in Brevard County.

It is difficult to accurately measure the total level of employment in the Florida space industry. This is due to the fact that most space companies are also aerospace companies. These aerospace companies design and build commercial and military aircraft in addition to their space-related activities. However, the analysis did look at the aerospace industry in Brevard County as a signal of the overall health of the

⁹⁸ Conversation with Frank DiBello, President and CEO and Bernie McShea, Senior Vice President Business Development & Marketing of Space Florida, September 25, 2018

⁹⁹ https://www.bls.gov/careeroutlook/2016/article/careers-in-space.htm

¹⁰⁰ <u>https://www.floridatoday.com/story/tech/science/space/2017/05/02/ksc-extends-visitor-complex-contract/101217210/</u>

¹⁰¹ <u>https://www.lockheedmartin.com/en-us/products/orion.html</u>

¹⁰² https://www.space.com/25275-x37b-space-plane.html

¹⁰³ <u>https://www.spacex.com/falcon9</u>

¹⁰⁴ <u>http://www.boeing.com/space/starliner/</u>

¹⁰⁵ <u>https://www.floridatoday.com/story/tech/science/space/2017/12/13/blue-origin-officially-moves-into-new-glenn-rocket-factory-ksc-florida/948899001/</u>

¹⁰⁶ <u>https://www.nasaspaceflight.com/2016/09/blue-origin-new-glenn-orbital-lv/</u>

space industry. As the Table below shows, over the past three years, aerospace employment has grown by over 10% annually. In 2016, the average salary of these aerospace jobs was \$107,047.

Annual Aerospace Employment and Average Wages in Brevard County									
	2012	2013	2014	2015	2016				
Total Employment	4,908	4,888	5,096	5,960	6,506				
Average Wage	\$96,095	\$101,777	\$110,409	\$101,308	\$107,047				
Source: Enterprise Florida									

Meeting the Future Needs of the Space Industry

The greatest challenge facing the expansion of the commercial space industry in Florida is the need for a more qualified and skilled workforce. According to Space Florida CEO Frank DiBello, Florida does not provide enough aerospace-related degrees. This leads to a shortage of qualified candidates for the aerospace industry.¹⁰⁷ Instead of training a new generation of aerospace workers, Frank DiBello fears that aerospace companies will take employees away from other companies.¹⁰⁸ This situation would lead to a chronic labor shortage and significantly higher labor costs for the space companies in Florida. In addition to more aerospace-related degrees, retraining is particularly important in the space industry due its constantly evolving and highly technical nature.

Other states and countries have developed successful programs to enhance the local workforce and encourage a greater collaboration between aerospace companies and the local educational system. Some states have developed university/industry development zone, which encourage companies and universities to locate in close proximity to each other and to share facilities, infrastructure and personnel. For example, in Alabama, nine universities and community colleges are working together with Airbus to create the Alabama Aviation Education Center. The center's mission is to develop an aviation and aerospace workforce in Alabama and to encourage youths to pursue careers in the aerospace industry.¹⁰⁹

Another example of a collaborative public and private facility can be found at the Advanced Manufacturing Research Centre (AMRC) at The University of Sheffield in England. The AMRC is a partnership between the university and Boeing. The center gives any aerospace manufacturer access to the newest machinery, testing equipment and manufacturing technology. In addition, the center provides aerospace apprenticeships and a vocational engineering student program.¹¹⁰

¹⁰⁷ <u>https://www.floridatoday.com/story/tech/science/space/2017/05/09/dibello-florida-must-grow-aerospace-talent-pipeline/101428348/</u> accessed 09/17/2018

¹⁰⁸ Ibid.

¹⁰⁹ <u>http://www.madeinalabama.com/2017/05/alabama-aviation-education-center/</u>

¹¹⁰ <u>https://www.amrc.co.uk/</u> for more information.

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Florida Fish and Wildlife Conservation Commission

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Socioeconomic Assessment

In today's "Information Age," economic research and analysis are vital to the broad approach necessary to address Florida's complex fish-, wildlife- and habitat-related issues.

The Socioeconomic Assessment Office, part of the Fish and Wildlife Research Institute, provides decision-makers with an understanding of the economic value, impact, benefits, costs and efficiency measures directly related to the conservation of fish and wildlife resources. Although the primary audience for this information is the Florida Legislature and FWC resource managers, we recognize the importance of communicating economic information to the public as well.

Economics of Fish & Wildlife Recreation in Florida

When a family goes fishing or hunting, buys binoculars to view wildlife, visits a nature preserve, goes boating or visits a seafood restaurant in Florida, it is contributing to the economic prosperity of the state and to jobs. Results from various studies, summarized on this page, show in human terms the value of protecting and managing wildlife.

Economic Impacts of Hunting, Freshwater Fishing, Saltwater Fishing, Wildlife Viewing and Recreational Boating

Economics | Florida Fish and Wildlife Conservation Commission

Category	Economic Contribution	Jobs
Hunting*	\$1.6 billion	14,673
Recreational Boating***	\$10.4 billion	82,752
Recreational Freshwater Fishing*	\$1.7 billion	14,040
Recreational Saltwater Fishing**	\$6.6 billion	96,801
Wildlife Viewing*	\$4.9 billion	44,623

* 2011 data

** 2015 data

*** 2013 data

Hunting, Recreational Freshwater Fishing and Wildlife Viewing Expenditures

Туре	Hunting	Freshwater Fishing	Wildlife Viewing
Participants	242,000	1,227,000	4,308,000
Total Expenditures	\$716 million	\$710 million	\$3 billion
Trip-related	\$281 million	\$461 million	\$1.7 billion
Equipment and other	\$435 million	\$249 million	\$1.3 billion
Average per participant	\$2,824	\$578	\$668

(2011 data)

Recreational Saltwater Fishing Expenditures

Economics | Florida Fish and Wildlife Conservation Commission

Туре	Expenditures
For Hire	\$380,057
Private Boat	\$417,050
Shore	\$223,355
Total	\$1,020,462

Durable Goods	Expenditures
Fishing Tackle	\$1,775,011
Other Equipment	\$748,622
Boat Expenses	\$4,397,267
Vehicle Expenses	\$469,238
Second Home Expenses	\$71,973
Total Durable Expenditures	\$7,462,111
Total State Trip and Durable Goods Expenditures	\$8,482,573

(2015 data)

Recreational Boating Expenditures

	Total Expenditures
\$10.3 billion	

(2013 data)

Sources

Sources Hunting: Southwick Associates. Hunting in America: An Economic Force for Conservation. Produced for the National Shooting Sports Foundation in partnership with the Association of Fish and Wildlife Agencies. 2012.

Recreational freshwater fishing: Southwick Associates. Sportfishing in America: An Economic Force for Conservation. Produced for the American Sportfishing Association under a U.S. Fish and Wildlife Service Sport Fish Restoration grant (F12AP00137, VA M-26-R) awarded by the Association of Fish and Wildlife Agencies. 2012.

Recreational saltwater fishing: National Marine Fisheries Service. 2017. Fisheries Economics of the United States, 2015. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-F/SPO-170.

Wildlife viewing: Southwick Associates. The 2011 Economic Benefits of Wildlife Viewing in Florida. Prepared for Florida Fish and Wildlife Conservation Commission.

Recreational boating: National Marine Manufacturers Association. Economic Significance of Recreational Boating in Florida. 2013.

Other Economics Projects

- A Process for Public Boating Access Investment Decisions (2MB)
- 🖪 RUM Final Boating Access Conference Presentation
- Description of Registered Boater Spending to the Florida Economy - Statewide and by Region
- Florida Boating Access Facilities Inventory and Economic Study, including a pilot study for Lee County 2009
 - P Florida Boating Access Facilities Inventory and Economic Study,

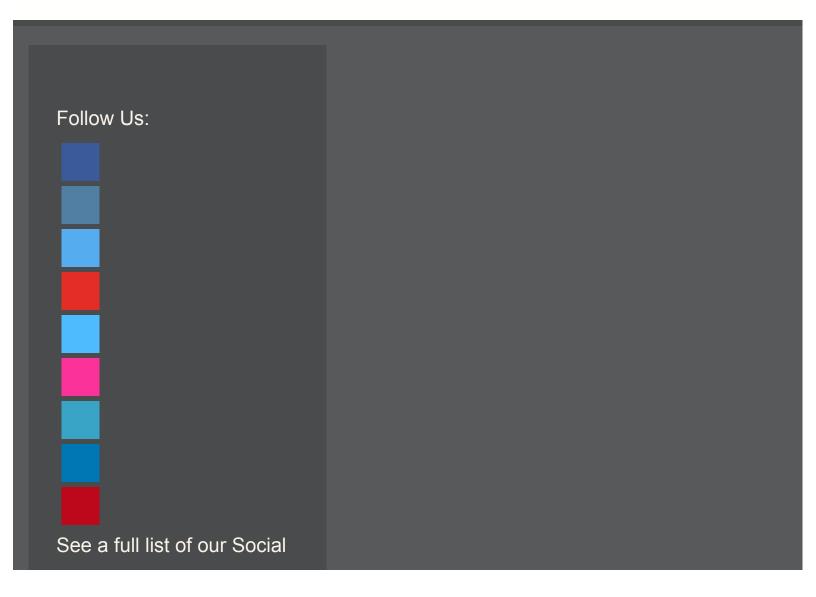
including a Pilot Study of Lee County

• Executive Summary - Florida Boating Access Facilities Inventory and Economic Study, including a Pilot Study for Lee County (6MB)

 Pull Report - Boating Access Facilities Inventory and Economic Study (4MB)

 Appendices - Boating Access Facilities Inventory and Economic Study (7.5MB)

- Economics of Recreational Freshwater Fishing
- Economics of Saltwater Fishing



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Pursuant to section 120.74, Florida Statutes, the Fish and Wildlife Conservation Commission has published its **2018 Agency Regulatory Plan**. FLORIDA

2019-2020

HUNTING REGULATIONS

Deer Changes!

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HUNTING REGULATIONS

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Licenses also available by phone at 888-HUNT-FLORIDA (486-8356) or at a tax collector's office or license agent.

Hunter safety course

To find hunter safety courses in your area, visit our website at MyFWC.com/ HunterSafety or contact your nearest FWC regional office (see page 5).



On the cover

St. Johns River Water Management District's Jeremy Olson photographed these three bucks in velvet during the summer on a central Florida wildlife management area.

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A message from the Florida Fish and Wildlife Conservation Commission about new deer hunting rules

New deer hunting rules taking effect in 2019-2020 will help support the goals and objectives in the Commission-approved strategic plan for deer management. Our thanks for this progress goes to stakeholders for their willingness to collaborate with FWC staff throughout the rulemaking process to achieve regulations based on hunter preference and sound science to ensure sustainability.

One of the new rules establishes an annual statewide bag limit. Beginning this season, the annual statewide bag limit is five deer per hunter, of which no more than two can be antlerless (any deer, except a spotted fawn, without antlers or whose antlers are less than five inches in length). Antlerless deer may still only be harvested during seasons when they are legal to take, such as during archery season and on antlerless deer days. This adaptive approach to deer management is intended to improve hunting opportunities by encouraging harvest among more hunters as well as greater selectivity, while helping maintain a healthy and reasonably balanced deer herd. Before this limit was established, Florida was the only state in the Southeast without a specified annual bag limit.

New rules also require all hunters - including youth under 16 years of age, resident hunters 65 years and older, those with a disability license, military personnel, and those hunting on their homestead in their county of residence - to report deer they harvest. A harvest reporting system is expected to foster bag limit compliance and give the FWC another source of deer harvest data.

Another rule change established a new youth deer hunt weekend for youth 15-years-old and younger who are supervised by an adult (18 years or older). This Saturday-Sunday youth deer hunt coincides with the muzzleloading gun season in all four hunting zones. Youth can harvest one antlered or antlerless deer (except spotted fawn), and the deer counts toward their annual bag limit. Youth are allowed to use any method of take legal for deer hunting.

The new youth deer hunt weekend is not available on wildlife management areas, which have hosted youth and family deer hunts for years. This newly established youth deer hunt weekend is a way to encourage youth deer hunting on other lands. It supports the FWC's commitment to igniting interest in hunting and creating the next generation of conservation stewards.

For more information about the new hunting rule changes, visit MyFWC.com/Deer and click on "New Hunting Rules."

Major changes

Major regulation and rule changes for this season are listed below. There are many other changes not listed here. Hunters are responsible for learning requirements and regulations pertaining to the types of hunting they pursue.

- The new annual statewide bag limit is 5 deer per hunter of which no more than 2 deer can be antlerless. See deer bag limits on page 20.
- All deer hunters now must log and report their deer harvest. See page 18 for details.
- A youth deer hunt weekend has been established in all four hunting zones. Youth 15-years-old and younger can harvest 1 antlered or antlerless deer (except spotted fawn). Youth must be supervised by an adult. See page 20 for season dates and details.
- Youth 15-years-old and younger are now limited to 1 antiered deer annually that does not meet DMU antier point regulations. See pages 22–25 for details.
- The Youth Waterfowl Hunting Days have been modified to occur the Saturday before the start of the regular waterfowl season and the second Saturday after the season ends. See page 26 for dates and details.
- Shooting hours during spring turkey season on most WMAs has been extended until sunset.



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About This Guide

This high-quality guide is offered to you by the FWC's Division of Hunting and Game Management through its unique partnership with J.F. Griffin Publishing, LLC.

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This guide is also available online at eRegulations.com This publication is provided as a guide to Florida hunting laws and regulations; however, the Wildlife Code of the State of Florida is the final authority on hunting laws. The Florida Wildlife Code, Division Number 68A of the Florida Administrative Code, can be obtained at www.flrules.org. The FWC strives to ensure the information in this publication is accurate but assumes no liability for substantive or typographical differences between this publication and the Florida Administrative Code. If you have questions regarding hunting laws and regulations, contact an FWC regional office (see below). This publication is valid from July 1, 2019 through June 30, 2020.

Definitions

- Game—resident game birds, game mammals and migratory game birds
- Resident game birds—quail and wild turkeys
- Game mammals-deer, gray squirrels, rabbits and black bears
- Migratory game birds—ducks, geese, common moorhens, coots, snipe, rails, woodcocks, mourning doves and white-winged doves
- Non-migratory game—resident game birds and game mammals
- Furbearers—bobcats, otters, raccoons, opossums, coyotes, beavers, skunks and nutrias
- Fox squirrels, Key deer and Florida panthers cannot be taken or pursued

Information regarding bear management is not contained in this handbook. Please visit MyFWC.com/Bear for information.

INTRODUCTION

The Florida Fish and Wildlife Conservation Commission does not allow discrimination on the basis of race, color, sex, religion, national origin, age or disability. If you believe you have been discriminated against in any program, activity or facility of this agency which receives Federal financial assistance, you should contact/ write to:

Florida Fish and Wildlife Conservation Commission, Office of Human Resources 620 South Meridian Street Tallahassee, FL 32399-1600 Telephone 850-488-6411

or contact/write to: Civil Rights Accessibility Coordinator for Public Access, U.S. Fish and Wildlife Service, Wildlife and Sport Fish Restoration Program 5275 Leesburg Pike Falls Church, VA 22041 Telephone 703-358-2349 or 703-358-2131

Florida Fish and Wildlife Conservation Commission



Partners for public hunting

Florida has one of the largest wildlife management area (WMA) systems in the country at nearly 6 million acres. WMAs are managed for conservation and recreation, and offer diverse and exciting public hunting opportunities. The FWC is lead manager or landowner on about 1.4 million acres of these public lands. The remaining 4.5 million acres is open for public hunting thanks to partners and cooperators including:

Florida Forest Service Northwest Florida Water Management District Suwannee River Water Management District St. Johns River Water Management District Southwest Florida Water Management District South Florida Water Management District Florida Armory Board Florida Department of Environmental Protection Florida Department of Corrections U.S. Forest Service **U.S.** Department of Defense **National Park Service**

Alachua County **Collier County Columbia County** Lee County Levy County **Orange County** Volusia County Martin County **U.S. Army Corps of Engineers** U.S. Fish and Wildlife Service Hancock Timber Resource Group Weyerhaeuser Company Nutrien **City of Jacksonville** The Nature Conservancy **PRIDE Enterprises Miccosukee Indian Tribe**

To find a WMA near you, visit MyFWC.com/WMAbrochures.

Your donations support youth hunting programs

It's never been easier to support youth hunting programs. Simply add a donation at checkout when you buy your hunting license.

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Florida Youth Centers Note



Youth Hunting Program of Florida

Offering safe, educational, mentored youth hunts.

To learn more and find a hunt near you, visit *MyFWC.com/YHPF*



KNOW THE LAW Before Burning Outdoors in Florida

DID YOU KNOW?

- Escaped yard debris burning is one of the leading causes of wildfires in Florida.
- The Florida Forest Service administers Florida's outdoor burning and forest fire laws.
- Some types of burning require an authorization from the Florida Forest Service.

WHAT IS YARD WASTE?

Yard waste is any vegetative debris such as grass clippings, brush, leaves, tree limbs and palm fronds that are a result of yard maintenance.

CAN YOU BURN YARD WASTE WITHOUT AN AUTHORIZATION?

- Burning yard waste does not require an authorization as long as you meet the required set-backs and no local, city or county ordinances prohibit burning.
- Yard waste must be generated on your property and fit into an 8-foot diameter pile or non-combustible container.
- The fire must be ignited after 8:00 a.m. central time or 9:00 a.m. eastern time and extinguished one hour before sunset.
- Piles greater than 8-feet in diameter require an authorization from the Florida Forest Service, suppression equipment and additional set-backs.

WHAT IS ILLEGAL TO BURN?

It is illegal to burn household garbage, including paper products, treated lumber, plastics, rubber materials, tires, pesticides, paint and aerosol containers.

OUTDOOR BURNING TIPS

- Never burn on windy days.
- Clear an area down to bare soil around your pile to prevent the fire from spreading.
- Cover a non-combustible container with wire mesh to keep sparks from flying out and starting new fires.
- Keep a water hose and shovel nearby in case your fire escapes.
- Never leave a fire unattended.

QUESTIONS?

Contact your local Florida Forest Service office or visit FloridaForestService.com to learn more.

REMEMBER!

If your fire escapes, you may be liable for costs of suppression and damage to the property of others. FOREST FIRE LAWS & OPEN BURNING REGULATIONS DACS-P 00149





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Cypress Ridge Hunting Preserve is located just outside of Orlando, less than an hour away from Disney. We have 450 acres of prime Florida land high fenced with many different species including whitetail deer, wild hogs, and exotics such as black buck antelope and axis deer. Come hunt the buck of a lifetime at Cypress Ridge Hunting Preserve. Please don't hesitate to contact us with any questions.



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RED STAG BLACKBUCK ANTELOPE SCIMITAR ORYX BLUE WILDEBEEST FALLOW DEER AXIS DEER AOUDAD BARASINGHA WHITETAIL DEER LECHWE PERE DAVID'S DEER AND MANY MORE!



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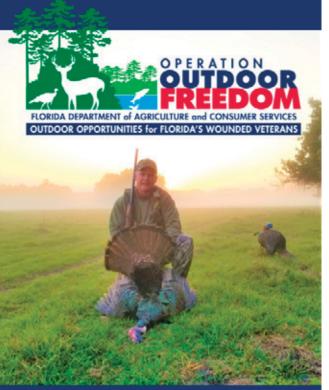


Visit MyFWC.com/NewHunter for:

- Hunting tips
- Places to hunt
- Youth and family hunts
- License and permit information
- Hunter safety training
- Season dates and regulations



eRegs



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Recreational license, permit information and requirements

Most recreational hunting and fishing licenses and permits, including reprints, are available at GoOutdoorsFlorida.com, tax collectors' offices, license agents, or by calling toll-free 888-HUNT-FLORIDA (486-8356). For purposes of hunting in Florida, a resident is defined as any person who has declared Florida as his or her only state of residence as evidenced by a valid Florida driver license or identification card with both a Florida address and a Florida residency verified by the Department of Highway Safety and Motor Vehicles (HSMV). A valid Florida driver license or ID Card is needed for resident license or permit purchases made online or by telephone. If a Florida driver license or ID card is not on record with HSMV, a Florida voter information card, declaration of domicile, or homestead exemption may be used as proof of residency.

Active duty military personnel stationed in Florida, including spouse and dependent children residing in the household, are considered residents. Except as noted under License and Permit Exemptions, the following licenses and permits are required:

Hunting license

Required when taking or attempting to take game or furbearing animals (by methods other than trapping).

Deer permit

Required, in addition to a hunting license, when taking or attempting to take deer.

Turkey permit

Required, in addition to a hunting license, when taking or attempting to take turkeys.

Migratory bird permit

Required, in addition to a hunting license, when taking or attempting to take ducks, geese, coots, common moorhens, gallinules, rails, snipes, woodcocks, mourning doves and white-winged doves.

Florida waterfowl permit and Federal duck stamp

Required, in addition to a hunting license and migratory bird permit, when taking or attempting to take ducks and geese.

Archery season permit

Required, in addition to a hunting license, when hunting during archery season.

Crossbow season permit

Required, in addition to a hunting license, when hunting during crossbow season.

Muzzleloading gun season permit

Required, in addition to a hunting license, when hunting during muzzleloading gun season.

Management area permit

Required, in addition to a hunting license, when taking or attempting to take wildlife on wildlife management areas. Permit may also be used on wildlife management areas where a daily-use fee is required.

Limited entry/quota permit

Required to hunt, or access for recreational purposes, some management areas during specified periods (see Limited Entry/Quota Permits on page 39).

NOTE: In addition to a hunting license, management area permit and any other related permits, additional permits or tags may be required for all or parts of a season when hunting on a wildlife management area. Requirements and exemptions vary by area. Please consult the specific brochure for the WMA you wish to hunt at MyFWC.com/WMAbrochures.



LICENSES AND PERMITS

Furbearer trapping license

Required of anyone, except residents age 65 or older, when taking or attempting to take furbearing animals (raccoons, beavers, bobcats, otters, opossums, coyotes, skunks, nutrias) using live traps or snares and when selling furs to licensed fur dealers.

How to order

Hunting licenses and permits can be ordered online at GoOutdoorsFlorida.com or by calling 888-HUNT-FLORIDA (888-486-8356) 24 hours a day. Purchases can also be made in person at tax collector's offices or license agent locations. Visit MyFWC.com/License for more information on handling fees. All license and permit sales are final.

License and permit exemptions

Exemptions from hunting license and permit (including Florida waterfowl, migratory bird, deer, turkey, management area, and archery, crossbow and muzzleloading gun season) requirements are:

 Persons hunting in their county of residence on their homestead or homestead of their



spouse or minor child; or minor child hunting on the homestead of their parents.

- Florida residents age 65 or older possessing proof of age and residency (a valid Florida Driver License or Florida ID Card meets this requirement) or a Florida Resident 65+ Hunting and Fishing License. Also exempt from furbearer trapping license. Residents age 65 or older may obtain these complimentary hunting and fishing licenses at county tax collectors' offices and at GoOutdoorsFlorida.com.
- Florida residents possessing a Florida Resident Persons with Disabilities Hunting and Fishing License. Information for this license is available at MyFWC.com/ ADA, and applications can be submitted at GoOutdoorsFlorida.com.
- Florida residents in the U.S. Armed Services not stationed in Florida, while home on leave with orders for 30 days or less.
- Children under age 16 (also exempt from federal duck stamps).

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Resident Hunting Licenses	Annual	5-Year
Gold Sportsman's License Includes Hunting, Saltwater Fishing and Freshwater Fishing licenses; and Deer, Man- agement Area, Archery Season, Muzzleloading Gun Season, Crossbow Season, Turkey, Florida Waterfowl, Snook and Lobster permits.	\$100.00	\$494.00
Youth Gold Sportsman's License Includes the same licenses and permits as the Gold Sportsman's License. This license is not required, but available to youths age 8 to 15 who hold a hunter safety certification and is valid from time of purchase until they reach 17 years old.	\$100.00	
Military Gold Sportsman's License Includes the same licenses and permits as the Gold Sportsman's License. Available online at GoOutdoorsFlorida.com or at county tax collectors' offices for Florida resi- dents with valid military credentials who are active duty or retired military members of the U.S. Armed Forces, Armed Forces Reserve, Florida National Guard, Coast Guard or Coast Guard Reserve.	\$20.00	
Sportsman's License Includes Hunting and Freshwater Fishing licenses; and Deer, Management Area, Archery Season, Muzzleloading Gun Season, Crossbow Season, Turkey and Florida Waterfowl permits.	\$80.50	
Resident 64+ Silver Sportsman's License Includes Freshwater Fishing and Hunting licenses; and Deer, Management Area, Archery Sea- son, Muzzleloading Gun Season, Crossbow Season, Turkey and Florida Waterfowl permits.	\$13.50	\$67.50
Annual Hunting License	\$17.00	\$79.00
Youth Hunting License This license is not required, but available to youths age 8 to 15 who hold a hunter safety certification and is valid from time of purchase until they reach 17 years old.	\$17.00	
Hunting/Freshwater Fishing Combination License	\$32.50	
Hunting/Freshwater/Saltwater Fishing Combination License	\$48.00	
Resident Persons with Disabilities Hunting/Fishing License Includes Hunting, Saltwater Fishing and Freshwater Fishing licenses; and Deer, Management Area, Archery Season, Muzzleloading Gun Season, Crossbow Season, Turkey, Florida Waterfowl, Snook and Lobster permits. Eligibility and application details for this license are available at MyFWC.com/ADA.	No Cost	
Florida Resident 65+ Hunting and Fishing License	No Cost	
Nonresident Hunting Licenses		
Nonresident Annual Hunting License	\$15	1.50
Nonresident 10-Day Hunting License	\$46	6.50
Hunting Permits and Related Licenses (Resident and Nonresident)	Annual	5-Year (Residents only)

(Resident and Nonresident)		only)
Management Area Permit	\$26.50	\$126.50
Deer Permit	\$5.00	\$25.00
Archery Season Permit	\$5.00	\$25.00
Crossbow Season Permit	\$5.00	\$25.00
Muzzleloading Gun Season Permit	\$5.00	\$25.00
Turkey Permit (Resident)	\$10.00	\$50.00
Turkey Permit (Nonresident)	\$125.00	—
Florida Waterfowl Permit	\$5.00	\$25.00
Migratory Bird Permit (valid Sept. 1 – March 31)	No Cost	_
Federal Duck Stamp (valid July 1 – June 30)	\$27.50	—
Furbearer Trapping License	\$26.50	—

Lifetime Licenses

Lifetime Licenses are available to Florida residents only but remain valid even if you move out of state. Funds generated from sales of these licenses are invested in an endowment to support long-term conservation of Florida's fish and wildlife resources. Lifetime license holders may be exempt from any licenses or permits that are created in the future, or be exempt from the permit fees.

Lifetime Sportsman's License

Includes Hunting, Saltwater Fishing and Freshwater Fishing licenses; and Deer, Management Area, Archery Season, Muzzleloading Gun Season, Crossbow Season, Turkey, Florida Waterfowl, Snook and Lobster permits.

4 years or younger	\$401.50
5–12 years	\$701.50
13 years and older	\$1,001.50
Lifetime Hunting License	Cup Sacan Crassbow

Includes Hunting license; and Deer, Management Area, Archery Season, Muzzleloading Gun Season, Crossbow Season, Turkey and Florida Waterfowl permits.

4 years or younger	\$201.50
5–12 years	\$351.50
13 years and older	\$501.50



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Hunter safety requirement

Anyone born on or after June 1, 1975 must complete a hunter safety course before purchasing a hunting license enabling them to hunt without supervision. Children under age 16 may hunt with adult supervision without having to take a hunter safety course. Persons 16 and older who have not completed a hunter safety course can request a deferral from the hunter safety certification requirement when purchasing their hunting license. This enables them to purchase a license and hunt within the supervision of a mentoring adult who is at least 21 years old. Persons needing proof of course

Do you need a duplicate hunter safety card?

You can now obtain a duplicate hunter safety card at MyFWC.com/ HunterSafety. If you do not have Internet access or are unable to print the duplicate card, contact an FWC regional hunter safety office (see page 5). completion can print a duplicate certification card at MyFWC.com/HunterSafety.

Hunter safety course

Everyone born on or after June 1, 1975 must pass an approved hunter safety course before purchasing a Florida hunting license that enables you to hunt without adult supervision. To learn more about these and other programs, visit us at MyFWC.com/HunterSafety.

Hunter safety deferral

Anyone 16 years or older and born after May 31, 1975 can purchase a hunting license and hunt under the supervision of a qualified hunter without having to complete the state's hunter safety certification. When purchasing your hunting license, check the box requesting a deferral from the hunter safety certification requirement. Hunters requesting this deferral need to be supervised by an adult, 21 years old or older, who has a valid hunting license and has met the hunter safety requirement.

New and experienced hunters are encouraged to take a hunter safety course to learn more about conservation and safe, responsible hunting. In addition, successfully completing a hunter safety course is required before anyone 16 years old and older is allowed to hunt without being under the supervision of an adult 21 years old or older.

Minors Under 16 — Florida law

Anyone under 16 years of age can hunt with an air gun (air or gas-operated) or firearm only when supervised by a parent or an adult who is acting with consent of the minor's parent or guardian.

See Section 790.22, Florida Statues for additional info.

Legal methods of taking game mammals and resident game birds

Definition of take

The term shall include taking, attempting to take, pursuing, hunting, molesting, capturing, or killing any wildlife or freshwater fish, or their nests or eggs by any means whether or not such actions result in obtaining possession of such wildlife or freshwater fish or their nests or eggs.

Resident game birds and game mammals

Rifles, shotguns, pistols, air guns, longbows, compound bows, recurve bows, crossbows and birds of prey (falcons, hawks and great horned owls) may be used. Longbows, compound bows, recurve bows must have minimum draw





weights of 35 pounds. Hand-held releases may be used. Arrows or bolts used to take deer or turkeys must be equipped with broadheads having at least two sharpened edges with minimum widths of 7/8 inch. Only pre-charged pneumatic (PCP) air guns firing single bullets or bolts/arrows of at least .30-caliber and at least .20-caliber may be used to take deer and turkey, respectively. PCP air guns are commerciallymanufactured air guns that are charged from an external high compression source, such as an air compressor, air tank or external hand pump and are specifically designed to propel a bolt, arrow or other projectile commonly used for hunting.

Hunting deer with a muzzleloader

Muzzleloading guns firing single bullets must be at least .30-caliber or larger. Muzzleloading guns firing two or more balls must be 20-gauge or larger.

Prohibited methods and equipment for taking game mammals and resident game birds

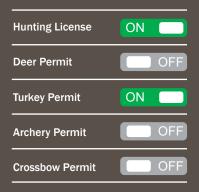
 This document doesn't address or advise persons as to local ordinances prohibiting the discharge of firearms or as to the validity of such ordinances.

- Centerfire semi-automatic rifles having magazine capacities of more than five rounds
- Nonexpanding full metal case (military ball) ammunition for taking deer
- Firearms using rimfire cartridges for taking deer
- Fully automatic firearms
- Air guns that are not pre-charged pneumatic (PCP) air guns when taking deer or turkey
- PCP air guns firing single bullets that are less than .30-caliber and less than .20-caliber when taking deer and turkey, respectively
- Explosive or drug-injecting arrows
- Taking or attempting to take with live decoys, recorded game calls or sounds, set guns, artificial lights, nets, traps, snares, drugs or poisons
- Shooting from vehicles, powerboats or sailboats moving under power. Motors must be shut off or sails furled, and progress must cease from such motor or sail before taking game.
- Herding or driving game with vehicles, boats or aircraft
- Hunting turkeys with dogs
- Taking turkeys while they are on the roostTaking turkeys when the hunter is within
- 100 yards of a game-feeding station when feed is present
- Taking spotted fawn deer or swimming deer
 Hunting game using bows with draw weights less than 35 pounds



Login at GoOutdoorsFlorida.com

to set your licenses and permits to Auto-Renew. With easy settings and safe payment tokens, you can always be ready for your next hunt!





- Using dogs without collars that identify the owners name and address
- Using dogs on private lands without written landowner permission (see Statewide registration on page 16)
- Placing, exposing or distributing soporific, anesthetic, tranquilizer, hypnotic or similar drugs or chemicals; preparation by baits; or by other means where game birds or game animals may be affected
- Shooting or attempting to shoot or harass any bird, fish or other animal from aircraft, except as specifically authorized by a Federal or State issued license or permit

Areas closed to hunting

Taking or attempting to take wildlife is illegal on, upon or from rights-of-way of federal, state or county-maintained roads, whether paved or otherwise, except reptiles and amphibians may be taken without the use of firearms and raptors may be taken per Rule 68A-9.005, F.A.C. Casting dogs from rights-of-way is considered attempting to take wildlife and constitutes violation of this regulation.

- Discharging firearms over paved public roads, rights-of-way, highways, streets or occupied premises is prohibited.
- Shooting or propelling potentially lethal projectiles over or across private land without authorization in order to take game is considered criminal trespassing and is a felony.
- Taking deer is prohibited by any method in the Florida Keys.
- Taking deer is illegal in that portion of Collier County lying south of S.R. 84 (I-75), west of S.R. 29, north of U.S. 41 and east of the western boundary of Fakahatchee Strand State Preserve.
- Hunting is prohibited on most sanctuaries and parks.

Trespassing

The possession of a hunting license does not authorize a person to trespass onto private land. Obtain landowner's permission before entering private land. Trespassing while possessing a firearm or other dangerous weapon is a felony punishable by imprisonment up to five years and/or a fine of up to \$5,000.

Florida's CWD Watch

866-CWD-WATCH (293-9282)

Chronic wasting disease (CWD) is a contagious disease of the brain and central nervous system that causes deer to die. CWD has not been detected in Florida. You can help guard against CWD by reporting sick or abnormally thin deer or deer dead of unknown causes to the CWD hotline at 866-CWD-WATCH (866-293-9282).

Learn more at MyFWC.com/CWD.

Wildlife Alert Reward Program

Report fishing, boating or hunting law violations by calling toll-free 888-404-FWCC (3922); on cell phones, dial *FWC or #FWC depending on service carrier or text TIP@MyFWC.com (standard usage fees may apply); or report violations at MyFWC.com/WildlifeAlert.

Visit our Facebook page at Facebook.com/WildlifeAlert.

We all can help protect Florida's fish and wildlife from poaching and wildlife and environmental violations and to help protect each other from boaters who are operating boats under the influence of drugs or alcohol. It's called "Wildlife Alert" — a reward-based program



for apprehending those who violate Florida's fish and wildlife laws. Through the program, alert residents become the eyes and ears of fish and wildlife law enforcement officers and are rewarded for their efforts.

Callers can report any suspicious activity, supplying information such as the physical descriptions of violators, vehicles, license tag numbers, locations, etc. They should report it as soon as possible, but they should not put themselves in any dangerous situation. To make an anonymous phone call to report fish and wildlife violations, call toll-free 888-404-3922 or visit MyFWC.com/WildlifeAlert.

Use of firearms by felons

It is illegal in Florida for convicted felons to possess firearms, including muzzleloading guns, unless the convicted felon has had his/ her civil rights restored by the state's Clemency Board or the firearm qualifies as an antique firearm under Florida Statute 790.001(1). Properly licensed convicted felons may hunt with bows, crossbows or antique firearms per Florida Statute 790 during hunting seasons when such devices are legal for taking game. The 2015 Florida Statutes Title XLVI, Section, 790.001(1) states "Antique firearm means any firearm manufactured in or before 1918 (including any matchlock, flintlock, percussion cap or similar early type of ignition system) or replica thereof, whether actually manufactured before or after the year 1918, and also any firearm using fixed ammunition manufactured in or before 1918, for which ammunition is no longer manufactured in the United States and is not readily available in the ordinary channels of commercial trade." Convicted felons should be aware that being in a location where a firearm is present may constitute constructive possession of that firearm. Constructive possession occurs when the person knows about the firearm and is in a position to exert control over that firearm or where they have concealed the firearm. Possession may also be joint, that is, two or more persons may jointly possess a firearm, exercising control over it, each person is considered to be in possession.

Antierless Deer Permit Program

Persons who own, lease or otherwise have written permission to take deer on properties of at least 640 contiguous acres, or not less than 150 contiguous acres if adjoining land with a current permit, may apply for antlerless deer permits and tags to authorize the harvest of a specific number of antlerless deer on the enrolled property during the established deer hunting season. A group with adjoining lands may apply together, provided the total combined acreage meets the acreage requirements. For more information, visit MyFWC.com/Deer.

Wild hogs

On private property with landowner permission, wild hogs may be hunted year-round day or night without restriction (i.e., by all lawful methods with no bag/possession limits, no size limits and no licenses/permits required). They also may be trapped but cannot be transported alive without a Feral Swine Dealer Permit from the Florida Department of Agriculture and Consumer Services by calling 850-410-0900. Wild hogs can only be taken on WMAs during specified seasons, where permit, method of take and bag limit requirements may apply. For more information on hunting wild hogs on WMAs, consult the specific WMA brochure for the area you want to hunt.

Shooting hours for resident game birds, crows and game mammals

One-half hour before sunrise to one-half hour after sunset except when hunting turkeys during spring turkey season. Shooting hours during spring turkey season on private lands and most WMAs are one-half hour before sunrise to sunset. On some WMAs, spring turkey shooting hours are one-half hour before sunrise to 1 p.m.

Sign up for free hunting and shooting range email updates

3 easy steps!

- 1. Visit MyFWC.com/News and click "Sign Up for News Releases"
- 2. Enter your email address and hit "Submit" button
- 3. Under "Subscription Topics" select "Hunting" and check box for "Hunting Hot Sheet" and "Outta the Woods'

Florida Buck Registry

The Florida Buck Registry recognizes hunters for taking quality deer in Florida. A minimum Boone and Crockett score of 100 for typical antlers and 125 for nontypical antlers is required for entry into the registry. To get your antlers officially scored, contact an FWC regional office (see page 5).



Florida Wild Turkey Registry

The Florida Wild Turkey Registry recognizes quality wild turkeys taken in Florida.

- · To qualify for an "Outstanding Gobbler Certificate," the beard must be 11 inches or longer and both spurs must be 11/4 inches or longer.
- A "First Gobbler Certificate" also is awarded to hunters under age 16 for harvesting their first gobbler, regardless of beard and spur measurements.

Applications are available at MyFWC.com/Turkey.



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Hunter orange requirement

It is unlawful to hunt deer or to accompany another person hunting deer on public lands unless each person is wearing a minimum of 500 square inches of daylight fluorescent orange material as an outer garment. Such clothing must be worn above the waistline and can include a head covering. This rule does not apply during an archery-only season, or when hunting on private lands at any time.

Hunting dogs

Dogs may be used as an aid in taking game mammals and birds, wild hogs and furbearers, unless otherwise prohibited. Persons owning or using dogs shall not knowingly or negligently permit such dogs to trail, pursue or otherwise molest wildlife during closed seasons. When using archery equipment and muzzleloaders during their respective archery, crossbow and muzzleloading gun seasons, the taking of deer by the use or aid of dogs is prohibited. Dogs on leashes may be used to trail wounded game mammals during all seasons. Taking turkeys by aid of dogs at any time is prohibited. Hunters, who use dogs for hunting, including bird dogs or retrievers, are required to have their dogs wear collars that identify their owner's name and address. This regulation also requires dog hunters to possess landowners' written permission before using their dogs to pursue game, wild hogs or furbearers on private property. On private land rabbit, raccoon, opossum, skunk, nutria, beaver, coyote, wild hog, fox and bobcat may be chased throughout the year with free running dogs. For more information, contact an FWC regional office (see page 5).

Deer dogs: Deer dogs can be trained during closed seasons when dogs are constantly attached to leashes or ropes in the hands of their trainers for training purposes. Deer dogs are permitted to run free for training purposes only during deer-dog training seasons (see page 19). Taking deer or any other wildlife with a gun is prohibited while training deer dogs.

Statewide deer-dog registration: Deer hunters using dogs on private properties in Florida must obtain a no-cost registration from the FWC. Registration requirements apply to the deer-dog training season and during any open deer hunting season when it is legal to take deer with dogs. Applications must be submitted no later than 30 days prior to the final day of general gun season in the hunting zone where the property is situated. To comply with the registration rule, deer-dog hunters on private lands must have registration numbers on their dogs' collars; possess copies of the registration; and keep their dogs on registered properties. For more information and to apply go to MyFWC.com/Deer.

Bird dogs: On private lands during closed seasons, bird dogs may be trained with pistols firing blanks or balls or by taking pen-raised

quail (with shotguns only), when birds have been banded with owners' names prior to releasing them.

Fox dogs: Foxes cannot be killed, but may be chased year-round with dogs (see Furbearer regulations on page 28).

Feeding game

Taking game on lands or waters upon which corn, wheat, grain, food or other substances have been deposited by means other than normal agricultural harvesting or planting is prohibited, except as noted below.

- Non-migratory game may be hunted in proximity of year-round game-feeding stations on private lands, provided the feeding station has been maintained with feed for at least six months prior to taking game.
- Wild turkey may not be taken if the hunter is less than 100 yards from a game feeding station when feed is present.
- Placing, offering or allowing the placement of feed or garbage that is likely to create or creates a public nuisance by attracting bears is prohibited after receiving written notification from the FWC. The intentional feeding of bears is prohibited.

Buying or selling game

Selling or purchasing game is prohibited except for game produced on licensed game farms that is lawfully identified and handled. When lawfully taken, the feathers or skins of resident game birds or the skins of deer, squirrels, or rabbits may be sold.

Deer harvest reporting requirement

After harvesting a deer and prior to moving it from the point of harvest, all hunters must record the harvest in their harvest log and report it to the FWC's harvest reporting system within 24 hours of harvest and prior to final processing of the deer, any parts of it being transferred to a meat processor or taxidermist, or the deer leaving the state. Before the start of the deer season, hunters can access harvest logs online at MyFWC.com/Deer. Hunters should keep their harvest log nearby when hunting deer. More information about this new requirement can be found at MyFWC.com/Hunting.

Dividing deer and turkey in the field

Deer and turkeys may be dismembered in field or camp, however tags must be attached to each portion identifying names, addresses, FWC issued customer number of the persons who harvested them with date and location at which they were taken. These tags must be readily traceable to the portion of the animal bearing sex identification, head and, if applicable, beard.

Sex evidence

Positive evidence of sex identification, including the head with any antler or antlers, shall remain on deer taken or killed within the state and on all turkeys taken during any gobbler season when taking of turkey hens is prohibited, so long as such deer or turkey is kept in the field or camp or is in route to the domicile of its possessor or until such deer or turkey has been cooked or stored at the domicile of its possessor.

Transport of game

- A person may transport the possession limit of lawfully taken game.
- A person may at any time possess mounted specimens of lawfully taken game, including the heads, antlers, hides/skins, feathers or feet.
- Lawfully taken game may be shipped by the person who took such game provided that each package shall be marked on the outside to show the names and addresses of both the shipper and the addressee, and the numbers and kinds of game contained therein.

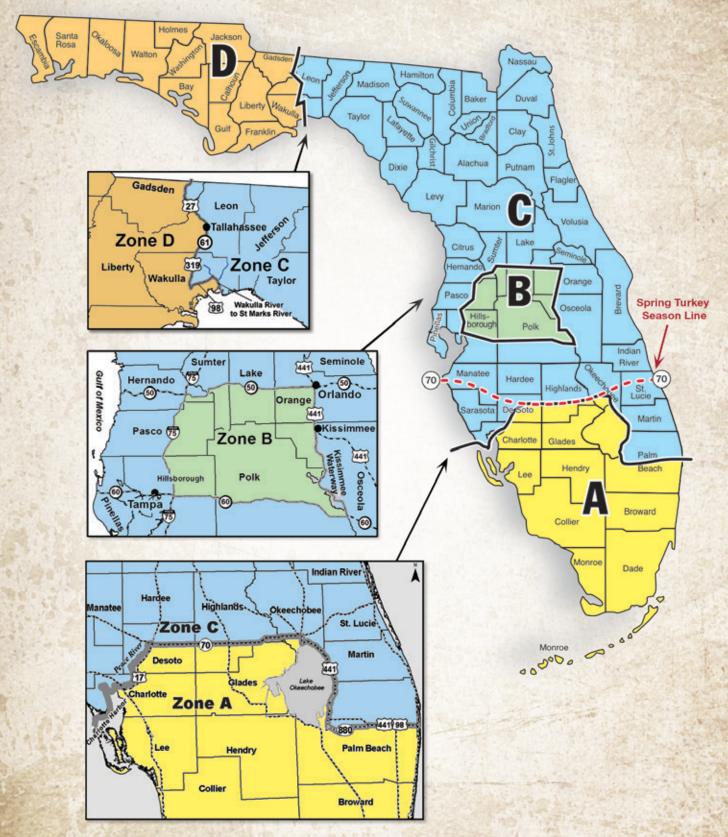
What is legal to bring back when hunting out of state for deer, elk or moose

It is illegal for persons to bring into the state or possess carcasses of any species of the family Cervidae (deer, elk and moose) from 26 states and three Canadian provinces where CWD has been detected. These areas are: Arkansas, Colorado, Illinois, Iowa, Kansas, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, West Virginia, Wisconsin, Utah, Virginia and Wyoming and Alberta, Saskatchewan and Quebec, Canada. Visit www.cwd-info.org or MyFWC.com/CWD for a list of CWD positive states and provinces and further information. When hunting out of state, check that state's current status for CWD. Hunters can bring back de-boned meat from any CWD-affected region, as well as finished taxidermy mounts, hides, skulls, antlers and teeth as long as all soft tissue has been removed.

Motor vehicles

All-terrain vehicles (ATVs) and off-highway motorcycles (OHMs) purchased after July 1, 2002 must be titled with the Department of Highway Safety and Motor Vehicles. ATVs and OHMs must be titled when used for recreational purposes on lands within the state that are available for public use and that are owned, operated or managed by federal, state, county or municipal governmental entities. Applications for title may be made at county tax collectors' offices.

Hunting Zones



2019–2020 Florida Resident Game and Furbearer Hunting Season Dates and Bag Limits

Seasons, dates and bag limits do not apply to wildlife management areas

Deer

Antlered deer – deer with at least one antler 5 inches or more in length (see DMU pages 22–25 for additional antler regulations)

Zone A

- Archery season: Aug. 3 Sept. 1
- Crossbow season: Aug. 3 Sept. 6
- Muzzleloading gun season: Sept. 7–20
- Youth deer hunt weekend: Sept. 14–15 **①**
- General gun season: Sept. 21 Oct. 20, Nov. 23 – Jan. 5

Zone B

- Archery season: Oct. 19 Nov. 17
- Crossbow season: Oct. 19 Nov. 22
- Muzzleloading gun season: Nov. 23 Dec. 6
- Youth deer hunt weekend: Nov. 30 Dec. 1 ●
- General gun season: Dec. 7 Feb. 23

Zone C

- Archery season: Sept. 14 Oct. 13
- Crossbow season: Sept. 14 Oct. 18
- Muzzleloading gun season: Oct. 19 Nov. 1
- Youth deer hunt weekend: Oct. 26–27 **①**
- General gun season: Nov. 2 Jan. 19

Zone D

- Archery season: Oct. 26 Nov. 27
- Crossbow season: Oct. 26 Nov. 27, Dec. 2–6
- General gun season: Nov. 28 Dec. 1, Dec. 14
 Feb. 23
- Youth deer hunt weekend: Dec. 7–8 **①**
- Muzzleloading gun season: Dec. 7–13, Feb. 24 – March 1

Antlerless deer – deer (except spotted fawn) without antlers or antlers less than 5 inches

Zone A

- Archery season: DMU A2: Aug. 3–11, DMU A3: Aug. 3–18
- Crossbow season: DMU A2: Aug. 3-11, DMU A3: Aug. 3-18
- Youth deer hunt weekend: DMU A2 and DMU A3: Sept. 14-15 ●
- General gun season: DMU A2: Nov. 23–24, DMU A3: Nov. 23–26

Zone B

- Archery season: Oct. 19 Nov. 17
- Crossbow season: Oct. 19 Nov. 17
- Youth deer hunt weekend: Nov. 30 Dec. 1 1
- General gun season: Dec. 27–29

Zone C

- Archery season: Sept. 14 Oct. 13
- Crossbow season: Sept. 14 Oct. 13
- Muzzleloading gun season: DMU C5: Oct. 19–20
- Youth deer hunt weekend: Oct. 26-27 **①**
- General gun season:
 - » DMU C1: Nov. 22–25
 - » DMU C2: Nov. 22-24
 - » DMU C3: Nov. 22-24
 - » DMU C4: Nov. 22-25
 - » DMU C5: Nov. 2-3, Nov. 16-17
 - » DMU C6: Nov. 22–25

Zone D

- Archery season: Oct. 26 Nov. 27
- Crossbow season: Oct. 26 Nov. 27
- Muzzleloading gun season: DMU D2: Dec. 7–8
- Youth deer hunt weekend: Dec. 7-8 1
- General gun season:
 - » DMU D1: Nov. 30 Dec. 1, Dec. 28–29
 » DMU D2: Nov. 30 Dec. 1, Dec. 21–22, Dec. 28–29
 - Dec. 28–29

Daily bag limit: 2 deer

- During those portions of archery and crossbow seasons when antlerless deer can be taken, either deer may be antlered or antlerless.
- During antlerless deer seasons (see DMU pages 22–25), only 1 deer may be antlerless.
- During all other seasons, only antlered deer may be taken. Antlerless deer can only be taken by antlerless deer permit/tag.

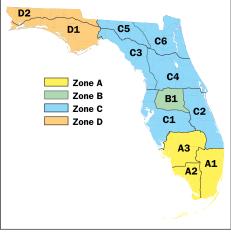
Possession limit: 4 deer

Annual bag limit: 5 deer of which only 2 can be antlerless.

Deer taken under the Deer Depredation Permit Program, Private Lands Deer Management Permit Program and Antlerless Deer Permit Program (antlerless deer only), and on licensed game farms and hunting preserves are excluded from bag (daily and annual) and possession limits.

Deer Management Units (DMUs)

Hunting Zones and



Deer-dog training season

Zone A: Aug. 17 – Sept. 5 Zone B: Nov. 2–21 Zone C: Sept. 28 – Oct. 17 Zone D: Oct. 26 – Nov. 14

A new harvest reporting system is now required for all deer hunters. See "Deer harvest reporting requirement" on page 18.

Antler Point Regulations



Turkey (gobblers and bearded turkeys only)

Fall seasons

Zone A

- Archery season: Aug. 3 Sept. 1
- Crossbow season: Aug. 3 Sept. 6
- Muzzleloading gun season: Sept. 7–20
- Fall turkey season: Oct. 7–20, Nov. 23 Jan. 5 2

Zone B

- Archery season: Oct. 19 Nov. 17
- Crossbow season: Oct. 19 Nov. 22
- Muzzleloading gun season: Nov. 23 Dec. 6
- Fall turkey season: Dec. 7 Feb. 2 2

Zone C

- Archery season: Sept. 14 Oct. 13
- Crossbow season: Sept. 14 Oct. 18
- Muzzleloading gun season: Oct. 19 Nov. 1
- Fall turkey season: Nov. 2 Dec. 29 **2**

Zone D (except in **Holmes County**, where there is no fall harvest of turkeys allowed)

- Archery season: Oct. 26 Nov. 27
- Crossbow season: Oct. 26 Nov. 27, Dec. 2–6
- Muzzleloading gun season: Dec. 7–13
- Fall turkey season: Nov. 28 Dec. 1, Dec. 14 – Jan. 19 **2**

Daily bag limit: 2 turkeys

Season and possession limit: 2 for all fall seasons combined



Spring seasons 2

North of State Road 70

- Youth turkey hunt weekend: March 14–15 3
- Spring turkey season: March 21 April 26

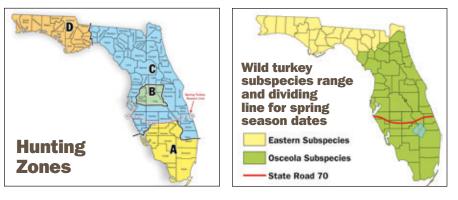
South of State Road 70

- Youth turkey hunt weekend: Feb. 29 March 1 3
- Spring turkey season: March 7 April 12

Daily bag limit: 2 turkeys

Season and possession limit: 2 for all spring seasons

In **Holmes County**, the daily bag and season limit is 1.



Archery season — Only bows may be used. General gun season

Crossbow season — Only crossbows and bows may be used.

Muzzleloading gun season — Only muzzleloaders fired by wheel lock, flintlock, percussion cap or centerfire primer (including 209 primers) and crossbows and bows may be used. Firearms that can be loaded from the breech are not legal during muzzleloading gun season. **General gun season** — Centerfire rifles, shotguns, centerfire pistols, muzzleloaders, precharged pneumatic air guns, crossbows and bows may be used.

• Youth deer hunt weekend – Youth 15-yearsold and younger can harvest any deer except spotted fawn, but youth must be supervised by an adult, 18 years or older. Youth may use any legal method of take (including dogs) for deer, with a limit of 1 deer for the weekend that counts towards the youth's annual statewide bag limit. *This weekend does not apply to wildlife management areas.*

Gray Squirrel

Statewide Oct. 12 – March 1

Daily bag limit: 12 Possession limit: 24

Quail Statewide Nov. 9 – March 1

Daily bag limit: 12 Possession limit: 24

Rifles, shotguns, pistols, muzzleloaders, air guns, crossbows and bows may be used. Gray squirrel and quail also may be taken during archery, crossbow and muzzleloading gun seasons using the respective methods of take allowed during those seasons.

Bobcat

Statewide Dec. 1 – March 31

Otter

Statewide Dec. 1 – March 1

Bobcats and otters may be taken by rifle, shotgun, pistol, muzzleloader, air gun, crossbow or bow.

Bag limits: No limit on bobcats and otters

Rabbits, wild hogs, raccoons, opossums, skunks, nutrias, beavers and coyotes

may be taken year round by rifle, shotgun, pistol, muzzleloader, air gun, crossbow or bow.

Daily bag limits: 12 rabbits. No limits on other species.

Possession limits: 24 rabbits. No limits on other species.

- **2** Fall and spring turkey seasons Shotguns, rifles, pre-charged pneumatic air guns, pistols, muzzleloaders, crossbows or bows may be used.
- Youth turkey hunt weekend Youth 15-years-old and younger can harvest turkey, but youth must be supervised by an adult, 18 years or older. However, adult supervisors with a hunting license and turkey permit can "call in" the turkey and otherwise participate in the hunt, but they cannot shoot or shoot at turkey.

DEER MANAGEMENT UNITS (DMUs)



DMU-D2

Antler regulations and antlerless deer season

All antlered deer must have an antler with at least 3 points (1 inch or more in length) OR have a main beam length of 10 inches or more to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-years-old and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length.

Antlerless deer are deer that do not have antlers or have antlers less than 5 inches in length. It is illegal to take spotted fawns.

Antlerless deer season on private lands only: During general gun season Nov. 30–Dec. 1, Dec. 21–22 and Dec. 28–29. During muzzleloading gun season Dec. 7–8.

DMU-D1

Antler regulations and antlerless deer season

All antlered deer must have an antler with at least 2 points (1 inch or more in length) to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-years-old and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length.

Antlerless deer are deer that do not have antlers or have antlers less than 5 inches in length. It is illegal to take spotted fawns.

Antlerless deer season on private lands only is Nov. 30–Dec. 1 and Dec. 28–29.

DMU-B1

Antler regulations and antlerless deer season

All antlered deer must have an antler with at least 3 points (1 inch or more in length) OR have a main beam length of 10 inches or more to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-years-old and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length.

Antlerless deer are deer that do not have antlers or have antlers less than 5 inches in length. It is illegal to take spotted fawns. Antlerless deer season on private lands only is Dec. 27–29.



GULF

FRANKLIN

98

Wakulla to St Marks River

60



DMU-C3

Antler regulations and antlerless deer season

All antlered deer must have an antler with at least 2 points (1 inch or more in length) to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-years-old and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length. Antlerless deer are deer that do not have antlers or have antlers less

than 5 inches in length. It is illegal to take spotted fawns. Antlerless deer season on private lands only is Nov. 22–24.

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DMU-C4, C5, C6 Antler regulations and antlerless deer season

All antlered deer must have an antler with at least 3 points (1 inch or more in length) OR have a main beam length of 10 inches or more to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-yearsold and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length.

Antlerless deer are deer that do not have antlers or have antlers less than 5 inches in length. It is illegal to take spotted fawns.

DMU-C4

Antlerless deer season on private lands only is Nov. 22-25.

DMU-C5

Antlerless deer season on private lands only: During muzzleloading gun season Oct. 19–20, and during general gun season Nov. 2–3 and 16–17.

DMU-C6

Antlerless deer season on private lands only is Nov. 22-25.

DEER MANAGEMENT UNITS (DMUs)



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DMU-C1, C2

Antler regulations and antlerless deer season

All antlered deer must have an antler with at least 3 points (1 inch or more in length) OR have a main beam length of 10 inches or more to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-years-old and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length.

Antlerless deer are deer that do not have antlers or have antlers less than 5 inches in length. It is illegal to take spotted fawns.

DMU-C1

Antlerless deer season on private lands only is Nov. 22–25.

DMU-C2

Antlerless deer season on private lands only is Nov. 22-24.

DMU-A3

Antler regulations and antlerless deer season

All antlered deer must have an antler with at least 3 points (1 inch or more in length) OR have a main beam length of 10 inches or more to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-years-old and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length.

Antlerless deer are deer that do not have antlers or have antlers less than 5 inches in length. It is illegal to take spotted fawns.

Antlerless deer season on private lands only is Nov. 23-26.

DMU-A1, A2 Antler regulations and antierless deer season

All antlered deer must have an antler with at least 2 points (1 inch or more in length) to be legal to take. Hunters 16 years of age and older may not take during any season or by any method an antlered deer not meeting this criteria. As part of their annual statewide antlered deer bag limit, youth 15-years-old and younger may harvest 1 deer annually not meeting antler criteria but having at least 1 antler 5 inches or more in length.

Antlerless deer are deer that do not have antlers or have antlers less than 5 inches in length. It is illegal to take spotted fawns.

DMU-A1

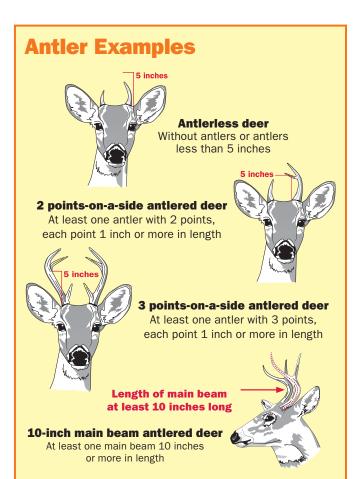
Antlerless deer may not be taken. *Note:* Taking deer is prohibited in the Florida Keys.

DMU-A2

Antlerless deer season on private lands only is Nov. 23–24. No antlerless deer may be taken in Collier County south of I-75 during these dates.

Note: Taking ANY deer is illegal in that portion of Collier County lying south of S.R. 84 (I-75), west of S.R. 29, north of U.S. 41 and east of the western boundary of Fakahatchee Strand State Preserve.







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2019–2020 Florida Migratory Bird Hunting Season Dates and Bag Limits

Seasons and dates may not apply to wildlife management areas.					
Species/Season	Season Dates	Daily Bag Limit	Possession Limit		
Crow *	Aug. 10 – Oct. 27 (Sat. & Sun. only) Nov. 11 – Feb. 18	No limit	No limit		
Rail (King and clapper)	Sept. 1 – Nov. 9	15	45		
Rail (Sora and Virginia)	Sept. 1 – Nov. 9	25	75		
Common moorhen	Sept. 1 – Nov. 9	15	45		
Canada goose 🕅	Sept. 7 – 29 Nov. 23 – Jan. 30	5	15		
	Sept. 21 – 25 (teal and wood duck only)	6 (of which only 2 can be wood ducks)	3 times the daily bag		
	Sept. 26 – 29 (teal only)	6	18		
Duck	Nov. 23 - Dec. 1	6 ducks, including no more than 2 mal- lards (of which only 1 can be female), 4 scoters, 4 eiders, 4 long-tailed ducks, 3 wood ducks, 2 redheads, 2 black ducks,	3 times the daily bag		
	Dec. 7 – Jan. 26	2 scaup, 2 canvasbacks, 2 black ducks, 2 scaup, 2 canvasbacks, 1 pintail, 1 mottled duck (Florida duck) and 1 fulvous whistling-duck			
	Sept. 28 – Oct. 20				
Dove (Mourning and white-winged)	Nov. 9 - Dec. 1	15	45		
	Dec. 19 – Jan. 31				
Snipe	Nov. 1 - Feb. 15	8	24		
Coot	Nov. 23 - Dec. 1	15	45		
COOL	Dec. 7 – Jan. 26	15			
Liste store (Oncombine and D. 1)	Nov. 23 - Dec. 1	15	No limit		
Light geese (Snow, blue and Ross') 🖤	Dec. 7 – Jan. 26	15	INO IITTIL		
	Nov. 23 – Dec. 1	5 (of which only 2 may be hooded)	3 times the daily had		
Merganser 🕅	Dec. 7 – Jan. 26	5 (or which only 2 may be hooded)	3 times the daily bag		
Woodcock	Dec. 18 – Jan. 31	3	9		
Youth Waterfowl Hunting Days	Nov. 16 and Feb. 8	**	**		

Must have migratory bird permit (no cost) as well as hunting license to hunt all above listed species, except crow.

Shooting hours: One-half hour before sunrise until sunset, unless otherwise noted

Taking or attempting to take harlequin ducks, brant and purple gallinule is prohibited.

Must have \$5 Florida waterfowl permit and \$27.50 Federal duck stamp in addition to hunting license and migratory bird permit when hunting waterfowl.

* Shooting hours is one-half hour before sunrise until one-half hour after sunset. No hunting license or permit is required.

** Only youth 15-years-old and younger are allowed to hunt ducks, light geese, Canada geese, mergansers, coots and common moorhens, while supervised by a non-

hunting adult 18-years-old or older. Bag and possession limits for each species are listed in the above table.

Limited hunting days:

In Leon County and on Lake Miccosukee, waterfowl hunting is permitted only on Wednesdays, Saturdays and Sundays during the Regular Duck Season (Nov. 23 – Dec. 1 and Dec. 7 – Jan. 26) and on Nov. 28 and 29, Dec. 24, 26 and 31, and Jan. 2 and 20. However, Lake Talquin and the Ochlockonee River are open to hunting every day during the Regular Duck Season. During open seasons, hunting ducks, geese and coots is permitted only on Wednesdays, Saturdays and Sundays in the state waters of the Gulf of Mexico in Hernando County north of Raccoon Point and east of Saddle Key as designated by posted signs.

Special regulations for Leon County and Lake Miccosukee:

Boat motor restrictions - During Regular Duck Season (Nov. 23 – Dec. 1 and Dec. 7 – Jan. 26), the use of internal combustion engines is prohibited on Lake lamonia (except as authorized by permit from the Executive Director) and Carr Lake. The use of internal combustion engines of more than 10 horsepower on Lake Miccosukee is also prohibited during these dates. However, internal combustion motors and airboats may be used on these lakes during the September Duck Season and during Youth Waterfowl Days.

Duck blinds - It is illegal to hunt from or within 30 yards of a permanent duck blind on Lake Miccosukee, and lakes Iamonia, Jackson and Carr. The use of temporary duck blinds, including those made with vegetation, that are removed at the end of each hunt is allowed.

2019–2020 Migratory bird hunting regulations

Daily bag limit: The maximum number of migratory game birds of a single species or combination (aggregate) of species permitted to be taken by one person in any one day during the open season in any one specified geographic area for which a daily bag limit is prescribed.

Possession limit: The maximum number of migratory game birds of a single species or a combination of species permitted to be possessed by any one person when lawfully taken in the United States in any one specified geographic area for which a possession limit is prescribed.

Dressing: No person shall completely field dress any migratory game birds (except doves) and transport them from the field. The head or one fully feathered wing must remain attached to all such birds while being transported from the field to one's home or processing facility.

Personal abode: One's principal or ordinary home or dwelling place, as distinguished from one's temporary or transient place of abode or dwelling such as a hunting club, or any club house, cabin, tent or trailer house used as a hunting club, or any hotel, motel or rooming house used during a hunting, pleasure or business trip.

Tagging requirement: No person shall put or leave any migratory game birds at any place (other than at a personal abode), or in the custody of another person for picking, cleaning, processing, shipping, transportation, or storage (including temporary storage), or for the purpose of having taxidermy services performed, unless such birds have a tag attached, signed by the hunter, stating his or her address, the total number and species of birds, and the date such birds were harvested. Migratory game birds being transported in any vehicle as the personal baggage of the possessor shall not be considered as being in storage or temporary storage.

Custody of birds of another: No person shall receive or have in custody any migratory game birds belonging to another person unless such birds are properly tagged

Transportation of birds of another: No person shall transport migratory game birds belonging to another person unless such birds are properly tagged.

Wanton waste of migratory game birds: No person shall kill or cripple any migratory game bird without making a reasonable effort to retrieve the bird, and retain it in his or her actual custody, at the place where taken or between that place and either (a) an automobile or principal means of land transportation; or

Report Duck Bands!

Please report any banded duck or other migratory bird that you shoot to ReportBand.gov.

Band recovery information ensures good management and continued hunting opportunities.



(b) a personal abode or temporary or transient place of lodging; or (c) a migratory bird preservation facility; or (d) a post office; or (e) a common carrier facility.



Unlawful means and methods

- No persons shall take migratory game birds: ■ With a trap, snare, net, rifle, pistol, swivel gun, shotgun larger than 10 gauge, punt gun, battery gun, machine gun, fish hook, poison, drug, explosive, or stupefying substance
- With a shotgun of any description capable of holding more than three shells, unless it is plugged with a one-piece filler, incapable of removal without disassembling the gun, so its total capacity does not exceed three shells
- From or by means, aid, or use of a sinkbox or any other type of low floating device, having a depression affording the hunter a means of concealment beneath the surface of the water



- From or by means, aid, or use of any motor vehicle, motor-driven land conveyance, or aircraft of any kind, except that paraplegics and persons missing one or both legs may take from any stationary motor vehicle or stationary motor-driven land conveyance
- From or by means of any motorboat or other craft having a motor attached, or any sailboat, unless the motor has been completely shut off and/or the sails furled, and its progress there from has ceased
- By the use or aid of live birds as decoys; although not limited to, it shall be a violation of this paragraph for any person to take migratory waterfowl on an area where tame or captive live ducks or geese are present unless such birds are and have been for a period of 10 consecutive days prior to such taking, confined within an enclosure which substantially reduces the audibility of their calls and totally conceals such birds from the sight of wild migratory waterfowl
- By the use or aid of recorded or electrically amplified bird calls or sounds, or recorded or electrically amplified imitations of bird calls or sounds. This restriction does not apply during dates States haves selected under the Conservation Order for light geese (i.e. greater and lesser snow and Ross's geese) or those selected for the control of resident Canada geese. Taking or attempting to take any game species in Florida with recorded game calls or sounds is prohibited (68A-12.002).

- By means or aid of any motor driven land, water, or air conveyance, or any sailboat used for the purpose of or resulting in the concentrating, driving, rallying, or stirring up of any migratory bird
- By the aid of baiting, or on or over any baited area, where a person knows or reasonably should know that the area is or has been baited

Nontoxic shot

No person may take ducks, geese or coots while possessing shot (either shellshots or as loose shot for muzzleloading) other than approved non-toxic shot. For a list of approved non-toxic shot, see www.fws.gov/birds/bird-enthusiasts/ hunting/nontoxic.php.

If you have any questions about migratory bird regulations, call the Florida Fish and Wildlife Conservation Commission at 850-488-5878.

For information on federal hunting regulations or violations, contact U.S. Fish and Wildlife Service special agents: Groveland 352-429-1037; Ft. Myers 239-561-8144; Miami 305-526-2610: Vero Beach 772-562-3909 or Tallahassee 850-402-0573.



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George Meeks 912-536-3844 Seasons, dates and bag limits do not apply to wildlife management areas.

Furbearer regulations

- Bobcat and otter may be trapped statewide Dec. 1 – March 1. No bag limits.
- Raccoon, opossum, coyote, beaver, skunk and nutria may be trapped statewide year round. No bag limits.
- Minks, Everglades minks, weasels and round-tailed muskrats cannot be taken or possessed.

License requirements

A furbearer trapping license (\$26.50) is required:

- When taking or attempting to take furbearing animals using traps or snares.
- To sell the pelts or meat of furbearing animals to licensed fur dealers, whether taken by trap, snare or gun.

Methods of take

Furbearers may be taken with guns (including air guns), live traps, snares (including power snares) and recorded game calls. Live traps and snares must be checked every 24 hours. Hunting raccoons or opossums at night is allowed,

but only .22-caliber rimfire firearms (other than .22-magnums) or single-shot .410-gauge shotguns (using shot not larger than size 6) may be used.

Prohibited

The use of steel leg-hold traps, dog-proof raccoon traps and body-grip (conibear) traps is prohibited, except when permitted by FWC. It is illegal to transport wild-trapped live raccoons within, into or from the state, except by FWC permit or authorization. Hunting raccoons or opossums by displaying or using lights from moving vehicles, vessels or animals is prohibited.

Feeding

The intentional placement of feed or garbage in a manner that is likely to create or creates a public nuisance by attracting foxes, coyotes or raccoons is prohibited.

Closed season on fox

Trapping or shooting foxes is prohibited, but foxes may be chased with dogs year round.

Commercial furbearer requirements

One must possess a fur dealer's license (\$100.00) to buy or sell meat or fur from furbearing mammals for commercial purposes, or to solicit business by mail or advertising.

CITES tag requirements

Bobcat and otter pelts taken for commercial purposes must be tagged with a CITES tag. Licensed fur dealers and their agents must tag otter and bobcat pelts immediately upon receipt. CITES tags are also required when transporting pelts of bobcat or otter across state lines. The possession of pelts of bobcat and otter is prohibited during the period of April 1 to Nov. 30 unless pelts have been tagged. Tags are distributed to trappers and dealers upon request. To obtain CITES tags, call FWC at 850-488-5878. Fur dealers are held accountable for disposition of tags and are required to return unused tags by April 15.

Falconry

Wildlife management area regulations can differ.

Species	2019–2020 Season Dates	Bag/ Possession Limit		
Quail	Oct. 1 – March 31	2/4		
Gray Squirrel	Oct. 1 – March 31	12/24		
Rabbit	Year round	12/24		
Mourning Dove,	Sept. 28 - Oct. 20			
White-winged	Nov. 9 – Dec. 1 3/9*			
Dove	Dec. 19 - Feb. 17			
Rail (Sora, King, Clapper, Virginia)	Sept. 1 – Dec. 16	3/9*		
Common Moorhen	Sept. 1 – Dec. 14	3/9*		
Snipe	Nov. 1 - Feb. 15	3/9*		
Woodcock	Nov. 24 – March 9	3/9*		
Canada Goose	Sept. 7 – 29	3/9*		
Callaua Goose	Nov. 23 – Jan. 30	3/9"		
	Sept. 21 - 29			
Ducks, Light	Nov. 3 – 12			
Geese (Snow,	Nov. 16**	3/9*		
Blue and Ross'), Coot	Nov. 23 - Dec. 1	2,0		
	Dec. 7 – Jan. 26 Feb. 3 – 28			
* The daily bag limit for all migratory game bird spe-				

cies is three, singly or in the aggregate

** Youth only (15 and under)

For more information on falconry regulations, contact the FWC's Waterfowl and Small Game Program at 850-488-5878



General prohibitions

No wildlife or their nests, eggs, young, homes or dens shall be taken, transported, stored, served, bought, sold or possessed in any manner at any time, except as specifically permitted by Title 68A, F.A.C. No one shall take, poison, store, buy, sell, possess or wantonly or willfully waste wildlife, unless specifically permitted or authorized to do so.

- The use of gasoline or any other chemical or gaseous substances to drive wildlife from their retreats is prohibited.
- It is prohibited to place food or garbage, allow the placement of food or garbage, or offer food or garbage in such a manner that it attracts black bears, foxes or raccoons and in a manner that is likely to create or creates a public nuisance.
- Intentional feeding of sandhill cranes is prohibited.
- Intentional feeding or the placement of food that attracts pelicans and modifies the natural behavior of the pelican so as to be detrimental to the survival or health of a local population is prohibited.
- It is prohibited to take or assist in taking wildlife by the remote control aiming and discharge of a gun when that person is not physically present with that gun.

Birds

State and federal laws protect birds. Birds (or their parts, nests or eggs) may not be taken, possessed, imported, exported, transported, sold, purchased, bartered, or offered for sale, purchase or barter, except as permitted by State and Federal regulations. See title 68A, F.A.C. at www.flrules.org and 50 C.F.R at ecfr.gov for more information. the wild is prohibited. For all other freshwater turtles, take is limited to one turtle per person per day (midnight to midnight) from the wild.

Non-protected birds and mammals

House (English) sparrows, European starlings, armadillos, Norway and black rats, and house mice may be taken throughout the year. See Rule 68A-4.001 at www.flrules.org for more information.

Frogs

Frogs, except Pine Barrens tree-frogs, gopher frogs and Florida bog frogs, may be taken throughout the year by gigs, clubs, air guns, blowguns, hook and line or manually; or by shooting with a .22 caliber or smaller firearm during daylight hours. Frog species classified as threatened or endangered may not be possessed or taken. See Rule 68A-26.002, F.A.C. at www.flrules.org for more information.

Turtles

Freshwater turtles taken from the wild may not be sold. Take, transport or possession of alligator snapping turtles and Barbour's map turtles is prohibited. The following species have a possession limit of two: loggerhead musk turtles, box turtles, Escambia map turtles and diamondback terrapins. Taking Escambia map turtles, cooters, striped mud turtles (from the Lower Keys only) and snapping turtles from turtles, take is limited to one turtle per person per day (midnight to midnight) from the wild. Freshwater turtles may only be taken by hand, dip net, minnow seine or baited hook. Many freshwater turtle species may be taken year round, but softshell turtles may not be taken from the wild from May 1 to July 31. In addition, collecting of any freshwater turtle eggs is prohibited. See Rule 68A-25.002 and 68A-27.003, F.A.C. at www.flrules.org for more information. It is illegal to take, attempt to take, pursue, hunt, harass, capture, possess, sell or transport gopher tortoises, parts thereof, or their eggs without a permit. It is illegal to molest, damage or destroy gopher tortoise burrows. For information about gopher tortoises and permits, please visit MyFWC.com/GopherTortoise.

Snakes

Florida pine snakes may not be sold, bought or possessed for sale, nor shall any person possess more than one Florida pine snake, unless the snake is amelanistic or albino. Short-tailed snakes, Key ringneck snakes, and rim rock crowned snakes may not be taken. Red rat snakes, Peninsula ribbon snakes, and Florida brown snakes (from the Lower Keys only) may not be taken. See Rule 68A-25.002 and 68A-27.003, F.A.C. at www.flrules.org for more information.



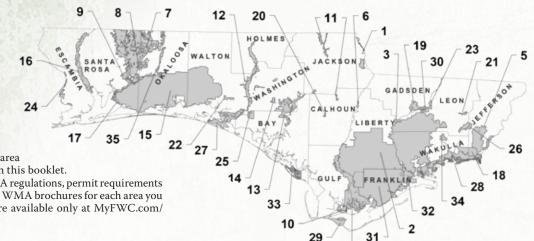


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PUBLIC HUNTING AREAS



Wildlife management areas (WMAs)

Only general wildlife management area (WMA) regulations are covered in this booklet.

For specific information on WMA regulations, permit requirements and exemptions, obtain individual WMA brochures for each area you wish to hunt. These brochures are available only at MyFWC.com/ WMAbrochures.

Northwest Region

- 1 Apalachee: 7,952 acres in Jackson County
 - *\(\)* → *\(\) \(\)* →

Quota permit required during general gun and spring turkey; recreational access allowed.

2 Apalachicola: 581,290 acres in Franklin, Leon, Liberty and Wakulla counties

7 🔾 AM 🔫 💆 💉 🐄 HD DD 🔺 👬 🤺 🖌 🖌 YT 🎼 Quota permits are not required for this area; recreational access allowed.

3 Apalachicola—Bradwell Unit: 1,420 acres in Liberty County



Quota permit required during archery, muzzleloading gun, general gun, family, youth turkey and spring turkey; recreational access allowed.

4 Apalachicola River WEA: 83,192 acres in Franklin and Gulf counties

🖌 🤌 🐂 HD DD 🔺 👬 🏌 🛆 AM 🔫 🍞 Quota permits are not required for this area; camping in designated campgrounds allowed

only by FWC permit: recreational access allowed.

5 Aucilla: 50,549 acres in Jefferson and Taylor counties

* 🔾 🔫 🗶 🦽 🌾 HD DD 🛆 👬 🏌 🤕 YT Quota permit required during general gun, archery, muzzleloading gun and family; recre-

ational access allowed

6 Beaverdam Creek: 1,317 acres in Liberty County

💫 AM 🔫 💕 🖌 🦐 HD 💏 🖌 🖬

Quota permit required during muzzleloading gun, family and spring turkey; recreation access allowed.

Blackwater: 192,449 acres in Santa Rosa and Okaloosa counties

🔾 AM 🔫 🎽 💉 🐜 HD DD 🔺 👬 🦄 🖌 YT 👬

Quota permit required during general gun, family, quail and archery/muzzleloading gun; recreational access allowed.

8 Blackwater—Carr Unit: 590 acres in Santa Rosa County

Þ

Released quail permit required.

Blackwater—Hutton Unit: 7.629 acres in Santa Rosa County

Archery

seasor

Quota permit required during archery, muzzleloading gun, mobility-impaired, general gun, youth turkey and spring turkey; recreational access allowed only during nonhunting periods.

Muzzleloading

gun season

Archery/

muzzleloading

gun season

AM

General gur

season

Small-game

season

10 Box-R: 12,260 acres in Franklin County



Quota permit required during archery, muzzleloading gun, general gun, wild hog-dog and spring turkey; recreational access allowed.

11 Chipola River: 9,094 acres in Jackson and Calhoun counties

29



Quota permits are required during archery, muzzleloading gun, family, youth turkey and spring turkey; camping allowed only at designated campgrounds by landowner permit; recreational access allowed.

12 Choctawhatchee River: 57,998 acres in Bay, Holmes, Walton and Washington counties

HD DD \Lambda 🎢 $\overline{\mathbf{X}}$

Quota permit required during youth turkey and spring turkey; camping allowed throughout the area, but camping in designated campgrounds only allowed by landowner permit; recreational access allowed.

13 Econfina Creek: 41,433 acres in Bay, Jackson and Washington counties



Quota permit required during archery, muzzleloading gun, mobility-impaired, general gun, youth turkey and spring turkey; camping allowed only at designated campgrounds by landowner permit: recreational access allowed.

14 Econfina Creek—Fitzhugh Carter Tract: 2,174 acres in Washington County

Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey; recreational access allowed.

15 Eglin AFB: 250,000 acres in Santa Rosa, Okaloosa, and Walton counties



16 Escambia River: 35,413 acres in Escambia and Santa Rosa counties

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Quota permits are not required for this area; camping allowed throughout the area, but camping in designated campgrounds only allowed by landowner permit; recreational access allowed.

17 Escribano Point: 4,087 acres in Santa Rosa County



Spring turkey

season

Quota permit required during archery, muzzleloading gun, general gun, archery/muzzleloading gun and spring turkey; camping allowed only in designated campgrounds by FWC permit; recreational access allowed.

Family

hunts

Florida Fish and Wildlife Conservation Commission

Camping

allowed

Released quail

allowed

18 Flint Rock: 7.939 acres in Jefferson and Wakulla counties

T

Recreational use permit required for all hunting seasons and activities; recreational access allowed only during hunting periods.

19 Joe Budd: 11,173 acres in Gadsden County



Quota permit required during archery, archery/muzzleloading gun and spring turkey; camping allowed only at High Bluff Campground with permit from Florida Forest Service; fishing and recreational access allowed only during nonhunting periods.

20 Juniper Creek: 914 acres in Calhoun County

YT **i**

Family and youth turkey hunts only; landowner zone tag required for all hunts; recreational access allowed only during nonhunting periods.

21 L. Kirk Edwards WEA: 1,782 acres in Leon County

AM 🔊 Ň

Quota permit required during archery, family, archery/muzzleloading gun, youth turkey and spring turkey; recreational access allowed except from a half-hour before sunrise to 1 p.m. during youth and spring turkey hunts.

22 Lafayette Creek: 3,160 acres in Walton County



Quota permit required during archery, muzzleloading gun, general gun, family and spring turkey; fishing and recreational access allowed only during nonhunting periods.

23 Ochlockonee River: 2,790 acres in Leon County

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Quota permit required during archery/muzzleloading gun and youth turkey; fishing and recreational access allowed 1.5 hours before sunrise until 1.5 hours after sunset.

24 Perdido River: 6,261 acres in Escambia County

T AM

Quota permit required during archery, muzzleloading gun, general gun, archery/muzzleloading gun, family, youth turkey and spring turkey; camping allowed only at designated campgrounds by landowner permit; horseback riding allowed on designed trails; recreational access allowed.

25 Pine Log: 7,091 acres in Bay and Washington counties



Quota permit required during muzzleloading gun, general gun and youth turkey; camping allowed only at designated campsites by landowner permit; recreational access allowed.

26 Plank Road: 8,096 acres in Jefferson and Leon counties



Quota permit required during archery, muzzleloading gun, general gun, family, mobility-impaired, youth turkey and spring turkey; horseback riding allowed; recreational access allowed 1.5 hours before sunrise until 1.5 hours after sunset.

27 Point Washington: 15,355 acres in Walton County

Ť) AM 🔫 🏷

Quota permit required during general gun; camping allowed only at designated campsites by landowner permit; recreational access allowed.

28 St. Marks NWR: 32,000 acres in Wakulla, Jefferson and Taylor counties

T

Landowner permit required for all hunting seasons; recreational access allowed.

Hog dogs

allowed

29 St. Vincent NWR: 11,400 acres in Franklin County

HD



Hog hunting

season

Landowner permit required for all hunting seasons and camping; recreational access allowed.

30 Talquin: 3,053 acres in Leon County



Quota permit required during general gun and youth turkey; recreational access allowed 1.5 hours before sunrise until 1.5 hours after sunset.

31 Tate's Hell: 185.044 acres in Franklin and Liberty counties



Quota permit required during general gun and spring turkey; camping allowed with landowner permit; recreational access allowed.

32 Tate's Hell—Womack Creek Unit: 13,754 acres in Franklin and Liberty counties



Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey; camping allowed only at designated campsites by landowner permit; recreational access allowed.

33 Tyndall AFB: 14,400 acres in Bay County



Landowner permit required for all hunting seasons and activities.

34 Wakulla: 4,045 acres in Wakulla County



Quota permit required during archery, archery/muzzleloading gun, youth turkey and spring turkey; recreational access allowed 1.5 hours before sunrise until 1.5 hours after sunset.

35 Yellow River: 27,208 acres in Okaloosa and Santa Rosa counties



Quota permits are not required for this area; recreational access allowed.



DD Florida Fish and Wildlife Conservation Commission

Deer dogs

allowed

Night raccoor

hunting

Horseback riding

allowed

Hiking

trails

Fishing

YΤ

Mobility-impaired

hunts

Youth

North Central Region

36 Alligator Lake Public Small-Game Hunting Area: 484 acres in Columbia County

Waterfowl, fishing and frogging area only.

37 Andrews: 3,501 acres in Levy County

17 🔾 📲 🔰 💉 🥻 🔄 🖚 YT

Quota permit required during archery, muzzleloading gun, general gun, youth, youth turkey and spring turkey; hiking and fishing allowed with management area permit or daily-use fee, unless exempt; recreational access allowed only during nonhunting periods with management area permit or daily-use fee.

38 Bayard: 9,702 acres in Clay County

Quota permit required during archery, muzzleloading gun, general gun, wild hog-still, youth turkey and spring turkey; tent camping only; recreational access allowed.

39 Belmore: 8,737 acres in Clay County

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Quota permit required during archery, muzzleloading gun, general gun, family, youth turkey and spring turkey; recreational access allowed.

40 Big Bend—Hickory Mound Unit: 14,427 acres in Taylor County

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Quota permit required during general gun; recreational access allowed.

41 Big Bend—Jena Unit: 11,651 acres in Dixie County

Quota permit required during general gun; recreational access allowed.

42 Big Bend—Snipe Island Unit: 11,687 acres in Taylor County

Quota permit required during archery, muzzleloading gun, general gun, and spring turkey; horseback riding allowed; recreational access allowed.

43 Big Bend—Spring Creek Unit: 14,600 acres in Taylor County

Quota permit required during muzzleloading gun and general gun; recreational access allowed.

44 Big Bend—Tide Swamp Unit: 19,538 acres in Taylor County

Quota permits are not required for this area; recreational access allowed.

45 Big Shoals: 2,140 acres in Hamilton County

Quota permit required during archery, muzzleloading gun, youth turkey and spring turkey; recreational access allowed.

46 Camp Blanding: 56,197 acres in Clay County

Quota permit required during archery (except no quota needed in still hunt area), muzzleloading gun, youth, general gun, youth turkey and spring turkey.

47 Cary: 11,644 acres in Duval and Nassau counties

Quota permit required during archery, muzzleloading gun, general gun, family, wild hogstill and spring turkey; camping allowed only at designated sites by landowner permit; recreational access allowed.

Muzzleloading

gun season

Archery,

muzzleloading

gun season

AM

General gur

season

Cedar Key Scrub: 6,480 acres in Levy County

Archery

season



Legend 🕇

Quota permit required during general gun; recreational access allowed.

49 Citrus: 49,317 acres in Citrus and Hernando counties



Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey; recreational access allowed.

50 Cypress Creek: 1,328 acres in Hamilton County



Quota permit required during archery, muzzleloading gun, youth turkey and spring turkey; recreational access allowed.

51 Devil's Hammock: 7,600 acres in Levy County



Quota permit required during archery, muzzleloading gun, general gun, family, youth turkey and spring turkey; camping allowed only during nonhunting periods at designated sites by permit from Levy County Commission; recreational access allowed.

52 Flying Eagle: 10,563 acres in Citrus County



Quota permit required during archery, muzzleloading gun, general gun and spring turkey; camping allowed only during nonhunting periods; recreational access allowed.

53 Fort White WEA: 1,610 acres in Gilchrist County



Quota permit required during archery, youth turkey and spring turkey; recreational access allowed.

54 Four Creeks: 13,060 acres in Nassau County



Quota permit required during archery, muzzleloading gun, general gun, family, wild hog-still, youth turkey and spring turkey; recreational access allowed.

55 Goethe: 45,745 acres in Levy County



Quota permit required during muzzleloading gun, general gun, family and spring turkey; camping allowed only at designated sites by landowner permit; recreational access allowed.

56 Grove Park: 16,437 acres in Alachua County



Recreational use permit required for all hunts and activities except on designated trails; horseback riding allowed only during nonhunting periods, except on designated trails where it is allowed year-round.

57 Gulf Hammock: 23,991 acres in Levy County



Recreational use permit required for all hunts and activities; horseback riding and fishing allowed only during hunting periods.

58 Hatchet Creek: 2,760 acres in Alachua County



Quota permit required during archery, muzzleloading gun, general gun, family, youth turkey and spring turkey; camping allowed only by landowner permit; recreational access allowed.

59 Holton Creek: 2,531 acres in Hamilton County



Mobility-impaired quota permit required during general gun and spring turkey; fishing, horseback riding and recreational access allowed only during nonhunting periods.

60 Homosassa: 5,675 acres in Citrus County

Spring turkey

season



Small-game

season

Special-opportunity permit required during spring turkey; quota permit required during archery; recreational access allowed, except during spring turkey.

Florida Fish and Wildlife Conservation Commission

Family

hunts

Camping

allowed

Released quail

allowed

34

61 Jennings Forest: 23,269 acres in Clay and Duval counties

オンマン 🖌 YT 🖬

Quota permit required during archery, muzzleloading gun, general gun, family, quail, wild hog-still, youth turkey and spring turkey; primitive camping allowed at designated sites by landowner permit; recreational access allowed.

62 Lafayette Forest WEA: 2,148 acres in Lafayette County

🖌 🐜 YT 👬

Quota permit required during archery, muzzleloading gun, wild-hog-still, family, youth turkey and spring turkey; recreational access allowed, except during hunting periods when only hunters are allowed on the area.

63 Little River: 2,203 acres in Suwannee County

Quota permit required during archery, family, muzzleloading gun, youth turkey and spring turkey; recreational access allowed.

64 Lochloosa: 11,149 acres in Alachua County

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Quota permit required during general gun; horseback riding allowed except during general gun season; recreational access allowed.

65 Log Landing: 5,015 acres in Dixie, Gilchrist and Lafayette counties

🐀 YT

Quota permits are not required for this area; recreational access allowed. 66 Lower Econfina River: 3,007 acres in Taylor County

Ά/

Quota permits are not required for this area; horseback riding allowed only during nonhunting periods; recreational access allowed.

67 Lower Suwannee NWR: 53,000 acres in Dixie and Levy counties

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National Wildlife Refuge permit required for all hunting seasons; recreational access allowed.

68 Mallory Swamp: 31,225 acres in Lafayette County 🗡 🔾 🤜 🎽 🕋 HD DD 🕷 🚄 🥵

Quota permit required during muzzleloading gun and general gun; recreational access allowed.

69 Middle Aucilla: 2,245 acres in Jefferson, Madison and Taylor counties

Quota permit required during archery, muzzleloading gun, general gun and spring turkey; recreational access allowed.

70 Osceola: 266,270 acres in Baker and Columbia counties

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Quota permit required if hunting in the dog hunt area during general gun; recreational access allowed.

PotashCorp-White Springs: 2,400 acres in Hamilton County 71 Waterfowl area only.

72 Potts: 4,155 acres in Citrus County

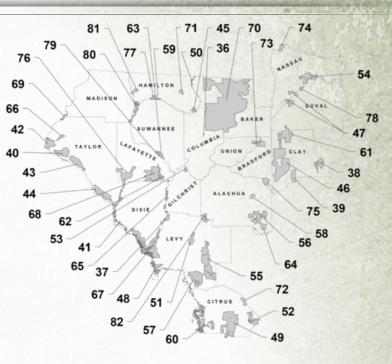
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Quota permit required during wild hog-dog and spring turkey; camping allowed only during hunting periods or with landowner permit; horseback riding allowed except during wild hogdog hunts; recreational access allowed.

73 Raiford: 9,141 acres in Bradford and Union counties

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Quota permit required during muzzleloading gun, archery/muzzleloading gun, youth turkey and spring turkey; fishing allowed only during hunting periods.



74 Ralph E. Simmons: 3,630 acres in Nassau County



Quota permit required during archery, muzzleloading gun, family, general gun mobilityimpaired, general gun, youth turkey and spring turkey; horseback riding and recreational access allowed only during nonhunting periods and during small-game season.

75 Santa Fe Swamp WEA: 7,326 acres in Alachua and Bradford counties 🖈 🔾 AM 🦽 👬 🕤

Quota permits are not required for this area; recreational access allowed.

76 Steinhatchee Springs: 24,422 acres in Lafayette, Dixie and Taylor counties

Quota permit required during muzzleloading gun, wild hog-dog, general gun and spring turkey; recreational access allowed.

77 Suwannee Ridge WEA: 1,425 acres in Hamilton County

Mobility-impaired quota permit required during general gun and spring turkey; recreational access allowed only during nonhunting periods.

78 Thomas Creek Kings Road Unit: 2,429 acres in Duval County

Quota permit required during archery, muzzleloading gun, general gun, family, youth turkey and spring turkey; recreational access allowed.

79 Troy Springs: 1,750 acres in Lafayette County



Quota permits are not required for this area; recreational access allowed.

80 Twin Rivers: 9,289 acres in Madison, Hamilton and Suwannee counties

Quota permit required during archery, muzzleloading gun, general gun, family, youth turkey and spring turkey; camping allowed only by authorization of Florida Forest Service; recreational access allowed.

81 Twin Rivers—Blue Springs Unit: 2,086 acres in Hamilton County



Permit required for bird-dog training; quota permit required for quail hunting; camping allowed only during nonhunting periods by landowner permit; recreational access allowed.

Hog hunting season	HOg dogs allowed	DD Deer dogs allowed	Night raccoon hunting	Horseback riding allowed	Fishing	Mobility-impaired hunts	Youth turkey season	
Florida Fish a	nd Wildlife Con	servation Com	nission			20	019-2020	35

PUBLIC HUNTING AREAS

82 Watermelon Pond WEA: 4,687 acres in Alachua and Levy counties



Quota permit required during youth turkey; recreational access allowed.

Northeast Region

Buck Lake: 9.291 acres in Brevard and Volusia counties

T

Quota permit required during archery, muzzleloading gun, general gun and spring turkey; camping allowed only during nonhunting periods; horseback riding allowed only during small-game season and nonhunting periods; recreational access allowed.

Caravelle Ranch: 27,251 acres in Putnam and Marion counties

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Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey: recreational access allowed.

85 Charles H. Bronson: 11,672 acres in Orange and Seminole counties

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Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey; camping allowed only by landowner permit; recreational access allowed.

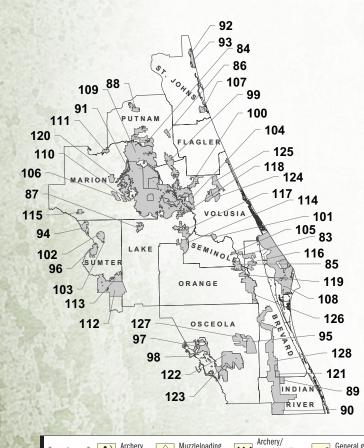
86 Dunns Creek: 3,184 acres in Putnam County

Quota permit required during archery, muzzleloading gun, general gun, wild hog-still and spring turkey; horseback riding and recreational access allowed only during nonhunting periods.

87 Emeralda Marsh Public Small-Game Hunting Area: 6,476 acres in Lake County



Waterfowl, snipe, fishing and frogging area only; recreational access allowed.



AM

gun season

muzzleloading

gun season

88 Etoniah Creek: 7,185 acres in Putnam County



Quota permit required during archery, muzzleloading gun, general gun and spring turkey; camping allowed with landowner permit; recreational access allowed.

89 Fellsmere Area 1 Public Small-Game Hunting Area: 4.189 acres in Indian **River County**

• Waterfowl, snipe, fishing and frogging area only; recreational access allowed.



Special-opportunity permit required for deer and spring turkey; quota permit required during wild hog-still; horseback riding allowed only during small-game season and nonhunting periods; recreational access allowed except during special-opportunity hunts.

Gores Landing: 4,357 acres in Marion County



Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey; recreational access allowed.

92 Guana River: 9,815 acres in St. Johns County



Quota permit required during archery, muzzleloading gun, general gun, waterfowl hunts and spring turkey; horseback riding allowed only during nonhunting periods and waterfowl season; recreational access allowed.

93 Guana River—Lake Ponte Vedra Public Small-Game Hunting Area: 2,342 acres in St. Johns County



General gur

season

Small-game

season

Waterfowl, snipe and fishing area only; guota permit required for all hunts.

94 Half Moon: 9,554 acres in Sumter County



Quota permit required during archery, muzzleloading gun, general gun, wild hog-still, youth turkey and spring turkey; horseback riding only allowed during nonhunting periods and small-game season; recreational access allowed.

95 Herky Huffman/Bull Creek: 23,646 acres in Osceola County



Quota permit required during archery, muzzleloading gun and general gun; camping allowed only during hunting periods; recreational access allowed.

96 Jumper Creek: 10,552 acres in Sumter County



Quota permit required during muzzleloading gun and general gun; camping allowed but accessible by boat only; recreational access allowed.

97 Kissimmee Chain of Lakes Area: 21,028 acres in Osceola and Polk counties



Quota permits are not required for this area; hog hunting allowed year round; offers crossbow season; camping allowed first-come, first-served at designated campsites by landowner permit: recreational access allowed.

98 Kissimmee Chain of Lakes Rolling Meadows Unit: 1,873 acres in Polk County



Quota permits are not required for this area; hog hunting allowed year round; offers crossbow season; recreational access allowed.

99 Lake George: 39,642 acres in Putnam and Volusia counties



Spring turkey

season

Quota permit required during muzzleloading gun, general gun, youth turkey and spring turkey; camping allowed with landowner permit, but camping is prohibited during general gun; recreational access allowed.

Family

hunts

Legend 36 2019-2020

Archery

season

Florida Fish and Wildlife Conservation Commission

Camping

allowed

Released quail

allowed



100 Lake George—Dexter/Mary Farms Unit: 14,377 acres in Volusia County

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Quota permit required during archery, muzzleloading gun and general gun; special-opportunity permit required during spring turkey; camping allowed during special-opportunity spring turkey but only by those hunters and their guests; camping is allowed at other times with landowner permit; recreational access allowed except during special-opportunity spring turkey.

101 Lake Monroe: 3,098 acres in Volusia and Seminole counties

Quota permits are not required for this area; recreational access allowed.

102 Lake Panasoffkee: 8,676 acres in Sumter County

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Special-opportunity permit required during archery and spring turkey; quota permit required during wild hog hunts; camping allowed only during hunting periods or with landowner permit; horseback riding allowed except during wild hog-dog hunts; recreational access allowed except during special-opportunity archery and spring turkey.

103 Lake Panasoffkee Public Small-Game Hunting Area: 647 acres in Sumter County

Y

Small game and wild hog hunting only; no quota permits required; recreational access allowed.

104 Lake Woodruff NWR: 21,574 acres in Volusia and Lake counties

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Landowner permit required during archery and muzzleloading gun; recreational access allowed

105 Little Big Econ: 7,156 acres in Seminole County

Quota permit required during archery, muzzleloading gun, general gun and spring turkey; camping allowed only with landowner permit; recreational access allowed.

106 Marshall Swamp: 6,445 acres in Marion County

Quota permit required during archery, muzzleloading gun, general gun and spring turkey; recreational access allowed.

107 Matanzas: 4,688 acres in St. Johns County

Quota permit required during archery, muzzleloading gun, family, general gun, wild hog-still and spring turkey; camping allowed by landowner permit; recreational access allowed.

108 Merritt Island NWR: 140,000 acres in Brevard County

Hog hunting

Archery and waterfowl hunting, and fishing area only. Quota permit required for all hunts.

Deer dogs

Night raccoor

hunting

109 Ocala: 385.349 acres in Marion. Putnam and Lake counties



Quota permit required during muzzleloading gun, general gun, youth turkey and spring turkey; camping regulated by landowner; recreational access allowed.

110 Ocklawaha Prairie Public Small-Game Hunting Area: 2,400 acres in Marion County



Waterfowl, snipe and fishing area only. Quota permit required for all hunts.

111 Orange Creek Public Small-Game Hunting Area: 3,423 acres in Marion and Alachua counties



Waterfowl, snipe, fishing and frogging area only.

112 Richloam: 58,146 acres in Hernando, Pasco, Sumter and Lake counties



Quota permit required during general gun and spring turkey; camping allowed with landowner permit; recreational access allowed.

113 Richloam—Baird Unit: 11,567 acres in Sumter County



Quota permit required during archery, muzzleloading gun, general gun, wild hog-still, youth turkey and spring turkey; recreational access allowed.

114 Rock Springs Run: 14,046 acres in Orange and Lake counties



Quota permit required during archery, muzzleloading gun and general gun; horseback riding is prohibited during hunting periods, except during small-game season; recreational access allowed.

115 Ross Prairie: 3.527 acres in Marion County



Quota permit required during archery and spring turkey; recreational access allowed.

116 Salt Lake: 7,805 acres in Brevard County



Quota permit required during archery, muzzleloading gun, general gun, wild hog-dog and spring turkey; horseback riding is prohibited during hunting periods, except during smallgame season; recreational access allowed.

117 Seminole Forest: 12,616 acres in Lake County



Quota permit required during archery, muzzleloading gun, mobility-impaired, general gun and spring turkey; camping, recreational activities and access regulated by landowner during nonhunting periods.

118 Seminole Forest—Lake Tracy Unit: 9,311 acres in Lake County



Quota permit required during archery, muzzleloading gun, general gun, wild hog-still and spring turkey; public access regulated by landowner during nonhunting periods.

119 Seminole Ranch: 6,000 acres in Orange County

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Quota permit required during archery, muzzleloading gun, general gun and spring turkey; horseback riding allowed only during nonhunting periods and small-game season; recreational access allowed.

120 Silver Spring Forest Public Small-Game Hunting Area: 4,900 acres in Marion County



Horseback riding

allowed

Small game, wild hog, fishing and frogging area only. Recreational access allowed.

Fishing



YΤ turkey

Mobility-impaired

hunts

Youth

seaso

trails

Hiking

PUBLIC HUNTING AREAS

121 T. M. Goodwin: 6,482 acres in Brevard County

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Waterfowl, snipe and fishing area only. Quota permit required for all hunts.

122 Three Lakes: 54,611 acres in Osceola County

Quota permit required during archery, muzzleloading gun and general gun; camping allowed only during hunting periods; recreational activities allowed with management area permit or daily-use permit, unless exempt.

123 Three Lakes—Prairie Lakes Unit: 8,859 acres in Osceola County

Quota permit required during archery, muzzleloading gun, general gun, wild hog-still, youth turkey and spring turkey; camping allowed with FWC permit; recreational activities allowed with management area permit or daily-use permit, unless exempt.

124 Tiger Bay: 19,644 acres in Volusia County

Quota permit required during general gun, youth turkey and spring turkey; recreational access allowed.

125 Tiger Bay—Rima Ridge Unit: 11,548 acres in Volusia County

Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey; camping allowed with landowner permit; recreational access allowed.

126 Tosohatchee: 30,701 acres in Orange County

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Quota permit required during archery, muzzleloading gun, general gun, wild hog-dog (on weekends) and spring turkey; camping, horseback riding allowed only during nonhunting periods; camping allowed with FWC permit; recreational access allowed with management area permit or daily-use permit, unless exempt.

127 Triple N Ranch: 16,295 acres in Osceola County

Special-opportunity permit required for deer and spring turkey; quota permit required during wild hog-still; camping allowed only during hunting periods; horseback riding allowed only during nonhunting periods, except hunters may hunt from horseback during smallgame season; recreational access allowed, except during special-opportunity hunts.

128 Upper St. Johns River Marsh: 120,386 acres in Brevard and Indian River counties

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Quota permits are not required for this area; only tent camping is allowed at designated campsites during the hunting season or with landowner authorization; recreational access allowed.

Southwest Region

129 Arbuckle: 13,925 acres in Polk County

Quota permit required during weekend archery and muzzleloading gun, and spring turkey; camping allowed with landowner permit; horseback riding allowed only during nonhunting periods; recreational access allowed.

Muzzleloading

gun season

Archery/

muzzleloading

gun season

AM

General gur

season

130 Avon Park AFR: 80,000 acres in Polk and Highlands counties

🖈 💪 📲 💆 🎢 🐂 HD DD 🛆 👬 YT

Landowner permit required for all hunts and activities.

131 Babcock Ranch Preserve: 16,612 acres in Charlotte County



Quota permit required during archery, muzzleloading gun, general gun, mobility impaired, family and spring turkey.

Archery

season

132 Babcock/Webb: 64,874 acres in Charlotte County



Quota permit required during archery, general gun and field trial quail; camping allowed with FWC permit; horseback riding, fishing and recreational access allowed with management area permit or daily-use fee, unless exempt.

133 Babcock/Webb—Punta Gorda Water Treatment Facility: 884 acres in Charlotte County

1

Quota permit required when hog or dove hunting.

134 Babcock/Webb—Yucca Pens Unit: 15,230 acres in Charlotte and Lee counties

Quota permit required during muzzleloading gun and general gun; horseback riding, fishing and recreational access allowed with management area permit or daily-use fee, unless exempt.

135 Chassahowitzka: 34,597 acres in Hernando County

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Quota permit required during archery, muzzleloading gun, general gun, wild hog-dog, youth turkey and spring turkey; horseback riding, hiking, fishing and recreational access allowed with management area permit or daily-use fee, unless exempt.

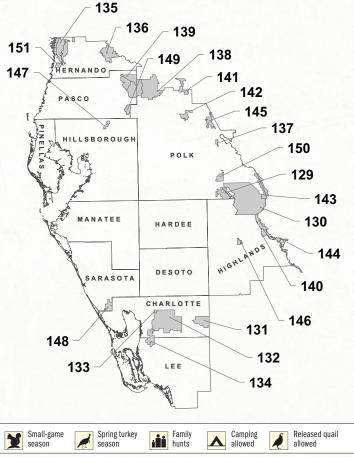
136 Croom: 20,595 acres in Hernando and Sumter counties



Quota permit required during muzzleloading gun, general gun and spring turkey; camping allowed with landowner permit; recreational access allowed.

137 Everglades Headwaters Hatchineha Unit: 1,460 acres in Polk County

Quota permit required during archery, muzzleloading gun, family hunt, general gun, youth turkey and spring turkey; recreational access allowed except during periods open to hunting.



Legend 🗼

Florida Fish and Wildlife Conservation Commission

138 Green Swamp: 50,692 acres in Polk, Sumter, and Lake counties

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Quota permit required during general gun and spring turkey; camping allowed only during hunting periods by permit from FWC; recreational access allowed.

139 Green Swamp—West Unit: 34,335 acres Pasco County

Special-opportunity permit required during archery, general gun and spring turkey; quota permit required during wild hog hunts; camping allowed only during hunting periods or with landowner permit; horseback riding allowed only during nonhunting periods and during small-game and wild hog-still hunts; recreational access allowed except during specialopportunity archery, general gun and spring turkey.

140 Hickory Hammock: 3,791 acres in Highlands County



Quota permit required during archery, muzzleloading gun, general gun, mobility-impaired, wild hog-still and spring turkey; camping and vehicle access allowed with landowner permit; recreational access allowed.

141 Hilochee: 9,369 acres in Lake and Polk counties

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Quota permit required during archery, muzzleloading gun, wild hog-still, youth turkey and spring turkey; fishing allowed with FWC permit; recreational access allowed with management area permit or daily-use fee, unless exempt.

142 Hilochee—Osprey Unit: 6,093 acres in Polk County



Quota permit required during archery, muzzleloading gun, family, wild hog hunts, youth turkey and spring turkey; horseback riding not allowed during wild hog-dog hunts; recreational access allowed.

143 KICCO: 6,647 acres in Polk and Osceola counties



Quota permit required during archery, muzzleloading gun, wild hog-still, youth turkey and spring turkey; horseback riding, camping and vehicle access allowed with landowner permit; recreational access allowed.

144 Kissimmee River PUA: 27,215 acres in Glades, Highlands, Okeechobee, Osceola and Polk counties



Quota permits are not required for this area; offers crossbow season; camping and horseback riding allowed with landowner permit; recreational access allowed.

145 Lake Marion Creek: 8,028 acres in Polk and Osceola counties



Quota permit required during archery, muzzleloading gun, general gun, wild hog-still, youth turkey and spring turkey; camping allowed only during nonhunting periods with landowner permit; vehicle access allowed with landowner permit; recreational access allowed.

146 Lake Wales Ridge WEA—Royce Unit: 2,641 acres in Highlands County



Quota permit required during archery, general gun, youth turkey and spring turkey; horseback riding allowed only during nonhunting periods; recreational access allowed.

147 Lower Hillsborough: 2,774 acres in Hillsborough County

Quota permit required during family and youth turkey; camping allowed with landowner permit; recreational access allowed.

148 Myakka State Forest Public Small-Game Hunting Area: 7,295 acres in Sarasota County

HD

Hog hunting

season

Quota permits are not required for this area; during archery and muzzleloading gun, only wild hogs can be taken; recreational access allowed.

DD

Deer dogs

allowed

Night raccoon

hunting

149 Upper Hillsborough: 5,178 acres in Polk and Pasco counties



Quota permit required during archery, muzzleloading gun and wild hog-dog; horseback riding allowed only during nonhunting periods with landowner permit; recreational access allowed.

150 Walk-in-the-Water: 6,034 acres in Polk County



Quota permit required during archery, muzzleloading gun and spring turkey; camping allowed with landowner permit; horseback riding allowed only during nonhunting periods and during small game and spring turkey; recreational access allowed.

151 Weekiwachee: 2,845 acres in Hernando County



Quota permit required during archery; recreational access allowed.

South Region

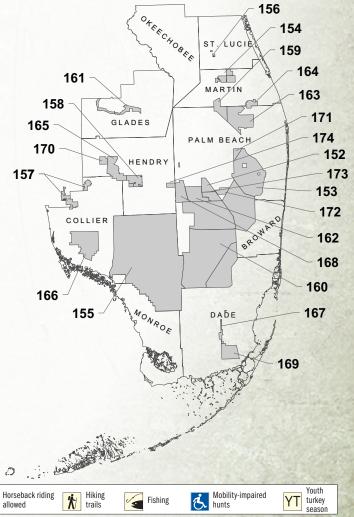
152 A-1 FEB Impoundment Public Small-Game Hunting Are: 16,908 acres in Palm Beach County

Waterfowl and alligator hunting only. Quota permit required.

- **153 A.R.M. Loxahatchee NWR:** 147,368 acres in Palm Beach County Waterfowl and alligator hunting only.
- 154 Allapattah Flats: 20,945 acres in Martin County



Quota permit required during archery, muzzleloading gun, general gun, family and spring turkey; camping allowed with landowner permit; recreational access allowed.



Florida Fish and Wildlife Conservation Commission

Hog dogs

allowed

Big Cypress: 728,274 acres in Collier, Miami-Dade and Monroe counties

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Quota permit required in some units during archery, muzzleloading gun, general gun and spring turkey; recreational access allowed.

C-23/24 Reservoir Public Small-Game Hunting Area: 1,149 acres in St. Lucie County

2 4

Recreational access allowed.

157 CREW WEA: 28,910 acres in Lee and Collier counties

Quota permit required during archery, muzzleloading gun, general gun and spring turkey; horseback riding and camping allowed with landowner permit; recreational access allowed.

158 Dinner Island Ranch: 21,714 acres in Hendry County



Quota permit required during archery, muzzleloading gun, general gun, family, youth turkey and spring turkey; horseback riding allowed only during nonhunting periods, except during dove season; camping allowed with FWC permit; recreational access allowed.

159 Dupuis WEA: 21.935 acres in Martin and Palm Beach counties

Quota permit required during archery, muzzleloading gun, general gun, mobility-impaired, general gun and spring turkey.

160 Everglades & Francis S. Taylor: 671,831 acres in Palm Beach, Broward and Miami-Dade counties

Airboat or track vehicle quota permit required during general gun-vehicle; recreational access allowed.

161 Fisheating Creek: 18,272 acres in Glades County



Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey west of US Hwy 27; special-opportunity permit required during spring turkey east of US Hwy 27: recreational access allowed.

162 Holey Land: 35,350 acres in Palm Beach and Broward counties

\prec 🏷 HD DD 🔥 🔄

Track vehicle quota permit required during general gun-vehicle; recreational access allowed.

163 J.W. Corbett: 60,348 acres in Palm Beach County

HD DD 🔺 🎢 Quota permits are not required for this area; camping, horseback riding, hiking, fishing and

recreational access allowed with management area permit or daily-use fee, unless exempt.

164 Jones/Hungryland WEA: 16,645 acres in Martin and Palm Beach counties

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Quota permit required during archery, muzzleloading gun and general gun; camping allowed with FWC permit; recreational access allowed.

165 Okaloacoochee Slough: 34,722 acres in Hendry and Collier counties

Quota permit required during archery, muzzleloading gun, general gun, family and spring turkey; recreational access allowed.

Picayune Strand: 76,317 acres in Collier County

Archery

season

t t



Quota permit required during muzzleloading gun, general gun and spring turkey; camping allowed with landowner permit; recreational access allowed.

167 Rocky Glades Public Small-Game Hunting Area: 5,143 acres in Miami-Dade County



168 Rotenberger: 29,297 acres in Palm Beach and Broward counties



Track vehicle quota permit required during general gun-vehicle; recreational access allowed.

169 Southern Glades WEA: 30,080 acres in Miami-Dade County



Quota permits are not required for this area; recreational access allowed.

170 Spirit-of-the-Wild: 7,487 acres in Hendry County



Quota permit required during archery, muzzleloading gun, general gun, youth turkey and spring turkey; horseback riding allowed only during nonhunting periods; recreational access allowed.

- 171 STA 1 West Public Small-Game Hunting Area: 6,670 acres in Palm Beach County Waterfowl and alligator hunting only. Quota permit required.
- 172 STA 2 Public Small-Game Hunting Area: 9,195 acres in Palm Beach County Waterfowl and alligator hunting only. Quota permit required.
- 173 STA 3/4 Public Small-Game Hunting Area: 16,772 acres in Palm Beach County Waterfowl and alligator hunting only. Quota permit required.
- 174 STA 5/6 Public Small-Game Hunting Area: 16,508 acres in Hendry County Waterfowl and alligator hunting only. Quota permit required.

Outdoors-Woman

Becoming an Outdoors-Woman (BOW) Program

This weekend retreat is for beginners who want to learn outdoors skills in a fun, safe and supportive environment!

Becoming an Outdoors-Woman workshops provide handson-learning with expert instructors. Anyone 18 years or older can attend to learn or improve outdoor skills such as:

- · Wilderness survival
- Archery
- Outdoor cooking
- Target shooting
- Fishing
- And more!

Small-game

season

Visit MyFWC.com/BOW for more information.

Spring turkey

season



Muzzleloading

gun season

Archery/

muzzleloading

gun season

AM

General gur

season

Florida Fish and Wildlife Conservation Commission

Camping

allowed

Released quail

allowed

Family

hunts

- Canoeing/kayaking
- Nature photography





Legend

2019-2020

Hunting

Boating

Wildlife management area permit requirements

- To hunt on wildlife management areas (WMAs), you must possess a management area permit and a hunting license, unless exempt (see License and permit exemptions on page 12). A management area permit is not required to hunt on Eglin, Avon Park and Tyndall military bases, Apalachicola River Wildlife and Environmental Area and Kissimmee River Public Use Area and Kissimmee Chain of Lakes Area.
- Limited entry/quota permits are required on WMAs during certain time periods (see Limited entry/quota permits on this same page).
- Permits for ADA accommodations are available under certain conditions for some WMAs. Visit MyFWC.com/ADA for more information.

Wildlife management area regulation changes

 Hunters should obtain WMA brochures for the area in which they intend to hunt. The latest rule changes are notated by bold print in these brochures. WMA brochures are available only at MyFWC.com/WMAbrochures.

Public small-game hunting areas

These small-game public hunting areas offer the opportunity to hunt wild hogs, doves, waterfowl and small game. WMA brochures are available only at MyFWC.com/WMAbrochures.

Hunting Florida's military bases

Three military bases in Florida are open to public hunting. For information on hunting these lands, contact:

- Eglin Natural Resources, Jackson Guard, 107 Hwy. 85 North, Niceville, FL 32578; 850-882-4165.
- Avon Park Air Force Range, Hunt Information, 347 RQW, DET1, OLA/CEVN, 29 South Blvd., Avon Park Air Force Range, FL 33825-5700; 863-452-4254.
- Tyndall Air Force Base, Natural Resources Flight, 325 CES/CEN, 119 Alabama Ave., Tyndall Air Force Base, FL 32403; 850-283-2641 or 850-283-2822.

Hog dogs

allowed

HD

Hog hunting

season

Hunting Florida's national wildlife refuges (NWR)

Eight national wildlife refuges in Florida are open to public hunting. These refuges are operated by the U.S. Fish and Wildlife Service. Hunting permits for some of these areas are issued by the FWC (see National Wildlife Refuge hunts on this same page).

- Chassahowitzka NWR, 1502 Southeast Kings Bay Dr., Crystal River, FL 34429; 352-563-2088.
- Ten Thousand Islands NWR, 12085 State Road 29 South, Immokalee FL 34142; 239-657-8001.
- A.R.M. Loxahatchee NWR, 10216 Lee Road, Boynton Beach, FL 33437; 561-732-3684. Waterfowl only.
- Lower Suwannee NWR, 16450 NW 31st Place, Chiefland, FL 32626; 352-493-0238.
- Lake Woodruff NWR, 2045 Mud Lake Road, DeLeon Springs, FL 32130; 386-985-4673.
- Merritt Island NWR, 1987 Scrub Jay Way, Titusville, FL 32815; 321-861-0667, Waterfowl only.
- St. Marks NWR, 1255 Lighthouse Road, St. Marks, FL 32355; 850-925-6121.
- St. Vincent NWR, 3100 County Road 30A, Apalachicola, FL 32329; 850-653-8808.

Limited entry/ quota permits

Reference individual WMA brochures to determine if or when a limited entry permit is required. Applications for limited entry/quota permits can be submitted at GoOutdoorsFlorida.com or by completing a worksheet and having a license agent submit it for you. You may find information and worksheets at MyFWC.com/License under "Limited Entry/Quota Hunts." FWC issues a variety of limited entry permits throughout the year to hunt species such as alligator, dove, quail, deer, waterfowl, hog and turkey and to camp on Green Swamp WMA.

Alligator

These limited permits allow the harvest of alligators on specific public water bodies or within specific counties. Each permit authorizes the take of two alligators on a specific harvest unit (see Florida is the alligator hunting capital of the world on page 44).

Green Swamp camping

Night raccoon

hunting

Camping permits are available for the archery/ general gun, small game, hog, spring turkey, and fish and frog seasons on designated sites within the Green Swamp WMA.

Horseback riding

allowed

Hiking

trails

National Wildlife Refuge (NWR) hunts

These are U.S. Fish and Wildlife Service hunt permits issued by FWC. For more information on NWR hunting opportunities, contact the local NWR office (see Hunting Florida's national wildlife refuges on this same page).

- Lake Woodruff archery, muzzleloading gun and family spring turkey hunts
- Merritt Island waterfowl and archery hunts St. Marks archery, general gun, spring tur-key and mobility-impaired hunts
- Lower Suwannee archery, muzzleloading gun, general gun, family and senior, wild hog, small game, waterfowl, raccoon/opossum, youth spring turkey and spring turkey hunts
- St. Vincent Island Sambar and white-tail deer hunts

Quota permits

Quota permits are a specific sub-type of limited entry permits that have their own unique set of rules and regulations on how to apply. Be sure to check the permit-specific information and application worksheets at MyFWC.com/ License (under "Limited Entry/Quota Hunts") for a complete list of details for each of these quota permit types:

- Airboat
- Archery*
- Dove*
- General gun*
- Family hunt
- ち Mobility impaired hunt*
- Muzzleloading gun*
- **Ouail** hunt
- Spring turkey*
- Track vehicle
- Wild hog*
- Youth hunt
- Youth spring turkey
- Guest permits are available for these permit type. For more specific information and worksheets, go to MyFWC.com/License under "Limited Entry/Quota Hunts."

Recreational use permits

Recreational use permits are designed to provide revenue to private landowners in the Wildlife Management Area (WMA) System. These permits include a management area permit that may be used when hunting other public lands not in the recreational use program. Recreational use permits are only valid on the area designated on the permit and may not be used on other recreational use program areas.

The three recreational use areas and their annual permit fees are:

Flint Rock WMA	Jefferson and Wakulla counties	\$206	
Grove Park WMA	Alachua County	\$595	
Gulf Hammock WMA	Levy County	\$417	

Mobility-impaired

thunts

Fishing



DD

Deer dogs

allowed

YΤ

Youth

Waterfowl and snipe hunt permits

Waterfowl permits are available for early, regular and youth seasons on the following areas: T.M. Goodwin and Broadmoor Marsh Unit

- Ocklawaha Prairie
- Guana River
- Stormwater Treatment Areas (STAs)
- A-1 Flow Equalization Basin (A-1 FEB)

Snipe permits also are available at Goodwin/ Broadmoor Marsh and Ocklawaha Prairie.

Merritt Island NWR offers waterfowl permits for regular season hunts for \$27.50.

Antlerless deer permits – wildlife management areas (WMAs)

Antlerless deer permits are available in limited numbers on special-opportunity hunts and firearms hunts on some WMAs. These permits are transferable and mailed in September. To be eligible for antlerless deer permits:

- Check "Yes" to the antlerless deer question on your phase I quota permit application.
- If awarded a quota permit during the phase I random drawing for an area that allows antlerless deer permits, you will be included in





an additional drawing for antlerless deer permits.

 Special-opportunity and recreational use permit holders will automatically be included in the antlerless deer permit drawing (if permits are available for that area).

Special-opportunity permits

The FWC has a number of special-opportunity hunts for sportsmen. These provide excellent chances to bag turkeys and quality deer. Hunters can submit as many applications as they want but a \$5 nonrefundable application fee must be submitted with each separate application. The cost of the permits ranges from \$50 to \$175. For more information, visit MyFWC. com/License and see details under "Limited Entry/Quota Hunts."

Special-opportunity fall hunts

- Fort Drum WMA: One seven-day general gun deer/hog hunt \$50; 20 hunters on 20,858 acres.
- Green Swamp WMA West Unit: Two archery and three general gun deer/hog hunts. Each four-day hunt - \$100; 54 hunters on 34,335 acres.



- Lake Panasoffkee WMA: Eight archery deer/ hog hunts. Each four-day hunt - \$100; 20 hunters on 8,676 acres.
- Triple N Ranch WMA: Two seven-day general gun and one four-day muzzleloading gun hunt for deer/hogs \$175; 15 hunters on 16,295 acres.

Special-opportunity spring turkey hunts

- Fisheating Creek WMA East: Two seven-day hunts. Each hunt - \$175; 10 hunters on 18,272 acres.
- Fort Drum WMA: Three seven-day hunts. Each hunt \$50; five hunters on 20,858 acres.
- Green Swamp WMA West Unit: 34,335 acres divided into three units with eight hunters per unit. Five hunts per unit. Each four-day hunt - \$100.
- Homosassa WMA: Two seven-day hunts. Each hunt - \$175; five hunters on 5,675 acres.
- Lake George WMA Dexter/Mary Farm Unit: 14,377 acres divided into three zones with four hunters per zone. Three hunts per zone. Each seven-day hunt \$175.
- Lake Panasoffkee WMA: Three four-day hunts. Each hunt - \$100; 10 hunters on 8,676 acres.
- Triple N Ranch WMA: Three seven-day hunts. Each hunt - \$175; 10 hunters on 16,295 acres.

Limited entry/ quota permits – application periods

Application periods for Florida's many limited entry/quota permit opportunities are available throughout the year. For up-to-date details, visit MyFWC.com/License and see information under "Limited Entry/Quota Hunts."



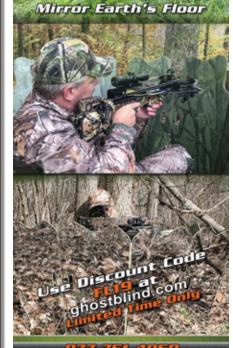
Youth and family hunting opportunities

The FWC offers several opportunities for adults to take youths (age 15 and under) hunting:

- The FWC offers two deer/hog hunts at Camp Blanding WMA and two deer/ hog hunts at Andrews WMA. During these hunts, permitted youths and their nonhunting supervisors are the only persons allowed on the area.
- A youth waterfowl day is held Saturday, Nov. 16, a week before the start of the regular waterfowl season, and another is held on Saturday, Feb. 9, two weeks after the season ends. Only those 15 years old and under are allowed to hunt while supervised by an adult, 18 years or older.
- Youth waterfowl hunts are held on Ocklawaha Prairie, Guana River, the stormwater treatment areas, A-1 FEB Impoundment and on T.M. Goodwin and Broadmoor Marsh Unit.
- Youth small-game hunts are held at Caravelle Ranch, Ross Prairie and Jennings Forest WMAs. Quota permits are not required for these hunts. Additional information is provided in the specific WMA brochures.
- Family hunts are offered on many WMAs. These hunts provide opportunities for a permitted supervisor to hunt with up to two youths.
- Youth spring turkey hunts are held on many WMAs the weekend before the spring turkey season begins. Only those 15 years old and under are allowed to harvest a turkey while supervised by an adult, 18 years or older.
- New information for beginning hunters can be found at MyFWC.com/NewHunter.



Florida Fish and Wildlife Conservation Commission



Reflective Panels

GNOSTB

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Florida is the alligator hunting capital of the world!

The alligator hunting season runs Aug. 15 - Nov. 1 each year. Over 7,000 alligator harvest permits are available this season. Each permit allows the harvest of two alligators.

Random drawings are held to distribute all available alligator harvest permits. Visit MyFWC.com/Alligator for details on how to apply. Applications may be submitted at any county tax collector's office, license agent (retail outlet that sells hunting and fishing licenses) or online at GoOutdoorsFlorida. com. There is no cost to apply, but credit card information must be submitted with each application, as applicants will be charged automatically if successful in the drawing. Those awarded a permit will be charged for an alligator trapping license and hide validation tags totaling \$272 for residents and \$1,022 for nonresidents. The cost for those with a Florida Resident Persons with Disabilities Hunting and Fishing License is \$22. The fee for additional alligator harvest permits, if available, is \$62 regardless of residency or disability.

All persons seeking a harvest permit must be at least 18 years of age by Aug. 15, 2019. Exemptions for senior citizens do not apply to alligator trapping licenses. All sales are final; no refunds will be provided for any reason. Alligator harvest permits are not transferable. No other hunting licenses or FWC-issued



permits are required. Permits and tags will be mailed within six weeks of drawing results and charges.

An alligator trapping agent license also is available for \$52 and allows a person to assist a permitted trapper with taking alligators. Those with a Florida Resident Persons with Disabilities Hunting and Fishing License are exempt from paying the fee but still need the license to hunt alligators. An alligator trapping agent license is not required for youth under 16 years of age. Exemptions for senior citizens do not apply to alligator trapping agent licenses.

To learn more about these exciting alligator hunts, visit MyFWC.com/Alligator and click on "Statewide Alligator Harvest Program."



SHOOTERS & HUNTERS: Help Prevent Wildfires.

The target shooting and hunting community prides itself on being safe and responsible with firearms in all situations—from using them outdoors to storing them safely at home. Sometimes, however, unusual conditions such as extremely dry environments require an extra level of awareness and safety on the part of shooters.

Wildfires have many possible causes. The National Shooting Sports Foundation, the trade association for the firearms and ammunition industry, reminds all shooters that during dry and hot weather conditions their use of certain ammunition and targets could accidentally ignite a wildfire. NSSF reminds all target shooters and hunters, as well as other outdoor enthusiasts, to consider the potential consequences of their activities in fireprone environments.



- Make it a point to know the regulations and rules related to shooting in areas experiencing dry and hot conditions, whether on public or private land or at shooting ranges. Many national forests, for example, do not allow recreational shooting when fire restrictions are in effect.
- Consider the type of ammunition and targets you are using. Minimize the risk of fires by not using steel-jacketed ammunition, ammunition with steel-core components, tracer rounds or exploding targets in fire-prone areas.
- Remember that equipment, such as cars and ATVs, can have extremely hot exhaust systems that could ignite dry vegetation, so park only in designated areas.
- Extinguish and dispose of smoking materials safely.
- Follow guidelines to extinguish campfires.
- Warn others of potential dangers and behaviors for starting wildfires.
- Report any wildfire you see to authorities.
- Spread this message to other target shooters, hunters and outdoor enthusiasts.



NSSF.ORG

HUNT FISH CAMP

at Florida State Forests

floridastateforests.reserveamerica.com

Florida Statewide Murder by Firearm, 1971 - 2018.

	Population	Total Murders	Murder Rate per 100,000	Total by Firearm	Total Handgun	Total Other Firearm	Total Percent by Firearms	Percent by Handguns	Percent by Other Firearms	Total by Firearm % change	Population % Change
1971	7,041,074	932	13.2	628	509	119	67.4	54.6	12.8		
1972	7,441,545	924	12.4	642	539	103	69.5	58.3	11.1	2.2	5.7
1973	7,845,092	1,182	15.1	769	637	132	65.1	53.9	11.2	19.8	5.4
1974	8,248,851	1,190	14.4	848	687	161	71.3	57.7	13.5	10.3	5.1
1975	8,485,230	1,132	13.3	747	616	131	66.0	54.4	11.6	-11.9	2.9
1976	8,551,814	902	10.5	575	466	109	63.7	51.7	12.1	-23.0	0.8
1977	8,717,334	857	9.8	507	415	92	59.2	48.4	10.7	-11.8	1.9
1978	8,967,206	949	10.6	542	437	105	57.1	46.0	11.1	6.9	2.9
1979	9,245,231	1,084	11.7	650	526	124	60.0	48.5	11.4	19.9	3.1
1980	9,579,497	1,387	14.5	839	702	137	60.5	50.6	9.9	29.1	3.6
1981	10,097,754	1,523	15.1	890	768	122	58.4	50.4	8.0	6.1	5.4
1982	10,375,332	1,410	13.6	807	678	129	57.2	48.1	9.1	-9.3	2.7
1983	10,591,701	1,203	11.4	571	483	88	47.5	40.1	7.3	-29.2	2.1
1984	10,930,389	1,264	11.6	585	486	99	46.3	38.4	7.8	2.5	3.2
1985	11,278,547	1,297	11.5	553	456	97	42.6	35.2	7.5	-5.5	3.2
1986	11,657,843	1,371	11.8	628	532	96	45.8	38.8	7.0	13.6	3.4
1987	12,043,608	1,368	11.4	697	569	128	51.0	41.6	9.4	11.0	3.3
1988	12,417,606										3.1
1989	12,797,318	1,405	11.0	888	700	188	63.2	49.8	13.4		3.1
1990	13,150,027	1,387	10.5	873	585	288	62.9	42.2	20.8	-1.7	2.8
1991	13,195,952	1,276	9.7	806	565	200	63.2	44.3	18.9	-7.7	0.3
1992	13,424,416	1,191	8.9	789	554	235	66.2	46.5	19.7	-2.1	1.7
1993	13,608,627	1,187	8.7	800	525	235	67.4	44.2	23.2	1.4	1.4
1993	13,878,905	1,152	8.3	739	525	222	64.1	44.9	19.3	-7.6	2.0
1995	14,149,317	1,030	7.3	687	460	227	66.7	44.7	22.0	-7.0	1.9
1996	14,411,563	1,077	7.5	668			62.0			-2.8	1.9
1997	14,712,922	1,014	6.9	634			62.5			-5.1	2.1
1998	15,000,475	966	6.4	589	392	197	61.0	40.6	20.4	-7.1	2.0
1999	15,322,040	856	5.6	460	347	113	53.7	40.5	13.2	-21.9	2.0
2000	15,982,378	890	5.6	499	366	133	56.1	41.1	14.9	8.5	4.3
2000	16,331,739	867	5.3	502	339	163	57.9	39.1	18.8	0.6	2.2
2001	16,674,608	906	5.4	552	392	160	60.9	43.3	17.7	10.0	2.2
2002	17,071,508	900	5.4	586	392	190	63.4	43.3	20.6	6.2	2.1
2003	17,516,732	946	5.4	555	330	214	58.7	36.0	20.0	-5.3	2.4
2004	17,918,227	881	4.9	521	321	200	59.1	36.4	22.0	-6.1	2.0
2005	18,349,132	1,129	6.2	740	450	200	65.5	39.9	25.7	42.0	2.3
2000	18,680,367	1,129	6.4	825	506	319	68.6	42.1	26.5	11.5	1.8
2007	18,807,219	1,168	6.2	780	456	319	66.8	39.0	20.5	-5.5	0.7
2008	18,750,483	1,017	5.4	695	430	283	68.3	40.5	27.8	-10.9	-0.3
2009	18,771,768	987	5.3	669	389	280	67.8	39.4	28.4	-10.9	0.1
2010	18,905,048	985	5.2	691	390	301	70.2	39.4	30.6	3.3	0.7
2011	19,074,434	1,009	5.3	722	358	364	71.6	35.5	36.1	4.5	0.7
2012	19,074,434	971	5.0	695	314	381	71.6	32.3	39.2	-3.7	1.0
2013	19,259,545	971	5.0	695	289	401	71.0	29.4	40.8	-3.7	1.0
2014	19,815,183	1,040	5.0	767	340	401	70.2	32.7	40.8	-0.7	1.5
2015	20,148,654	1,040	5.2	847	405	427	73.8	32.7	39.9	10.4	1.6
2016			5.5	791	405 379	442	76.4	36.6	39.9		1.7
2017	20,484,142 20,840,986	1,057 1,107	5.2	836	454	382	74.8	35.9 41.1	39.0 34.5	-6.6 4.7	1.7

-- Data not available

Note: This report incorporates updates and corrections received through April 2019.

* Figures include the Orlando Pulse nightclub shooting incident on June 12, 2016 where 49 persons were killed.

** Figures include the Marjory Stoneman Douglas High School Shooting incident on February 14, 2018 where 17 persons were killed.

SOURCE: Florida Department of Law Enforcement. (2019). Crime in Florida, 1971-2018. Florida uniform crime report [Computer program]. Tallahassee, FL: FDLE.

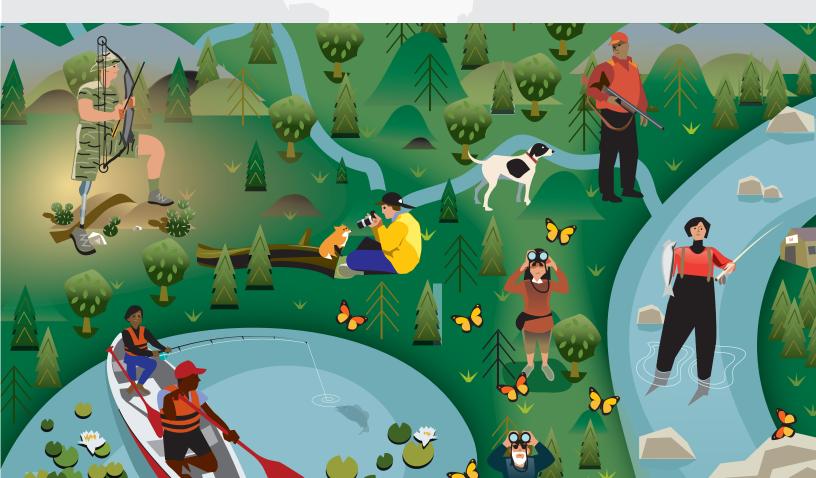
Tab 4

Reports

U.S. Fish & Wildlife Service

2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

Florida



2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation



Florida





U.S. Department of the Interior Sally Jewell, Secretar

U.S. Fish and Wildlife Service Dan Ashe, Director



U.S. Department of Commerce Penny Pritzker, Secretary

Economics and Statistics Administration Mark Doms, Under Secretary for Economic Affairs

U.S. CENSUS BUREAU John H. Thompson, Director



Economics and Statistics Administration Mark Doms, Under Secretary for Economic Affairs



U.S. CENSUS BUREAU John H. Thompson, Director



U.S. Department of the Interior Sally Jewell, Secretary



U.S. Fish and Wildlife Service Dan Ashe, Director



Wildlife and Sport Fish Restoration Hannibal Bolton, Assistant Director

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities. The mission of the Department's U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, and their habitats for the continuing benefit of the American people. The Service is responsible for national programs of vital importance to our natural resources, including administration of the Wildlife and Sport Fish Restoration Programs. These two programs provide financial assistance to the States for projects to enhance and protect fish and wildlife resources and to assure their availability to the public for recreational purposes. Multistate grants from these programs fund the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

Suggested Citation

U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

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Foreword

When I was growing up, it was taken as a matter of faith that kids belonged outside. I grew up with 4 brothers, and during those long, hot Atlanta summers, it was common for our mom to holler, "You boys get outside, and don't come back 'til it's dark." It never occurred to me or my brothers to do anything else in our spare time but explore the world around us. The truth is, we had little else to do. But those experiences - waking up on frosty mornings and starting the campfire, scanning trees for a shot at a scampering gray squirrel in the dawn light, scouring creek beds for crawdads and other fishing bait, or simply of the fun we had tramping through the forest - shaped who I am, and drew me to a career in conservation.

That's why I'm excited by this 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. This report, the 12th in a series that began in 1955, documents a significant resurgence in the number of people embracing America's Great Outdoors. Hunting participation has increased by 9 percent, while angling participation grew by 11 percent. Nearly 38 percent of Americans participated in wildliferelated recreation, an increase of 2.6 million participants from the 2006 Survey.

In addition, wildlife-related recreation is a major driver of the nation's economy. The 2011 Survey estimates that Americans spent \$145 billion on related gear, trips, licenses, land acquisition or leases, and other purchases, representing about one percent of the nation's gross domestic product. This spending creates thousands of jobs, supports countless local communities and provides vital funding for conservation. This year marks the 75th anniversary of the Wildlife and Sport Fish Restoration Program, a cornerstone of wildlife conservation in the United States. Through excise taxes on firearms, ammunition, archery and angling equipment, the U.S. Fish and Wildlife Service has distributed over \$14 billion for State and territorial wildlife conservation programs.

This report would not have been possible without the combined efforts of state wildlife agencies - which provided financial support through the Multi-State Conservation Grant Programs - the Association of Fish and Wildlife Agencies and a number of major national conservation organizations. We also owe our gratitude to the thousands of survey respondents from households across America. Because of you, this Survey is the nation's definitive wildlife-related recreation database and information source concerning participation and purchases associated with hunting, fishing and other forms of wildlife-associated recreation nationwide.

The Fish and Wildlife Service is dedicated to connecting people and families with nature. We are proud to celebrate the good news in this report, and we look forward to continuing progress as we work with the States, and all our partners and the public to help keep recreational fishing, hunting, and wildlife watching growing and going strong.

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Dan Ashe Director, U.S. Fish and Wildlife Service

Survey Background and Method

The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Survey) has been conducted since 1955 and is one of the oldest and most comprehensive continuing recreation surveys. The Survey collects information on the number of anglers, hunters, and wildlife watchers, how often they participate, and how much they spend on their activities in the United States.

Preparations for the 2011 Survey began in 2008 when the Association of Fish and Wildlife Agencies (AFWA) asked the Fish and Wildlife Service to coordinate the twelfth National Survey of wildlife-related recreation. Funding came from the Multistate Conservation Grant Programs, authorized by Wildlife and Sport Fish Restoration Acts, as amended.

Four regional technical committees were set up under the auspices of AFWA to ensure that State fish and wildlife agencies had an opportunity to participate in all phases of survey planning and design. The committees were made up of agency representatives.

We consulted with State and Federal agencies and nongovernmental organizations such as the American Sportfishing Association and National Shooting Sports Foundation to determine survey content. Other sportspersons' organizations and conservation groups, industry representatives, and researchers also provided valuable advice.

Data collection for the Survey was carried out in two phases by the U.S. Census Bureau. The first phase was the screen which began in April 2011. During the screening phase, the Census Bureau interviewed a sample of 48,600 households nationwide, to determine who in the household had fished, hunted, or wildlife watched in 2010, and who had engaged or planned to engage in those activities in 2011. In most cases, one adult household member provided information for all members. The screen primarily covered 2010 activities while the next, more in-depth phase covered 2011 activities. For more information on the 2010 data, refer to Appendix B.

The second phase of data collection consisted of three detailed interview waves. The first wave began in April 2011 concurrent with the screen, the second in September 2011, and the last in January 2012. Interviews were conducted with samples of likely anglers, hunters, and wildlife watchers who were identified in the initial screening phase. Interviews were conducted primarily by telephone, with in-person interviews for respondents who could not be reached by phone. Respondents in the second survey phase were limited to those who were at least 16 years old. Each respondent provided information pertaining only to his or her activities and expenditures. Sample sizes were designed to provide statistically reliable results at the state level. Altogether, interviews were completed for 11,330 anglers and hunters and 9,329 wildlife watchers. More detailed information on sampling procedures and response rates is found in Appendix D.

Comparability With Previous Surveys

The 2011 Survey's questions and methodology were similar to those used in the 2006, 2001, 1996, and 1991 Surveys. Therefore, the estimates are comparable.

The methodology for these Surveys differs significantly from the 1955 to 1985 Surveys, so these estimates are not directly comparable to those of earlier surveys. Changes in methodology included reducing the recall period over which respondents had to report their activities and expenditures. Previous Surveys used a 12-month recall period which resulted in greater reporting bias. Research found that the amount of activity and expenditures reported in 12-month recall surveys was overestimated in comparison with that reported using shorter recall periods.

Highlights

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Introduction

The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation reports results from interviews with U.S. residents about their fishing, hunting, and wildlife watching. This report focuses on 2011 participation and expenditures of persons 16 years of age and older.

The Survey is a snapshot of one year. The information it collected tells us how many people participated and how much they spent on their activities in the State in 2011. It does not tell us how many anglers, hunters, and wildlife watchers there were because many do not participate every year. For example, based on information collected in the Survey's household screen phase, we can estimate that about 51 percent more anglers and 44 percent more hunters participated nationally in at least 1 of the 5 years prior to the screen survey year 2010.

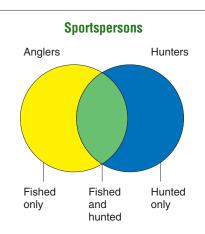
In addition to 2011 estimates, we also provide trend information in the Highlights section and Appendix C of the report. The 2011 numbers reported can be compared with those in the 1991, 1996, 2001, and 2006 Survey reports because they used similar methodologies. The 2011 estimates should not be directly compared with results from Surveys conducted prior to 1991 because of changes in methodology to improve accuracy.

The report also provides information on participation in wildlife recreation in 2010, particularly of persons 6 to 15 years of age. The 2010 information is provided in Appendix B. Information about the Survey's scope and coverage is in Appendix D. The remainder of this section defines important terms used in the Survey. This report does not provide information about the State's wildlife resources. That, and additional information on wildlife-related recreation, may be obtained from State fish and wildlife agencies. The Association of Fish and Wildlife Agencies can provide the addresses and telephone numbers of those agencies. The Association's website is www.fishwildlife.org.

Additionally, this report does not provide information about the State's number of licensed anglers and hunters. Historical license data can be found at wsfrprograms.fws.gov.

Wildlife-Related Recreation

Wildlife-related recreation is fishing, hunting, and wildlife-watching activities. These categories are not mutually exclusive because many individuals participated in more than one activity. Wildlife-related recreation is reported in two major categories: (1) fishing and hunting, and (2) wildlife watching, which includes observing, photographing, and feeding fish or wildlife.



Fishing and Hunting

This Survey reports information about residents of the United States who fished or hunted in 2011, regardless of whether they were licensed. The fishing and hunting sections report information for three groups: (1) sportspersons, (2) anglers, and (3) hunters.

Sportspersons

Sportspersons are those who fished or hunted. Individuals who fished or hunted commercially in 2011 are reported as sportspersons *only* if they also fished or hunted for recreation. The sportspersons group is composed of the three subgroups shown in the diagram below: (1) those that fished and hunted, (2) those that only fished, and (3) those that only hunted.

The total number of sportspersons is equal to the sum of people who only fished, only hunted, and both hunted and fished. It is not the sum of all anglers and all hunters because those people who both fished and hunted are included in both the angler and hunter population and would be incorrectly counted twice.

Anglers

Anglers are sportspersons who only fished plus those who fished and hunted. Anglers include not only licensed hook and line anglers, but also those who have no license and those who use special methods such as fishing with spears. Three types of fishing are reported: (1) freshwater, excluding the Great Lakes, (2) Great Lakes, and (3) saltwater. Since many anglers participated in more than one type of fishing, the total number of anglers is less than the sum of the three types of fishing.

Hunters

Hunters are sportspersons who only hunted plus those who hunted and fished. Hunters include not only licensed hunters using rifles and shotguns, but also those who have no license and those who engage in hunting with archery equipment, muzzleloaders, other primitive firearms, or pistols or handguns.

Four types of hunting are reported: (1) big game, (2) small game, (3) migratory bird, and (4) other animals. Since many hunters participated in more than one type of hunting, the sum of hunters for big game, small game, migratory bird, and other animals exceeds the total number of hunters.

Wildlife Watchers

Since 1980, the National Survey has included information on wildlifewatching activities in addition to fishing and hunting. However, unlike the 1980 and 1985 Surveys, the National Surveys since 1991 have collected data only for those activities where the *primary* purpose was wildlife watching (observing, photographing, or feeding wildlife).

The 2011 Survey uses a strict definition of wildlife watching. Participants must either take a "special interest" in wildlife around their homes or take a trip for the "primary purpose" of wildlife watching. Secondary wildlife watching, such as incidentally observing wildlife while pleasure driving, is not included.

Two types of wildlife-watching activity are reported: (1) away-from-home (formerly nonresidential) activities and (2) around-the-home (formerly residential) activities. Because some people participated in more than one type of wildlife watching, the sum of participants in each type will be greater than the total number of wildlife watchers. Only those engaged in activities whose *primary* purpose was wildlife watching are included in the Survey. The two types of wildlife-watching activity are defined below.

Away-From-Home

This group includes persons who took trips or outings of at least 1 mile from home for the primary purpose of observing, feeding, or photographing fish and wildlife. Trips to fish or hunt or scout and trips to zoos, circuses, aquariums, and museums are not considered wildlife-watching activities.

Around-The-Home

This group includes those who participated within 1 mile of home and involves one or more of the following: (1) closely observing or trying to identify birds or other wildlife; (2) photographing wildlife; (3) feeding birds or other wildlife; (4) maintaining natural areas of at least 1/4 acre where benefit to wildlife is the primary concern; (5) maintaining plantings (shrubs, agricultural crops, etc.) where benefit to wildlife is the primary concern; or (6) visiting parks and natural areas within 1 mile of home for the primary purpose of observing, feeding, or photographing wildlife.

2011 Florida Summary

Activities in Florida by Residents and Nonresidents

Fishing

Anglers	3,092,000
Days of fishing	
Average days per angler	19
Total expenditures	\$4,629,202,000
Trip-related	\$2,801,636,000
Equipment and other	\$1,827,566,000
Average per angler	\$1,480
Average trip expenditure per day	\$49

Hunting

Hunters	242,000
Days of hunting	5,252,000
Average days per hunter	22
Total expenditures	\$715,733,000
Trip-related	\$280,965,000
Equipment and other	\$434,768,000
Average per hunter	\$2,824
Average trip expenditure per day	\$53

Wildlife Watching

Total wildlife-watching participants.	4,308,000
Away-from-home participants	1,902,000
Around-the-home participants	3,312,000
Days of participation away from home.	16,786,000
Average days of participation	
away from home	9
Total expenditures	\$3,041,334,000
Trip-related	\$1,732,652,000
Equipment and other	\$1,308,682,000
Average per participant	\$668
Average trip expenditure per day	\$103

Activities by Florida Residents Both Inside and Outside Florida

Fishing

Anglers	1,991,000
Days of fishing	
Average days per angler	25
Total expenditures	
Trip-related	
Equipment and other	
Average per angler	
Average trip expenditure per day	\$43

Hunting

Hunters	329,000
Days of hunting	6,693,000
Average days per hunter	20
Total expenditures	\$1,034,465,000
Trip-related	\$490,798,000
Equipment and other	\$543,667,000
Average per hunter	\$3,140
Average trip expenditure per day	

Wildlife Watching

Total wildlife-watching participants .	3,598,000
Away-from-home participants	1,363,000
Around-the-home participants	3,312,000
Days of participation away from home.	11,866,000
Average days of participation	
away from home	9
Total expenditures	\$2,614,452,000
Trip-related	\$1,206,226,000
Equipment and other	
Average per participant	\$727
Average trip expenditure per day	\$102

Wildlife-Related Recreation

Participation in Florida

The 2011 Survey found that 6.4 million Florida residents and nonresidents 16 years old and older fished, hunted, or wildlife watched in Florida. Of the total number of participants, 3.1 million fished, 242 thousand hunted, and 4.3 million participated in wildlife-watching activities, which includes observing, feeding, and photographing wildlife. The sum of anglers, hunters, and wildlife watchers exceeds the total number of participants in wildlife-related recreation because many of the individuals engaged in more than one wildlife-related activity.

Participation in 2011 by 6- to 15-Year-Old Florida Residents

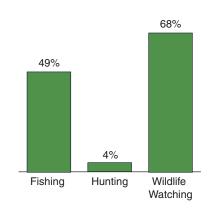
The focus of the National Survey is on the activity of participants 16 years old and older. However, the activity of 6- to 15-year-olds can be calculated using the screening data covering the year 2010. It is assumed for estimation purposes that the proportion of 6- to 15-year-old participants to participants 16 years old and older remained the same in 2010 and 2011. Based on this assumption, in addition to the 2.0 million resident anglers 16 years old or older in Florida, there were 464 thousand resident anglers 6 to 15 years old. Also, there were 329 thousand Floridians 16 years old and older and 41 thousand Floridians 6 to 15 years old who hunted. Finally, there were 3.6 million Floridians 16 years old and older and 571 thousand Floridians 6 to 15 years old who wildlife watched. Information on 2010 data for 6- to 15-yearolds is provided in Appendix B.

Expenditures in Florida

In 2011, state residents and nonresidents spent \$9.0 billion on wildlife recreation in Florida. Of that total, trip-related expenditures were \$4.8 billion and equipment expenditures totaled \$2.7 billion. The remaining \$1.5 billion was spent on licenses, contributions, land ownership and leasing, and other items.

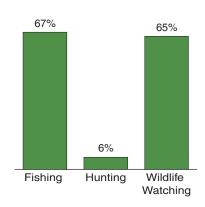
Percent of Total Participants by Activity

(Total: 6.4 million participants)

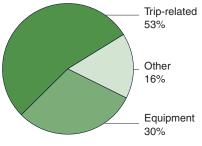


Percent of Total Residential Participants 6 to 15 Years Old by Activity: 2010

(Total: 990 thousand participants)







Participants in Wildlife-Related Recreation in Florida: 2 (U.S. residents 16 years old and older)	2011
Total	6.4 million
Sportspersons Total Anglers . Hunters .	3.2 million 3.1 million 242 thousand
Wildlife Watchers Total Away from home Around the home	4.3 million 1.9 million 3.3 million
Note: Detail does not add to total because of multiple responses. Source: Tables 1 and 24.	

Sportspersons

In 2011, 3.2 million state resident and nonresident sportspersons 16 years old and older fished or hunted in Florida. This group was comprised of 3.1 million anglers (98 percent of all sportspersons) and 242 thousand hunters (8 percent of all sportspersons). Among the 3.2 million sportspersons who fished or hunted in the state, 2.9 million (92 percent) fished but did not hunt in Florida. Another 60 thousand (2 percent) hunted but did not fish there. The remaining 181 thousand (6 percent) fished and hunted in Florida in 2011.

Sportspersons' Participation in Florida

 (State residents and nonresidents 16 years old and older)

 Sportspersons (fished or hunted)
 3.2 million

 Anglers
 3.1 million

 Fished only
 2.9 million

 Fished and hunted
 181 thousand

Fished and hunted	181 thousand
Hunters. Hunted only Hunted and fished.	60 thousand

Note: Detail does not add to total because of multiple responses.

Source: Table 1.

Anglers

Participants and Days of Fishing

In 2011, 3.1 million state residents and nonresidents 16 years old and older fished in Florida. Of this total, 1.9 million anglers (61 percent) were state residents and 1.2 million anglers (39 percent) were nonresidents. Anglers fished a total of 57.6 million days in Florida—an average of 19 days per angler. State residents fished 48.1 million days—83 percent of all fishing days in Florida. Nonresidents fished 9.5 million days in Florida—17 percent of all fishing days in the state.

A large majority of Florida residents who fished anywhere in the United States did so in their resident state. There were 2.0 million Florida residents 16 years old and older who fished in the United States in 2011 for a total of 49.5 million days. An estimated 95 percent of all Florida residents who fished did so in their home state. Of all fishing days by Florida residents, 97 percent or 48.1 million were in their home state. For further details about fishing in Florida, see Table 3.

Anglers in Florida

(State residents and nonresidents 16 years old and older)

Anglers. Residents Nonresidents.	
Days of fishing	57.6 million 48.1 million 9.5 million
Source: Table 3.	

In State/Out of State

(State residents 16 years old and older)

Florida anglers In Florida In other states .	
Days of fishing In Florida In other states	48.1 million

Note: Detail does not add to total because of multiple responses. Source: Table 3.

Fishing Expenditures in Florida

All fishing-related expenditures in Florida totaled \$4.6 billion in 2011. Trip-related expenditures, including food and lodging, transportation, and other expenses totaled \$2.8 billion-61 percent of all fishing expenditures. Expenditures for food and lodging were \$900 million and transportation expenditures were \$564 million. Other trip expenses, such as equipment rental, bait, and cooking fuel, totaled \$1.3 billion. Each angler spent an average of \$906 on trip-related costs during 2011.

Anglers spent \$1.1 billion on equipment in Florida in 2011, 23 percent of all fishing expenditures. Fishing equipment (rods, reels, lines, etc.) spending totaled \$600 million-55 percent of the equipment total. Auxiliary equipment expenditures (tents, special fishing clothing, etc.) and special equipment expenditures (boats, vans, etc.) amounted to \$485 million-45 percent of the equipment total. Expenditures classified as special and auxiliary equipment are on items that were purchased for fishing but could be used in activities other than fishing.

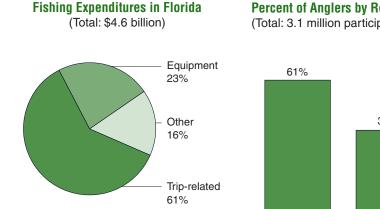
The purchase of other items, such as magazines, membership dues, licenses, permits, stamps, and land leasing and ownership, amounted to \$742 million—16 percent of all fishing expenditures. For more details about fishing expenditures in Florida, see Tables 19 and 21 through 23.

Fishing Expenditures in Florida

(State residents and nonresidents 16 years old and older)

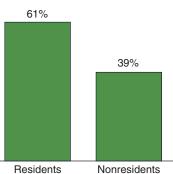
Total	\$4.6 billion
Trip-related	\$2.8 billion
Equipment	\$1.1 billion
Fishing	\$600 million
Auxiliary and special	\$485 million
Other.	\$742 million

Source: Table 19.



Percent of Anglers by Residence

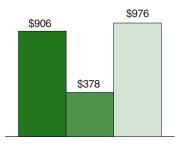
(Total: 3.1 million participants)



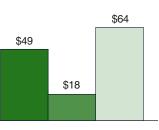
Comparative Fishing Expenditures by Type of Fishing







Trip expenditures per day:



Hunters

Participants and Days of Hunting

In 2011, there were 242 thousand residents and nonresidents 16 years old and older who hunted in Florida. Resident hunters numbered 215 thousand, accounting for 89 percent of the hunters in Florida. Residents and nonresidents hunted 5.3 million days in 2011, an average of 22 days per hunter. Residents hunted 5.0 million days in Florida or 95 percent of all hunting days.

There were 329 thousand Florida residents 16 years old and older who hunted in the United States in 2011 for a total of 6.7 million days. An estimated 65 percent of all Florida residents who hunted did so in their home state. Of all hunting days by Florida residents, 74 percent or 5.0 million were spent pursuing game in their home state. For further information on hunting activities by Florida residents, see Table 3.

Hunters in Florida

(State residents and nonresidents 16 years old and older)

Hunters. Residents Nonresidents.	215 thousand
Days of hunting Residents Nonresidents.	5.0 million
Sample size too small (less than 10) to report data reliably. Source: Table 3.	

In State/Out of State

(State residents 16 years old and older)

Florida hunters In Florida In other states	215 thousand
Days of hunting	
In Florida	
In other states	1.7 million

Note: Detail does not add to total because of multiple responses. Source: Table 3.

Hunting Expenditures in Florida

All hunting-related expenditures in Florida totaled \$716 million in 2011. Trip-related expenses, such as food and lodging, transportation, and other trip expenses, totaled \$281 million—39 percent of total expenditures. Expenditures for food and lodging were \$76 million and transportation expenditures were \$126 million. Other trip expenses, such as equipment rental, totaled \$79 million for the year. The average trip-related expenditure per hunter was \$1,152.

Hunters spent \$220 million on equipment—31 percent of all hunting expenditures. Hunting equipment (guns, ammunition, etc.) totaled \$185 million and made up 84 percent of all equipment costs. Hunters spent \$35 million on auxiliary equipment (tents, special hunting clothes, etc.) and special equipment (boats, vans, etc.), accounting for 16 percent of total equipment expenditures for hunting. Expenditures classified as special and auxiliary equipment are on items that were purchased for hunting but could be used in activities other than hunting.

The purchase of other items, such as magazines, membership dues, licenses, permits, and land leasing, and ownership, cost hunters \$215 million—30 percent of all hunting expenditures. For more details on hunting expenditures in Florida, see Tables 20 through 23.

Hunting Expenditures in Florida

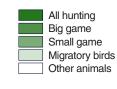
(State residents and nonresidents 16 years old and older)

Total	\$716 million
Trip-related	\$281 million
Equipment	\$220 million
Hunting	\$185 million
Auxiliary and special	\$35 million
Other	\$215 million

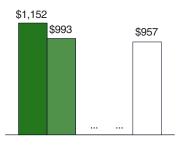
Source: Table 20.



Comparative Hunting Expenditures by Type of Hunting



Trip expenditures per hunter:



Trip expenditures per day:



... Sample size too small (less than 10) to report data reliably.

Wildlife Watchers

Participants and Days of Activity

In 2011, 4.3 million U.S. residents 16 years old and older fed, observed, or photographed wildlife in Florida. Most of them, 77 percent (3.3 million), enjoyed their activities close to home and are called "around-the-home" participants. Those persons who enjoyed wildlife at least one mile from home are called "away-from-home" participants. People participating in away-from-home activities in Florida in 2011 numbered 1.9 million—44 percent of all wildlife watchers in Florida. Of the 1.9 million, 1.1 million were state residents and 825 thousand were nonresidents.

Wildlife-Watching Participants in Florida

(State residents and nonresidents 16 years old and older)

Total	4.3 million
Around the home	3.3 million
Away from home	1.9 million

Note: Detail does not add to total because of multiple responses. Source: Table 24.

Away-From-Home Wildlife-Watching Participation in Florida (State residents and nonresidents 16 years old and older)

Participants, total	1.7 million 1.3 million
Days, total	160
Days, total	16.8 million
Observe wildlife	13.7 million
Observe wildlife	13.7 million 8.7 million

Note: Detail does not add to total because of multiple responses. Source: Table 25.

Around-The-Home Wildlife-Watching Participation in Florida (State residents 16 years old and older)

Total	3.3 million
Feed wildlife.	2.4 million
Observe wildlife	2.0 million
Photograph wildlife	
Maintain natural areas	328 thousand
Maintain plantings	418 thousand
Visit parks and natural areas	

Note: Detail does not add to total because of multiple responses. Source: Table 27. Floridians 16 years old and older who enjoyed away-from-home wildlife watching within their state totaled 1.1 million. Of this group, 957 thousand participants observed, 639 thousand photographed, and 246 thousand fed wildlife. Since some individuals engaged in more than one of the awayfrom-home activities during the year, the sum of wildlife observers, feeders, and photographers exceeds the total number away-from-home participants.

Floridians spent 8.3 million days engaged in away-from-home wildlifewatching activities in their state. For further details about away-from-home activities, see Table 25.

Florida residents also took an active interest in wildlife around their homes. In 2011, 3.3 million state residents enjoyed observing, feeding, and photographing wildlife within one mile of their homes. Among this around-the-home group, 2.4 million fed, 2.0 million observed, and 1.2 million photographed wildlife around their homes. Another 328 thousand participants maintained natural areas of one-quarter acre or more for wildlife; 418 thousand participants maintained plantings for the benefit of wildlife; and 658 thousand participants visited parks or natural areas within a mile of home because of the wildlife. Summing the number of participants in these six activities results in an estimate that exceeds the total number of around-thehome participants because many people participated in more than one type of around-the-home activity. In addition, 33 percent of Floridian around-thehome wildlife watchers also enjoyed wildlife away from home. For further details about Florida residents participating in around-the-home wildlifewatching activities, see Table 27.

Wild Bird Observers

Bird watching attracted many wildlife enthusiasts in Florida. In 2011, 3.0 million people observed birds around the home and on trips in the state. A majority, 64 percent (1.9 million), observed wild birds around the home while 54 percent (1.6 million) took trips away from home to watch birds.

Wildlife-Watching Expenditures in Florida

Wildlife watchers spent \$3.0 billion on wildlife-watching activities in Florida in 2011. Trip-related expenditures, including food and lodging (\$890 million), transportation (\$620 million), and other trip expenses (\$223 million), such as equipment rental, amounted to \$1.7 billion. This summation comprised 57 percent of all wildlife-watching expenditures by participants. The average of the trip-related expenditures for away-from-home participants was \$887 per person in 2011.

Wildlife-watching participants spent \$788 million on equipment—26 percent of all their expenditures. Specifically, wildlife-watching equipment (binoculars, special clothing, etc.) expenditures totaled \$476 million, 60 percent of the equipment total. Auxiliary equipment expenditures (tents, backpacking equipment, etc.) and special equipment expenditures (campers, trucks, etc.) amounted to \$313 million-40 percent of all equipment costs. Expenditures classified as special and auxiliary equipment are on items that were purchased for wildlife-watching recreation but could be used in activities other than wildlife watching.

Other items purchased by wildlifewatching participants, such as magazines, membership dues and contributions, land leasing and ownership, and plantings, totaled \$520 million—17 percent of all wildlife-watching expenditures. For more details about wildlifewatching expenditures in Florida, see Table 31.

Wild Bird Observers in Florida

(State residents and nonresidents 16 years old and older)

Participants, total Around the home Away from home	
Days, total	

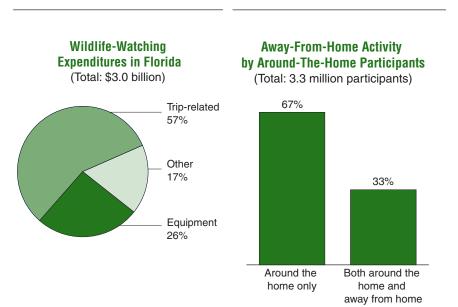
Note: Detail does not add to total because of multiple responses. Source: Table 29.

Wildlife-Watching Expenditures in Florida

(State residents and nonresidents 16 years old and older)

Total	\$3.0 billion
Trip-related	\$1.7 billion
Equipment	\$788 million
Wildlife watching.	\$476 million
Auxiliary and special	\$313 million
Other	\$520 million

Source: Table 31.



2001–2011 Comparison

Comparing the estimates from the 2001, 2006, and 2011 Surveys gives a perspective on the state of wildlife-related recreation in the early twenty-first century in Florida. Only the most general recreation comparisons are presented here.

The best way to compare estimates from surveys is not to compare the estimates themselves but to compare the confidence intervals around the estimates. A 90-percent confidence interval around the estimate gives the range of estimates that 90 percent of all possible representative samples would supply. If the 90-percent confidence intervals of the two surveys' estimates overlap, it is not possible to say the two estimates are statistically different.

The state resident estimates cover the participation and expenditure activity of Florida residents anywhere in the United States. The in-state estimates cover the participation, day, and expenditure activity if U.S. residents in Florida.

The expenditure estimates were made comparable by adjusting the estimates for inflation—all estimates are in 2011 dollars.

Florida 2001 and 2011 Comparison

(Numbers in thousands. Expenditures in 2011 dollars)

2001	2011	Percent change
Fishing		
Anglers in state	3,092	0
Days in state	57,594	^{NS} 19
In-state expenditures by U.S. anglers \$5,186,437	\$4,629,202	^{NS} -11
State resident anglers	1,991	^{NS} -6
Total expenditures by state residents \$4,352,455	\$3,815,000	^{NS} -12
Hunting		
Hunters in state	242	^{NS} 7
Days in state	5,252	^{NS} 12
In-state expenditures by U.S. hunters \$500,720	\$715,733	^{NS} 43
State resident hunters	329	^{NS} 22
Total expenditures by state residents \$693,014	\$1,034,465	^{NS} 49
Away-From-Home Wildlife Watching		
Participants in state 1,503	1,902	^{NS} 27
Days in state	16,786	^{NS} -22
State resident participants 1,279	1,363	^{NS} 7
Around-The-Home Wildlife Watching		
Total participants	3,312	26
Observers	2,036	^{NS} 22
Feeders 2,092	2,374	^{NS} 13
Wildlife-Watching Expenditures		
In-state expenditures by U.S. wildlife watchers \$2,001,057	\$3,041,334	52
Total expenditures by state residents \$1,834,086	\$2,614,452	^{NS} 43

^{NS} Not different from zero at the 10 percent level of significance.

Florida 2006 and 2011 Comparison

(Numbers in thousands. Expenditures in 2011 dollars)

2006	2011	Percent change
Fishing		
Anglers in state	3,092	^{NS} 12
Days in state	57,594	^{NS} 24
In-state expenditures by U.S. anglers \$4,807,383	\$4,629,202	^{NS} _4
State resident anglers 1,950	1,991	^{NS} 2
Total expenditures by state residents \$4,037,408	\$3,815,000	^{NS} —6
Hunting		
Hunters in state	242	^{NS} 3
Days in state	5,252	^{NS} 39
In-state expenditures by U.S. hunters \$421,084	\$715,733	^{NS} 70
State resident hunters	329	^{NS} 1
Total expenditures by state residents\$971,155	\$1,034,465	^{NS} 7
Away-From-Home Wildlife Watching		
Participants in state	1,902	^{NS} 22
Days in state	16,786	^{NS} 1
State resident participants 988	1,363	38
Around-The-Home Wildlife Watching		
Total participants	3,312	^{NS} 1
Observers	2,036	^{NS} -14
Feeders	2,374	^{NS} _4
Wildlife-Watching Expenditures		
In-state expenditures by U.S. wildlife watchers \$3,438,237	\$3,041,334	^{NS} -12
Total expenditures by state residents	\$2,614,452	^{NS} -28
NS Not different from zero at the 10 percent level of significance		

^{NS} Not different from zero at the 10 percent level of significance.

Anglers

Hunters

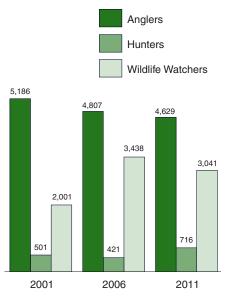
Number of People Who Hunted and Fished in Florida: 2001–2011 (In thousands)

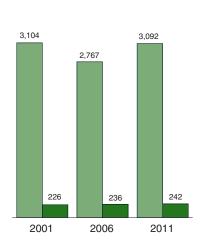
Number of People Who Wildlife Watched in Florida: 2001–2011 (In thousands)

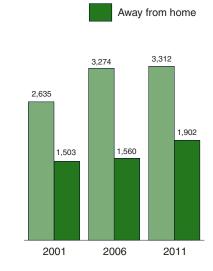
Around the home

Total Expenditures by Participants in Florida

(In millions of 2011 dollars)







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Guide to Statistical Tables

Purpose and Coverage of Tables

The statistical tables of this report were designed to meet a wide range of needs for those interested in wildlife-related recreation. Special terms used in these tables are defined in Appendix A.

The tables are based on responses to the 2011 Survey, which was designed to collect data about participation in wildlife-related recreation. To have taken part in the Survey, a respondent must have been a U.S. resident (a resident of one of the 50 states or the District of Columbia). No one residing outside the United States (including U.S. citizens) was eligible for interviewing. Therefore, reported state and national totals do not include participation by those who were not U.S. residents or who were U.S. citizens residing outside the United States.

Comparability With Previous Surveys

The numbers reported can be compared with those in the 1991, 1996, 2001, and 2006 Survey Reports. The methodology used in 2011 was similar to that used in those Surveys. These results should not be directly compared to results from Surveys earlier than 1991 since there were major changes in methodology. These changes were made to improve accuracy in the information provided.

Coverage of an Individual Table

Since the Survey covers many activities in various places by participants of different ages, all table titles, headnotes, stubs, and footnotes are designed to identify and articulate each item being reported in the table. For example, the title of Table 2 shows that data about anglers and hunters, their days of participation, and their number of trips are reported by type of activity. By contrast, the title of Table 7 indicates that it contains data on freshwater anglers and the days they fished for different species.

Percentages Reported in the Tables

Percentages are reported in the tables for the convenience of the user. When exclusive groups are being reported, the base of a percentage is apparent from its context because the percents add to 100 percent (plus or minus a rounding error). For example, Table 2 reports the number of trips taken by big game hunters, those taken by small game hunters, those taken by migratory bird hunters, and those taken by hunters pursuing other animals. These comprise 100 percent because they are exclusive categories.

Percents should not add to 100 when nonexclusive groups are being reported. Using Table 2 as an example again, note that adding the percentages associated with the total number of big game hunters, total small game hunters, total migratory bird hunters, and total hunters of other animals will not yield total hunters because respondents could hunt for more than one type of game.

When the base of the percentage is not apparent in context, it is identified in a footnote. For example, Table 15 reports two percentages with different bases: one base being the number of total participants at the head of the column and the other base being the total population who are described by the row category. Footnotes are used to clarify the bases of the reported percentages.

Footnotes to the Tables

Footnotes are used to clarify the information or items that are being reported in a table. Symbols in the body of a table indicate important footnotes. The following symbols are used in the tables to refer to the same footnote each time they appear:

- * Estimate based on a sample size of 10–29.
- ... Sample size too small to report data reliably.

- Z Less than 0.5 percent.X Not applicable.
- NA Not available.

Estimates based upon fewer than ten responses are regarded as being based on a sample size that is too small for reliable reporting. An estimate based upon at least 10 but fewer than 30 responses is treated as an estimate based on a small sample size. Other footnotes appear, as necessary, to qualify or clarify the estimates reported in the tables. In addition, these two important footnotes appear frequently:

- Detail does not add to total because of multiple responses.
- Detail does not add to total because of multiple responses and nonresponse.

"Multiple responses" is a term used to reflect the fact that individuals or their characteristics fall into more than one category. Using Table 5 as an example, those who fished in saltwater and freshwater appear in both of these totals. Yet each angler is represented only once in the "Total, all fishing" row. Similarly, in Table 12, those who hunt for big game and small game are counted only once as a hunter in the "Total, all hunting" row. Therefore, totals will be smaller than the sum of subcategories when multiple responses exist.

"Nonresponse" exists because the Survey questions were answered voluntarily, and some respondents did not or could not answer all the questions.

Table 1. Fishing and Hunting in Florida by Resident and Nonresident Sportspersons: 2011

(Population 16 years old and older. Numbers in thousands)

	Total, state residents and nonresidents		State re	sidents	Nonresidents		
Sportspersons	Number	Percent of sportspersons	Percent of resident Number sportspersons		Number	Percent of nonresident sportspersons	
Total sportspersons (fished or hunted)	3,152	100	1,937	100	1,215	100	
Total anglers Fished only Fished and hunted		98 92 *6	1,895 1,722 *173	98 89 *9	1,197 1,188 	99 98 	
Total hunters Hunted only. Hunted and fished .	242 *60 *181	8 *2 *6	215 *42 *173	11 *2 *9	 	 	

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

Note: Detail does not add to total because of multiple responses.

Table 2. Anglers and Hunters, Days of Participation, and Trips in Florida by Type of Fishing and Hunting: 2011

(Population 16 years old and older. Numbers in thousands)

Turne of fiching and hundring	Participan	ts	Days of par	rticipation	Trips	
Type of fishing and hunting	Number	Percent	Number	Percent	Number	Percent
FISHING						
Total, all fishing Total, all freshwater Freshwater, except Great Lakes Great Lakes Saltwater	3,092 1,214 1,214 (X) 2,398	100 39 39 (X) 78	57,594 25,729 25,729 (X) 36,348	100 45 45 (X) 63	47,781 18,182 18,182 (X) 29,600	100 38 38 (X) 62
HUNTING	2,000	10	50,510		27,000	02
Total, all hunting Big game Small game Migratory birds Other animals	242 187 *77	100 77 *32	5,252 4,051 *1,538	100 77 *29	4,543 3,002 *1,308	100 66 *29

(X) Not applicable.

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

Table 3. Anglers and Hunters, Trips, and Days of Participation: 2011

(Population 16 years old and older. Numbers in thousands)

		Activity in Florida						Activity by Florida residents in United States				3
Anglers and hunters, trips and days of participation	Total, residen nonres	ts and	State res	sidents	Nonres	idents	Total, in residence other s	e and in	In sta reside		In other	states
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
FISHING												
Total anglers	3,092 47,781 57,594 19	100 100 100 (X)	1,895 43,074 48,050 25	61 90 83 (X)	1,197 4,707 9,544 8	39 10 17 (X)	1,991 44,548 49,500 25	100 100 100 (X)	1,895 43,074 48,050 25	95 97 97 (X)	*149 *1,474 *1,450 *10	*8 *3 (X)
HUNTING												
Total hunters	242 4,543 5,252 22	100 100 100 (X)	215 4,433 4,969 23	89 98 95 (X)	··· ··· ···	 (X)	329 5,328 6,693 20	100 100 100 (X)	215 4,433 4,969 23	65 83 74 (X)	*146 *895 *1,724 *12	*44 *17 *26 (X)

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably. (X

(X) Not applicable.

Note: Detail does not add to total because of multiple responses.

Table 4. Florida Resident Anglers and Hunters by Place Fished or Hunted: 2011

(Population 16 years old and older. Numbers in thousands)

Place fished or hunted	Ang	lers	Hunters		
Place listed of numed	Number	Percent	Number	Percent	
Total, all places In-state only In-state and other states. In other states only	1,991 1,832 *62 *87	100 92 *3 *4	329 174 *105	100 53 *32	

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 5. Florida Resident Anglers and Hunters, Days of Participation, and Trips in the United States by Type of Fishing and Hunting: 2011

(Population 16 years old and older. Numbers in thousands)

True of Cohine and hunting	Partici	pants	Days of pa	rticipation	Trips		
Type of fishing and hunting	Number	Percent	Number	Percent	Number	Percent	
FISHING							
Total, all fishing	1,991	100	49,500	100	44,548	100	
Total, all freshwater Freshwater, except Great Lakes Great Lakes	1,029 1,025	52 51	22,204 22,197	45 45	18,788 18,767	42 42	
Saltwater	1,406	71	31,907	64	25,760	58	
HUNTING							
Total, all hunting	329	100	6,693	100	5,328	100	
Big game	267	81	5,366	80	3,636	68	
Small game	*63	*19	*287	*4	*169	*3	
Other animals	*77	*23	*1,781	*27	*1,416	*27	

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

Table 6. Freshwater Anglers, Trips, Days of Fishing, and Type of Water Fished: 2011

(Population 16 years old and older. Numbers in thousands)

	Activity in Florida								
Anglers, trips, and days of fishing	Total, state and nonrea		State re	sidents	Nonresidents				
	Number	Percent	Number	Percent	Number	Percent			
Total anglers Total trips. Total days of fishing Average days of fishing.	25,729	100 100 100 (X)	956 17,686 21,001 22	79 97 82 (X)	258 496 4,728 18	21 3 18 (X)			
ANGLERS									
Total, all types of water Ponds, lakes, or reservoirs Rivers or streams.		100 100 100	956 744 449	79 82 84	258 *165 *88	21 *18 *16			
DAYS									
Total, all types of water Ponds, lakes, or reservoirs Rivers or streams.	25,729 18,624 12,233	100 100 100	21,001 15,977 10,062	82 86 82	4,728 *2,647 *2,171	18 *14 *18			

* Estimate based on a sample size of 10–29. (X) Not applicable.

Note: Detail does not add to total because of multiple responses.

Table 7. Freshwater Anglers and Days of Fishing in Florida by Type of Fish: 2011

(Population 16 years old and older. Numbers in thousands)

	Activity in Florida									
Anglers and days of fishing	Total, state	residents and no	nresidents	State res	sidents	Nonresidents				
August and days of fishing	Number	Percent of total types	Percent of anglers/days	Number	Percent of anglers/days	Number	Percent of anglers/days			
ANGLERS										
Total, all types of fish	1,214	100	100	956	79	258	21			
Crappie	223 420	18 35	100 100	*185 376	*83 89					
White bass, striped bass, striped bass hybrids	244 756	20	100	*225	*92 80	*151	*20			
Black bass	/56 243	62 20	100	605 240	80 99	*151	*20			
Walleye, sauger Northern pike, pickerel, muskie, muskie hybrids										
Steelhead.										
Salmon										
Anything ¹ Other freshwater fish	272 *179	22 *15	100 *100	202 *178	75 *99					
DAYS										
Total, all types of fish	25,729	100	100	21,001	82	4,728	18			
Crappie Panfish	3,302 4,884	13 19	100 100	*2,939 4,673	*89 96					
White bass, striped bass, striped bass hybrids	5,432	21	100	*5,340	*98					
Black bass	15,900 4,667	62 18	100 100	11,501 4,651	72 100	*4,399	*28			
Walleye, sauger Northern pike, pickerel, muskie, muskie hybrids										
Steelhead										
Trout										
Anything ¹ . Other freshwater fish.	3,861	15 *13	100 *100	3,776	98 *100					
	*3,244	*13	*100	*3,235	*100					

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

¹ Respondent fished for no specific species and identified "Anything" from a list of categories of fish.

Table 8. Great Lakes Anglers, Trips, and Days of Fishing in Florida: 2011

This table does not apply to this state.

Table 9. Great Lakes Anglers and Days of Fishing in Florida by Type of Fish: 2011

This table does not apply to this state.

Table 10. Saltwater Anglers, Trips, and Days of Fishing in Florida: 2011

(Population 16 years old and older. Numbers in thousands)

	Activity in Florida									
Anglers, trips, and days of fishing	Total, state and nonr		State re	sidents	Nonresidents					
	Number	Percent	Number	Percent	Number	Percent				
Total anglers Total trips Total days Average days of fishing.	2,398 29,600 36,348 15	100 100 100 (X)	1,390 25,388 31,592 23	58 86 87 (X)	1,007 4,212 4,756 5	42 14 13 (X)				

(X) Not applicable.

Note: Detail does not add to total because of multiple responses.

Table 11. Saltwater Anglers and Days of Fishing in Florida by Type of Fish: 2011

(Population 16 years old and older. Numbers in thousands)

	Activity in Florida									
Anglers and days of fishing	Total, state	e residents and non	residents	State re	sidents	Nonres	idents			
	Number	Percent of total types	Percent of anglers/days	Number	Percent of anglers/days	Number	Percent of anglers/days			
ANGLERS										
Total, all types of fish	2,398	100	100	1,390	58	1,007	42			
Striped bass	*167	*7	*100	*101	*61	*66	*39			
Bluefish	*185	*8	*100	*117	*63	*68	*37			
Flatfish (flounder, halibut)	217	9	100	*170	*78	*47	*22			
Red drum (redfish)	650	27	100	433	67	*217	*33			
Seatrout (weakfish)	386	16	100	312	81	*74	*19			
Mackerel	352	15	100	*213	*61	*139	*39			
Mahi Mahi (dolphinfish)	383	16	100	*230	*60	*153	*40			
Tuna	*226	*9	*100	*176	*78					
Shellfish										
Anything ¹	788	33	100	522	66	266	34			
Another type of saltwater fish	1,128	47	100	686	61	441	39			
DAYS										
Total, all types of fish	36,348	100	100	31,592	87	4,756	13			
Salmon										
Striped bass	*976	*3	*100	*833	*85	*143	*15			
Bluefish	*2,653	*7	*100	*2,408	*91	*245	*9			
Flatfish (flounder, halibut)	6,319	17	100	*5,897	*93	*422	*7			
Red drum (redfish)	9,549	26	100	7,982	84	*1,567	*16			
Seatrout (weakfish)	6,078	17	100	5,680	93	*399	*7			
Mackerel	4,084	11	100	*3,492	*86	*592	*14			
Mahi Mahi (dolphinfish)	5,832	16	100	*4,266	*73	*1,567	*27			
Tuna	*984	*3	*100	*633	*64					
Shellfish										
Anything ¹	9,338	26	100	8,865	95	473	5			
Another type of saltwater fish	17,631	49	100	14,520	82	3,111	18			

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

¹ Respondent fished for no specific species and identified "Anything" from a list of categories of fish.

Table 12. Hunters, Trips, and Days of Hunting in Florida by Type of Hunting: 2011

(Population 16 years old and older. Numbers in thousands)

	Activity in Florida									
Hunters, trips, and days of hunting	Total, state and nonr		State re	sidents	Nonresidents					
	Number	Percent	Number	Percent	Number	Percent				
HUNTERS										
Total, all hunting Big game. Small game Migratory birds. Other animals	242 187 *77	100 100 *100	215 174 *63	89 93 *82	···· ··· ···	••• ••• ••• •••				
TRIPS										
Total, all hunting Big game. Small game . Migratory birds. Other animals	4,543 3,002 *1,308	100 100 *100	4,433 2,922 *1,301	98 97 *99	· · · · · · · · · · · · · · · · · · ·	••• ••• ••• •••				
DAYS										
Total, all hunting Big game. Small game Migratory birds. Other animals	5,252 4,051 *1,538	100 100 *100	4,969 3,796 *1,525	95 94 *99	···· ··· ···					

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

Note: Detail does not add to total because of multiple responses.

Table 13. Hunters and Days of Hunting in Florida by Type of Game: 2011

(Population 16 years old and older. Numbers in thousands)

True of come	Hunters, state resident	s and nonresidents	Days of hunting			
Type of game	Number	Percent	Number	Percent		
Total, all types of game	242	100	5,252	100		
Big game, total	187	77	4,051	77		
Deer.	147	61	2,492	47		
Elk						
Bear						
Wild turkey	*89	*37	*1,170	*22		
Other big game						
Small game, total						
Rabbit, hare						
Quail						
Grouse/prairie chicken						
Squirrel						
Pheasant						
Other small game						
Migratory birds, total						
Waterfowl						
Geese						
Ducks						
Doves						
Other migratory birds						
Other animals, total ¹	*77	*32	*1,538	*29		

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

¹ Includes groundhog, raccoon, fox, coyote, crow, prairie dog, etc.

Table 14. Hunters and Days of Hunting in Florida by Type of Land: 2011

(Population 16 years old and older. Numbers in thousands)

Hunters and days of hunting	Total, state and nonr		State re	sidents	Nonresidents		
	Number	Percent	Number	Percent	Number	Percent	
HUNTERS							
Total, all types of land	242	100	215	100			
Public land, total	*91	*38	*75	*35			
Public land only Public and private land							
Private land, total Private land only Private and public land	199 *145	82 *60	187 *135	87 *63	· · · · · · · · · · · · · · · · · · ·	••• •••	
DAYS							
Total, all types of land	5,252	100	4,969	100 *33		•••	
Public land ¹	*1,843 4,324	*35 82	*1,661 4,286	*33			

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

¹ Days of hunting on public land includes both days spent solely on public land and those spent on public and private land.

² Days of hunting on private land includes both days spent solely on private land and those spent on private and public land.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 15. Selected Characteristics of Florida Resident Anglers and Hunters: 2011

(Population 16 years old and older. Numbers in thousands)

	Popula	ation		portspersons shed or hunte			Anglers			Hunters	
Characteristic	Number	Percent	Number	Percent who par- ticipated	Percent of sports- persons	Number	Percent who par- ticipated	Percent of anglers	Number	Percent who par- ticipated	Percent of hunters
Total persons	14,855	100	2,068	14	100	1,991	13	100	329	2	100
Population Density of Residence											
Urban	12,644	85	1,556	12	75	1,517	12	76	*146	*1	*44
Rural	2,211	15	513	23	25	473	21	24	183	8	56
Population Size of Residence											
Metropolitan Statistical Area (MSA)	14,758	99	2,060	14	100	1,988	13	100	321	2	97
1,000,000 or more	9,672	65	1,126	12	54	1,092	11	55	*110	*1	*34
250,000 to 999,999	3,601	24	522	14	25	510	14	26	*68	*2	*21
50,000 to 249,999	1,486	10	412	28	20	386	26	19	*142	*10	*43
Outside MSA.	97	1									
Sex											
Male	6,978	47	1,611	23	78	1,542	22	77	300	4	91
Female	7,877	53	458	6	22	449	6	23			
Age											
16 to 17 years	441	3									
18 to 24 years	1,381	9	*137	*10	*7	*131	*9	*7			
25 to 34 years	2,304	16	359	16	17	347	15	17			
35 to 44 years	2,597	17	463	18	22	457	18	23			
45 to 54 years	3,141	21	438	14	21	421	13	21	*74	*2	*22
55 to 64 years	2,314	16	275	12	13	259	11	13	*61	*3	*19
65 years and older	2,677	18	317	12	15	296	11	15	*64	*2	*20
65 to 74 years	1,368	9	270	20	13	253	18	13	*61	*4	*19
75 and older	1,308	9	*47	*4	*2						
Ethnicity											
Hispanic	3,517	24	*111	*3	*5	*111	*3	*6			
Non-Hispanic	11,338	76	1,958	17	95	1,880	17	94	326	3	99
Race											
White	11,053	74	1.722	16	83	1.645	15	83	326	3	99
African American	1,768	12	*282	*16	*14	*282	*16	*14			
All others	2,034	14									
Annual Household Income											
Less than \$20,000	2,018	14	*158	*8	*8	*158	*8	*8			
\$20,000 to \$29,999	1,496	10	*98	*7	*5	*93	*6	*5			
\$30,000 to \$39,999	1,570	11	*142	*9	*7	*132	*8	*7	*63	*4	*19
\$40,000 to \$49,999	1,054	7	*180	*17	*9	*180	*17	*9			
\$50,000 to \$74,999	1,701	11	529	31	26	521	31	26	*47	*3	*14
\$75,000 to \$99,999	1,459	10	260	18	13	246	17	12			
\$100,000 to \$149,999	1,223	8	217	18	10	*197	*16	*10	*65	*5	*20
\$150,000 or more	1,057 3,277	7 22	*223 260	*21	*11	*204 260	*19	*10			
Not reported	3,277	22	∠00	8	13	200	8	15			
Education											
11 years or less	1,775	12	*146	*8	*7	*143	*8	*7			
12 years	5,523	37	748	14	36	698	13	35	174	3	53
1 to 3 years of college.	3,477	23	610	18	30	602	17	30	*51	*1	*16
4 years or more of college	4,080	27	564	14	27	548	13	28			

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

Note: Detail does not add to total because of multiple responses. Percent who participated columns show the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who fished, etc.). Remaining percent columns show the percent of each column's participants who are described by the row heading (the percent of anglers who lived in urban areas, etc.).

Table 16. Summary of Expenditures in Florida by State Residents and Nonresidents Combined for Fishing and Hunting: 2011

(Population 16 years old and older)

Expenditure item	Amount (thousands of dollars)	Spenders (thousands)	Average per spender (dollars) ¹	Average per sportsperson (dollars) ¹
FISHING AND HUNTING	(industries of donais)	(inousures)	(donars)	(donars)
Total	5,995,434	3,141	1,909	1,874
Food and lodging	976,099	2,491	392	310
Transportation	689,955	2,445	282	218
Other trip costs ²	1,416,547	2,502	566	449
Equipment (fishing, hunting)	804,035	1,829	440	241
Auxiliary equipment ³	122,205	512	239	36
Special equipment ⁴	*1,018,728	*162	*6,298	*314
Magazines, books, and DVDs.	23,633	443	53	7
Membership dues and contributions	148,548	296	502	47
Other ⁵	795,684	1,442	552	252
FISHING				
Total	4,629,202	3,012	1,537	1,480
Food and lodging	900,222	2,421	372	291
Transportation	563,990	2,350	240	182
Other trip costs ²	1,337,423	2,488	538	433
Fishing equipment.	600,093	1,736	346	182
Auxiliary equipment ³	76,817	319	241	23
Special equipment ⁴	*408,666	*135	*3,017	*129
Magazines, books, and DVDs.	17,084	357	48	5
Membership dues and contributions	*140,035	*188	*747	*45
Other ^s	584,872	1,290	453	189
HUNTING				
Total	715,733	322	2,223	2,824
Food and lodging	75,876	226	335	314
Transportation	125,965	243	518	511
Other trip costs ²	*79,124	*66	*1,193	*327
Hunting equipment	185,070	212	875	*669
Auxiliary equipment ³	*22,630	*74	*304	*88
Special equipment ⁴				
Magazines, books, and DVDs.				
Membership dues and contributions Other ⁵	210,812	189	1,118	*848
UNSPECIFIED ⁶				
Total	628,432	208	3,026	*192

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Includes boating costs, equipment rental, guide fees, access fees, heating and cooking fuel, and ice and bait (for fishing only).

³ Includes sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing and hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, processing and taxidermy costs, and electronic equipment such as a GPS device.

⁴ Includes big-ticket items bought primarily for hunting and fishing including boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

⁵ Includes land leasing and ownership, licenses, stamps, tags, permits, and plantings (for hunting only).

⁶ Respondent could not specify whether expenditure was primarily for either fishing or hunting.

Table 17. Summary of Fishing Trip and Equipment Expenditures in Florida by State Residents and Nonresidents Combined by Type of Fishing: 2011

(Population 16 years old and older)

Expenditure item	Amount (thousands of dollars)	Spenders (thousands)	Average per spender (dollars) ¹	Average per angler (dollars) ¹
ALL FISHING				
Total Food and lodging Transportation Other trip costs Equipment Equipment	3,887,212 900,222 563,990 1,337,423 1,085,576	2,928 2,421 2,350 2,488 1,794	1,328 372 240 538 605	1,240 291 182 433 334
ALL FRESHWATER				
Total Food and lodging Transportation Other trip costs Equipment Equipment	709,725 168,208 133,553 159,392 248,572	1,227 929 833 941 670	578 181 160 169 371	216 54 43 52 67
FRESHWATER, EXCEPT GREAT LAKES				
Total Food and lodging Transportation Other trip costs Equipment	707,991 168,208 131,819 159,392 248,572	1,227 929 833 941 670	577 181 158 169 371	215 54 42 52 67
GREAT LAKES				
Total Food and lodging Transportation Other trip costs Equipment Equipment		••• ••• ••• •••		
SALTWATER				
Total Food and lodging Transportation Other trip costs Equipment	3,119,236 732,014 430,437 1,178,031 778,754	2,171 1,924 1,914 1,901 1,111	1,437 380 225 620 701	1,007 237 139 381 250

... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

Note: Detail does not add to total because of multiple responses and nonresponse. See Table 19 for detailed listing of expenditure items.

Table 18. Summary of Hunting Trip and Equipment Expenditures in Florida by State Residents and Nonresidents Combined by Type of Hunting: 2011

(Population 16 years old and older)

Expenditure item	Amount (thousands of dollars)	Spenders (thousands)	Average per spender (dollars) ¹	Average per type of hunter (dollars) ¹
ALL HUNTING				
Total Food and lodging Transportation Other trip costs Equipment	500,555 75,876 125,965 *79,124 219,590	298 226 243 *66 222	1,680 335 518 *1,193 989	1,959 314 511 *327 807
BIG GAME				
Total Food and lodging Transportation Other trip costs Equipment	348,811 *54,465 62,748 *68,453 *163,146	235 *172 195 *50 *163	1,482 *317 322 *1,364 *1,000	1,388 *225 250 *283 *630
SMALL GAME				
Total Food and lodging Transportation Other trip costs Equipment	•• •• •• ••	••• ••• •••		
MIGRATORY BIRDS				
Total Food and lodging Transportation Other trip costs Equipment		••• ••• ••• •••	••• ••• •••	
OTHER ANIMALS				
Total Food and lodging	*73,829 	*74	*991 	*961
Transportation Other trip costs Equipment	*49,357 	*74	*663	*643

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

Note: Detail does not add to total because of multiple responses and nonresponse. See Table 20 for detailed listing of expenditure items.

Table 19. Expenditures in Florida by State Residents and Nonresidents Combined for Fishing: 2011

(Population 16 years old and older)

	Expendit	tures	Spenders		
Expenditure item	Amount (thousands of dollars)	Average per angler (dollars) ¹	Number (thousands)	Percent of anglers	Average per spender (dollars)
Total, all items	4,629,202	1,480	3,012	97	1,537
TRIP-RELATED EXPENDITURES					
Total trip-related	2,801,636	906	2,743	89	1,021
Food and lodging, total	900,222	291	2,421	78	372
Food	652,214	211	2,355	76	277
Lodging	248,008	80	582	19	426
Transportation	563,990	182	2,350	76	240
Other trip costs, total	1,337,423	433	2,488	80	538
Privilege and other fees ²	229,539	74	1,137	37	202
Boating costs ³	749,642	242	924	30	81
Bait	273,639	89	1,895	61	144
Ice	78,084	25	1,483	48	5.
Heating and cooking fuel	*6,520	*2	*210	*7	*31
EQUIPMENT AND OTHER EXPENDITURES PRIMARILY FOR FISHING					
Fishing equipment, total	600,093	182	1,736	56	346
Reels, rods, and rod-making components	279,417	80	944	31	29
Lines, hooks, sinkers, etc	139,316	45	1,549	50	9
Artificial lures and flies.	66,180	21	1,098	36	6
Creels, stringers, fish bags, landing nets, and gaff hooks	13,269	4	340	11	3
Minnow seines, traps, and bait containers	9,313	3	369	12	2:
Other fishing equipment ⁴	92,598	29	666	22	139
Auxiliary equipment ⁵	76,817	23	319	10	24
Special equipment ⁶	*408,666	*129	*135	*4	*3,017
Other fishing costs ⁷	741,990	240	1,481	48	501

* Estimate based on a sample size of 10–29.

¹ Average expenditures are annual estimates.

² Includes boat or equipment rental and fees for guides, pack trip (party and charter boats, etc.), public land use, and private land use.

³ Includes boat launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

⁴ Includes electronic fishing devices (depth finders, fish finders, etc.), tackle boxes, ice fishing equipment, and other fishing equipment.

⁵ Includes sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing clothing, foul weather gear, boots and waders, maintenance and repair of equipment, processing and taxidermy costs, and electronic equipment such as a GPS device.

⁶ Includes big-ticket items bought primarily for fishing including boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

⁷ Includes magazines, books, and DVDs, membership dues and contributions, land leasing and ownership, and licenses, stamps, tags, and permits.

Note: Detail does not add to total because of multiple responses and nonresponse. Percent of anglers may be greater than 100 because spenders who did not fish in this state are included.

Table 20. Expenditures in Florida by State Residents and Nonresidents Combined for Hunting: 2011

(Population 16 years old and older)

		litures	Spenders		
Expenditure item	Amount (thousands of dollars)	Average per hunter (dollars) ¹	Number (thousands)	Percent of hunters	Average per spender (dollars) ¹
Total, all items	715,733	2,824	322	133	2,223
TRIP-RELATED EXPENDITURES					
Total trip-related	280,965	1,152	252	104	1,115
Food and lodging, total Food Lodging.	75,876 68,055	314 281	226 226	94 94 	335 301
Transportation	125,965	511	243	101	518
Other trip costs, total Privilege and other fees ² . Boating costs ³ . Heating and cooking fuel	* 79,124 *31,981 	* 327 *132 	* 66 *45 	* 27 *19 	* 1,193 *708
EQUIPMENT AND OTHER EXPENDITURES PRIMARILY FOR HUNTING					
Hunting equipment, total Firearms Ammunition Other hunting equipment ⁴	185,070 *92,788 *23,201 *69,082	* 669 *342 *76 *251	212 *58 *150 *106	88 *24 *62 *44	875 *1,598 *154 *650
Auxiliary equipment ⁵	*22,630 215,178	*88 865	*74 202	*31 84	*304 1,064

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Includes guide fees, pack trip and package fees, public and private land use access fees, and rental of equipment such as boats and hunting or camping equipment.

³ Boating costs include launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

⁴ Includes telescopic sights, decoys and game calls, handloading equipment and components, hunting dogs and associated costs, hunting knives, bows, arrows, archery equipment, and other hunting equipment.

⁵ Includes sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, processing and taxidermy costs, and electronic equipment such as a GPS device.

⁶ Includes big-ticket items bought primarily for hunting including boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

⁷ Includes magazines, books, and DVDs, membership dues and contributions, land leasing and ownership, and licenses, stamps, tags, and permits.

Note: Detail does not add to total because of multiple responses and nonresponse. Percent of hunters may be greater than 100 because spenders who did not hunt in this state are included.

Table 21. Trip and Equipment Expenditures in Florida for Fishing and Hunting by Florida Residents and Nonresidents: 2011

(Population 16 years old and older)

STATE RESIDENTS AND NONRESIDENTS	of dollars)	(thousands)	per spender (dollars) ¹	sportsperson (dollars)
		(tilousailus)	(donars)	(donars)
Trip and equipment expenditures for fishing and hunting, total	5,027,569	3,028	1,661	20,793
Trip and equipment expenditures for fishing, total	3,887,710	2,930	1,327	1,240
Food and lodging	900,222	2,421	372	29
Transportation	563,990	2,350	240	182
Boating costs ²	749,642	924	811	242
Other trip costs ³	587,782	2,473	238	190
Equipment.	1,086,074	1,797	605	334
Frip and equipment expenditures for hunting, total	521,847	349	1,496	1,95
Food and lodging	75,876	226	335	31
Transportation	125,965	243	518	51
Boating costs ²	125,905	245	516	51
Other trip costs ³	*33,640	*59	*571	*139
Equipment.	240,882	273	882	80
Unspecified equipment ⁴	*618,013	*149	*4,140	*2,550
STATE RESIDENTS				,
Frip and equipment expenditures for fishing and hunting, total	4,122,996	1,848	2,231	19,17
Frip and equipment expenditures for fishing, total	3,022,349	1,779	1,699	1,59
Food and lodging	611,207	1,569	390	32
Transportation	324,243	1,471	220	17
Boating costs ²	685,187	745	919	36
Other trip costs ³	451,080	1,628	277	23
Equipment.	950,632	1,343	708	50
Frip and equipment expenditures for hunting, total	509,308	315	1,616	2,16
Food and lodging	71,972	204	353	33
Transportation	122,051	216	564	55
Boating costs ²				
Other trip costs ³	*33,553	*55	*614	*15
Equipment.	236,249	265	893	*90
Unspecified equipment ⁴	*591,339	*119	*4,981	*2,74
NONRESIDENTS				
Trip and equipment expenditures for fishing and hunting, total	904,573	1,180	767	33,85
Frip and equipment expenditures for fishing, total	865,361	1,151	752	67
Food and lodging	289,016	852	339	24
Transportation	239,747	879	273	24
Boating costs ²	*64,454	*179	*360	*5
Other trip costs ³	136,702	845	162	11
Equipment.	135,442	454	299	6
rip and equipment expenditures for hunting, total				
Food and lodging	•••	•••		•
Transportation				
Boating costs ²				
Other trip costs ³ .				
Equipment.				
Unspecified equipment ⁴				

* Estimate based on a sample size of 10–29. ... Sa

... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Includes boat launching, mooring, storage, maintenance, insurance, pumpout fees, and fuel.

³ Includes equipment rental, guide and access fees, ice and bait for fishing, and heating and cooking oil.

⁴ Respondent could not specify whether item was for hunting or fishing.

Table 22. Summary of Florida Residents' Fishing and Hunting Expenditures Both Inside and Outside Florida: 2011

(Population 16 years old and older)

Expenditure item	Amount (thousands	Spenders	Average per spender	Average per sportsperson
FISHING AND HUNTING	of dollars)	(thousands)	(dollars) ¹	(dollars) ¹
FISHING AND HUNTING				
Total	5,476,780	1,964	2,788	2,648
Food and lodging	794,259	1,712	464	384
Transportation	543,125	1,624	334	263
Other trip costs ²	1,276,419	1,731	737	617
Equipment (fishing, hunting)	755,408	1,470	514	365
Auxiliary equipment ³	113,108	504	224	55
Special equipment ⁴	*977,697	*151	*6,492	*473
Magazines, books, and DVDs.	21,856 144,752	421 238	52 607	11
Membership dues and contributions Other ⁵	850,156	1,097	775	70 411
Other	850,150	1,097	115	411
FISHING				
Total	3,815,000	1,869	2,041	1,916
Food and lodging	636,269	1,610	395	320
Transportation	343,022	1,505	228	172
Other trip costs ²	1,143,714	1,691	676	574
Fishing equipment.	518,114	1,364	380	260
Auxiliary equipment ³	59,163	276	214	30
Special equipment ⁴	*387,338	*125	*3,105	*195
Magazines, books, and DVDs.	16,959	355	48	9
Membership dues and contributions	*137,699	*165	*835	*69
Other ⁵	572,723	934	613	288
HUNTING				
Total	1,034,465	320	3,229	3,140
Food and lodging	157,990	287	550	480
Transportation	200,103	289	692	607
Other trip costs ²	*132,705	*116	*1,143	*403
Hunting equipment	217,512	235	926	660
Auxiliary equipment ³	*32,637	*96	*340	*99
Special equipment ⁴				
Magazines, books, and DVDs				
Membership dues and contributions				
Other ⁵	277,433	216	1,282	842
UNSPECIFIED ⁶				
Total	*600,818	*181	*3,324	*290

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Includes boating costs, equipment rental, guide fees, access fees, heating and cooking fuel, and ice and bait (for fishing only).

³ Includes sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing and hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, processing and taxidermy costs, and electronic equipment such as a GPS device.

⁴ Includes big-ticket items bought primarily for hunting and fishing including boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

⁵ Includes land leasing and ownership, licenses, stamps, tags, and permits, and plantings (for hunting only).

⁶ Respondent could not specify whether expenditure was primarily for fishing or hunting.

Note: Detail does not add to total because of multiple responses and nonresponse. See Tables 19-20 for a detailed listing of expenditure items.

Table 23. In-State and Out-of-State Expenditures by Florida Residents for Fishing and Hunting: 2011

(State population 16 years old and older)

Expenditure item	Amount (thousands of dollars)	Spenders (thousands)	Average per spender (dollars) ¹	Average per sportsperson (dollars) ¹
IN FLORIDA		(*********	-Fi at (at a s)	
Expenditures for fishing and hunting, total	5,068,808	1,887	2,686	1,608
Trip-related expenditures	2,344,776	1,799	1,304	744
Equipment (fishing and hunting)	704,535	1,405	501	223
Auxiliary equipment ²	95,988	440	218	30
Special equipment ³	*977.697	*151	*6,492	*310
Other ⁴	945,812	1,215	778	300
Expenditures for fishing, total	3,746,106	1,808	2,072	1,212
Trip-related expenditures	2,071,716	1.747	1,186	670
Fishing equipment.	505,164	1,319	383	163
Auxiliary equipment ²	57,633	259	222	19
Special equipment ³	*387,338	*125	*3,105	*125
Other ⁴	724,255	1,030	703	234
Expenditures for hunting, total	702,648	278	2,531	2,906
Trip-related expenditures	273,059	225	1,212	1,129
Hunting equipment	180,558	203	888	747
Auxiliary equipment ²	*22,567	*73	*310	*93
Special equipment ³	22,507		510	
Other ⁴	214,574	187	 1,147	887
Unspecified expenditures for fishing and hunting, total ⁵	*598,046	*157	*3,813	*190
OUT OF STATE				
Expenditures for fishing and hunting, total	407,972	1,670	244	129
Trip-related expenditures	269,028	235	1,146	85
Equipment (fishing and hunting)	*50,872	*1,470	*35	*16
Auxiliary equipment ²	*17,120	*504	*34	*5
Special equipment ³	·			
Other ⁴	70,952	767	93	23
Expenditures for fishing, total	68,894	1,479	47	22
Trip-related expenditures	*51,289	*114	*451	*17
Fishing equipment.	*12,949	*1,364	*9	*4
Auxiliary equipment ²		-,		
Special equipment ³				
Other ⁴	*3,126	*560	*6	*1
Expenditures for hunting, total	332,667	288	1,155	1,376
Trip-related expenditures	*217,739	*135	*1,617	*901
Hunting equipment	*36,954	*235	*157	*153
Auxiliary equipment ²	*10.920	*105	*104	*45
Special equipment ³	10,920	105	104	43
Other ⁴	*67,054	*158	*424	*277
Unspecified expenditures for fishing and hunting, total ⁵				
Unspecifical experiances for fishing and nunting, total		•••	•••	•••

* Estimate based on a sample size of 10–29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Auxiliary equipment includes sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing and hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, processing and taxidermy costs, and electronic equipment such as a GPS device.

³ Special equipment includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

⁴ Other equipment includes expenditures for magazines, books, DVDs, membership dues and contributions, land leasing and ownership, licenses, stamps, tags, and permits, and plantings.

⁵ Respondent could not specify whether expenditure was primarily for either fishing or hunting.

Table 24. Wildlife Watching in Florida by State Residents and Nonresidents Combined: 2011

(Population 16 years old and older. Numbers in thousands)

Participants	Number	Percent
Total participants	4,308	100
Away from home	1,902	44
Observe wildlife	1,710	40
Photograph wildlife	1,274	30
Feed wildlife	487	11
Around the home	3,312	77
Observe wildlife	2,036	47
Photograph wildlife	1,193	28
Feed wildlife	2,374	55
Visit parks or natural areas ¹	658	15
Maintain plantings or natural areas.		14

¹ Includes visits only to parks or natural areas within one mile of home.

Note: Detail does not add to total because of multiple responses.

Table 25. Participants, Trips, and Days of Participation in Away-From-Home Wildlife Watching in Florida: 2011

(Population 16 years old and older. Numbers in thousands)

			Activity i	n Florida			
Participants, trips, and days of participation	Total, state residents and nonresidents		State re	State residents		Nonresidents	
	Number	Percent	Number	Percent	Number	Percent	
PARTICIPANTS							
Total participants Observe wildlife Photograph wildlife Feed wildlife	1,902 1,710 1,274 487	100 90 67 26	1,076 957 639 *246	100 89 59 *23	825 753 635 *241	100 91 77 *29	
TRIPS							
Total Trips Average days per trip	11,278 1	100 (X)	8,300 1	100 (X)	2,978 3	100 (X)	
DAYS							
Total days Observing wildlife Photographing wildlife Feeding wildlife	16,786 13,668 8,658 2,669	100 81 52 16	8,307 6,591 4,873 *1,733	100 79 59 *21	8,478 7,076 3,785 *936	100 83 45 *11	
Average days per participant Observing wildlife Photographing wildlife Feeding wildlife	9 8 7 5	(X) (X) (X) (X)	8 7 8 *7	(X) (X) (X) (X)	10 9 6 *4	(X) (X) (X) (X)	

* Estimate based on a sample size of 10–29. (X) Not applicable.

Table 26. Away-From-Home Wildlife-Watching Participants by Wildlife Observed, Photographed, or Fed in Florida: 2011

(Population 16 years old and older. Numbers in thousands)

Wildlife observed, photographed, or fed	Total, state residents and nonresidents		State residents		Nonresidents	
	Number	Percent	Number	Percent	Number	Percent
Total all wildlife	1,902	100	1,076	57	825	43
Total birds Songbirds (cardinals, robins, warblers, etc.) Birds of prey (hawks, owls, eagles, etc.) Waterfowl (ducks, geese, swans, etc.) Other water birds (shorebirds, herons, cranes, etc.) Other birds (pheasants, turkeys, road runners, etc.)	1,762 683 929 1,247 1,378 313	100 100 100 100 100 100	956 442 624 719 744 *233	54 65 67 58 54 *74	806 242 305 528 634	46 35 33 42 46
Total land mammals Large land mammals (bears, bison, elk, etc.) Small land mammals (prairie dogs, squirrels, etc.)	668 346 573	100 100 100	451 *265 391	68 *76 68	217 *81 *183	32 *24 *32
Fish (salmon, sharks, etc.)	846 901 1,062	100 100 100	455 421 606	54 47 57	391 480 455	46 53 43

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

Note: Detail does not add to total because of multiple responses.

Table 27. Participation in Wildlife-Watching Activities Around the Home in Florida: 2011

(State population 16 years old and older. Numbers in thousands)

Around the home	Participants			
Around the nome	Number	Percent		
Total around-the-home participants	3,312	100		
Observe wildlife	2,036	61		
Visit parks and natural areas ¹	658	20		
Photograph wildlife	1,193	36		
Feed wildlife	2,374	72		
Maintain natural areas.	328	10		
Maintain plantings	418	13		
Participants Observing Wildlife				
Total, all wildlife	2,036	100		
Birds	1,912	94		
Land mammals	1,386	68		
Large mammals.	558	27		
Small mammals.	1,315	65		
	· · · · · · · · · · · · · · · · · · ·			
Amphibians or reptiles	1,093	54		
Insects or spiders.	766	38		
Fish and other wildlife	671	33		
Total, 1 day or more	2,036	100		
1 to 10 days	401	20		
11 to 50 days	272	13		
51 to 200 days	632	31		
201 days or more	693	34		
Participants Visiting Parks or Natural Areas ¹				
Total, 1 day or more	658	100		
1 to 5 days	*277	*42		
6 to 10 days	*93	*14		
11 days or more.	*273	*41		
Participants Photographing Wildlife				
Total, 1 day or more	1,193	100		
1 to 3 days.	406	34		
4 to 10 days	392	33		
11 or more days.	381	32		
Participants Feeding Wildlife				
Total, all wildlife	2,374	100		
	2,374	89		
Wild birds	· · · · · · · · · · · · · · · · · · ·			
Other wildlife	790	33		

* Estimate based on a sample size of 10-29.

¹ Includes visits only to parks or natural areas within one mile of home.

Table 28. Florida Residents Participating in Wildlife Watching in the United States: 2011

(State population 16 years old and older. Numbers in thousands)

Participants	Number	Percent of participants	Percent of population
Total participants	3,598	100	24
Away from home	1,363	38	9
Around the home.	3,312	92	22
Observe wildlife	2,036	57	14
Photograph wildlife.	1,193	33	8
Feed wild birds or other wildlife.	2,374	66	16
Maintain plantings or natural areas.	601	17	4
Visit parks or natural areas ¹	658	18	4

¹ Includes visits to publicly or privately owned parks or natural areas.

Note: Detail does not add to total because of multiple responses. The column showing percent of participants is based on total participants. The column showing percent of population is based on the state population 16 years old and older, including those who did not participate in wildlife watching.

Table 29. Wild Bird Observers and Days of Observation in Florida by State Residents and Nonresidents: 2011

(Population 16 years old and older. Numbers in thousands)

Observers and days of observation	Total, state and nonr		State re	sidents	Nonresidents		
-	Number	Percent	Number	Percent	Number	Percent	
OBSERVERS							
Total bird observers Around-the-home observers Away-from-home observers DAYS	2,966 1,912 1,589	100 64 54	2,222 1,912 846	100 86 38	743 (X) 743	100 (X) 100	
Total days observing birds Around the home. Away from home.	273,776 259,796 13,980	100 95 5	265,949 259,796 6,153	100 98 2	7,827 (X) 7,827	100 (X) 100	

(X) Not applicable.

Note: Detail does not add to total because of multiple responses.

Table 30. Selected Characteristics of Florida Residents Participating in Wildlife Watching: 2011

(State population 16 years old and older. Numbers in thousands)

	Popula	ation				1	Participants				
	Topula	ation		Total		Aw	ay from hor	ne	Arc	ound the hor	ne
Characteristic	Number	Percent	Number	Percent who par- ticipated	Percent	Number	Percent who par- ticipated	Percent	Number	Percent who par- ticipated	Percent
Total persons	14,855	100	3,598	24	100	1,363	9	100	3,312	22	100
Population Density of Residence											
Urban.	12,644	85	2,802	22	78	1,121	9	82	2,539	20	77
Rural	2,211	15	796	36	22	*242	*11	*18	774	35	23
Population Size of Residence											
Metropolitan Statistical Area (MSA)	14,758	99	3,562	24	99	1,354	9	99	3,276	22	99
1,000,000 or more	9,672	65	2,030	21	56	755	8	55	1,852	19	56
250,000 to 999,999	3,601	24	1,028	29	29	416	12	31	933	26	28
50,000 to 249,999	1,486	10	504	34	14	*183	*12	*13	491	33	15
Outside MSA	97	1									
Sex											
Male	6,978	47	1,664	24	46	716	10	53	1,463	21	44
Female	7,877	53	1,935	25	54	647	8	47	1,849	23	56
Age											
16 to 17 years	441	3									
18 to 24 years	1,381	9									
25 to 34 years	2,304	16	*245	*11	*7	*98	*4	*7	*208	*9	*6
35 to 44 years	2,597	17	439	17	12	*241	*9	*18	393	15	12
45 to 54 years	3,141	21	1,066	34	30	*397	*13	*29	1,026	33	31
55 to 64 years	2,314	16	725	31	20	303	13	22	671	29	20
65 years and older	2,677	18	1,069	40	30	*300	*11	*22	961	36	29
65 to 74 years	1,368 1,308	9 9	472 597	34 46	13 17	*154	*11	*11	458 503	33 38	14 15
Ethnicity	2 5 1 7	24	*144	*4	*4				*119	*3	*4
Hispanic	3,517 11,338	24 76	3,455	*4 30	*4 96	1,289	 11	 95	3,194	28	*4 96
-	,	, .	-,			-,,			-,		
Race	11.052	74	2 200	20	02	1.0(0)	11	02	2.027	27	0.1
White	11,053	74	3,308 *212	30	92 *6	1,260	11	92	3,027	27	91
African American	1,768 2,034	12 14	*212	*12	···				*207	*12	*6
Annual Household Income	2,018	14	*221	*11	*6				*191	*9	*6
Less than \$20,000	1,496	14	*221 *578	*39	*16				*191 *564	*38	*17
\$30,000 to \$39,999	1,490	10	316	20	9	*141	 *9	*10	*304	*20	*9
\$40,000 to \$49,999	1,054	7	*252	*24	*7	141	. 9	10	*238	*23	*7
\$50,000 to \$74,999	1,701	11	621	37	17	*311	*18	*23	581	34	18
\$75,000 to \$99,999	1,459	10	494	34	14	*128	*9	*9	467	32	14
\$100,000 to \$149,999	1,223	8	*322	*26	*9	*81	*7	*6	*318	*26	*10
\$150,000 or more	1,057	7	*264	*25	*7	*124	*12	*9	*226	*21	*7
Not reported	3,277	22	529	16	15	*277	*8	*20	420	13	13
Education											
11 years or less	1,775	12	*327	*18	*9				*297	*17	*9
12 years	5,523	37	989	18	27	*291	*5	*21	946	17	29
1 to 3 years of college	3,477	23	1,053	30	29	*533	*15	*39	925	27	28
4 years or more of college	4,080	27	1,229	30	34	468	11	34	1.145	28	35

* Estimate based on a sample size of 10-29.

.... Sample size too small (less than 10) to report data reliably.

Note: Detail does not add to total because of multiple responses and nonresponse. Percent who participated columns show the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who participated, etc.). Percent columns show the percent of each column's participants who are described by the row heading (the percent of those who participated who live in urban areas, etc.).

Table 31. Expenditures in Florida by State Residents and Nonresidents Combined for Wildlife Watching: 2011

(Population 16 years old and older)

		Spender				
Expenditure item	Expenditures (thousands of dollars)	Average per participant (dollars) ¹	Number (thousands)	Percent of wildlife-watching participants ²	Average per spender (dollars) ¹	
Total, all items	3,041,334	668	3,727	87	816	
TRIP EXPENDITURES						
Total, trip-related	1,732,652	887	1,846	97	939	
Food and lodging	890,458	468	1,553	82	573	
Food	435,841	229	1,522	80	286	
Lodging	454,617	239	572	30	795	
Transportation	619,555	302	1,729	91	358	
Other trip costs ³	222,639	117	1,198	63	186	
EQUIPMENT AND OTHER EXPENDITURES						
Total	1,308,682	276	2,761	64	474	
Wildlife-watching equipment, total	475,771	88	2,362	55	201	
Binoculars, spotting scopes.	*15,526	*3	*181	*4	*86	
Film and photo processing	*39,630	*5	*435	*10	*91	
Cameras, special lenses, video cameras, and other photographic						
equipment, including memory cards.	237,671	38	583	14	408	
Day packs, carrying cases, and special clothing	*17,867	*4	*229	*5	*78	
Bird food	102,135	24	1,436	33	71	
Food for other wildlife	29,231	7	376	9	78	
Nest boxes, bird houses, bird feeders, and bird baths	30,620	7	743	17	41	
Other equipment (including field guides)	*3,090	*1	*134	*3	*23	
Auxiliary equipment ⁴	*31.088	*5	*224	*5	*139	
Special equipment ⁵	*281,572	*65	*132	*3	*2.139	
Magazines, books, and DVDs.	24,766	4	343	8	72	
Membership dues and contributions	35,589	7	432	10	82	
Land leasing and ownership	 179,911	42	406	 9	 444	

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Percent of wildlife-watching participants column for trip-related expenditures is based on away-from-home participation. For equipment and other expenditures, the percent of wildlife-watching participants column is based on total wildlife-watching participants.

³ Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

⁴ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁵ Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

Table 32. Trip and Equipment Expenditures in Florida for Wildlife Watching by Florida Residents and Nonresidents: 2011

(Population 16 years old and older)

Expenditure item	Amount (thousands of dollars)	Spenders (thousands)	Average per spender (dollars) ¹	Average per participant (dollars) ¹
STATE RESIDENTS AND NONRESIDENTS				
Total	2,521,083 890,458 619,555 222,639 788,430	3,560 1,553 1,729 1,198 2,493	708 573 358 186 316	550 468 302 117 159
STATE RESIDENTS				
Total Food and lodging Transportation Other trip costs ² Equipment ³	1,405,654 192,560 346,021 111,521 755,553	2,612 843 967 637 2,276	538 228 358 175 332	369 179 279 104 195
NONRESIDENTS				
Total Food and lodging Transportation Other trip costs ² Equipment ³	1,115,428 697,898 273,535 111,118 *32,877	949 710 762 561 *217	1,176 984 359 198 *151	1,316 846 331 135 *4

* Estimate based on a sample size of 10-29.

¹ Average expenditures are annual estimates.

² Includes equipment rental and fees for guides, pack trips, public land use, private land use, boat fuel, other boating costs, and heating and cooking fuel.

³ Includes wildlife-watching auxiliary and special equipment.

Note: Detail does not add to total because of multiple responses and nonresponse. See Table 33 for detailed listed of expenditure items.

Table 33. Wildlife-Watching Expenditures Both Inside and Outside Florida by Florida Residents: 2011

(State population 16 years old and older)

				Spenders	
Expenditure item	Expenditures (thousands of dollars)	Average per participant (dollars) ¹	Number (thousands)	Percent of wildlife-watching participants ²	Average per spender (dollars) ¹
Total, all items	2,614,452	727	2,786	77	938
TRIP EXPENDITURES					
Total, trip-related Food and lodging Food Lodging. Transportation Other trip costs ³	1,206,226 613,344 514,887 *98,457 467,989 124,893	885 450 378 *72 343 92	1,239 1,046 1,046 *215 1,144 781	91 77 77 *16 84 57	974 586 492 *458 409 160
EQUIPMENT AND OTHER EXPENDITURES					
Total	1,408,226	391	2,538	71	555
Wildlife-watching equipment, total. Binoculars, spotting scopes. Film and photo processing Cameras, special lenses, video cameras, and other photographic equipment, including memory cards. Day packs, carrying cases, and special clothing. Bird food Food for other wildlife Nest boxes, bird houses, bird feeders, and bird baths. Other equipment	519,252 *23,849 *39,526 264,804 *20,837 103,944 30,953 31,986 *3,354	144 *7 *11 74 *66 29 9 9 9 9	2,366 *285 *421 592 *274 1,471 405 767 *145	66 *8 *12 16 *8 41 11 21 *4	219 *84 *94 447 *76 71 76 42 *23
Auxiliary equipment ⁴	*51,160 *281,316 19,648 71,160 179,911	*14 *78 5 20 50	*197 *115 314 438 406	*5 *3 9 12 11	*260 *2,455 63 163 444

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Percent of wildlife-watching participants column for trip-related expenditures is based on away-from-home participation. For equipment and other expenditures, the percent of wildlife-watching participants column is based on total wildlife-watching participants.

³ Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

⁴ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁵ Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

Table 34. In-State and Out-of-State Expenditures by Florida Residents for Wildlife Watching: 2011

(State population 16 years old and older)

Expenditure Item	Amount (thousands of dollars)	Spenders (thousands)	Average per spender (dollars) ¹	Average per participant (dollars) ¹
IN FLORIDA				
Expenditures for wildlife watching, total ² . Trip-related expenditures ³ . Wildlife-watching equipment ⁴ Auxiliary equipment ⁵ Special equipment ⁶ Other ⁷ OUT OF STATE	1,908,786 650,101 451,588 *22,649 *281,316 503,132	2,661 1,062 2,227 *159 *115 767	717 612 203 *143 *2,455 656	526 604 108 *7 *81 144
Expenditures for wildlife watching, total ² Trip-related expenditures ³ Wildlife-watching equipment ⁴ Auxiliary equipment ⁵ Special equipment ⁶ Other ⁷ .	658,702 *556,125 *44,762 *51,168	580 *309 *286 *121	1,136 *1,800 *156 *422	* 1,932 *1,729

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

¹ Average expenditures are annual estimates.

² Information on trip-related expenditures was collected for away-from-home participants only. Equipment and other expenditures are based on information collected from both away-from-home and around-the-home participants.

³ Includes equipment rental and fees for guides, pack trips, public land use and private land use, boat fuel, other boating costs, and heating and cooking fuel.

⁴ Includes binoculars, spotting scopes, cameras, special lenses, videocameras, other photography equipment, memory cards, film and photo processing, commercially prepared and packaged wild bird food, other bulk food used to feed wild birds, food used to feed other wildlife, nest boxes, bird houses, feeders, baths, and other wildlife-watching equipment.

⁵ Includes tents, tarps, frame packs and other backpacking equipment, other camping equipment, and other auxiliary equipment.

⁶ Includes boats, campers, cabins, trail bikes, dune buggies, 4 x 4 vehicles, ATVs, 4-wheelers, snowmobiles, pickups, vans, travel and tent trailers, motor homes, house trailers, recreational vehicles (RVs) and other special equipment.

7 Includes magazines, books, DVDs, membership dues and contributions, and land leasing and ownership.

Note: Detail does not add to total because of multiple responses and nonresponse.

Table 35. Participation of Florida Resident Wildlife-Watching Participants in Fishing and Hunting: 2011

(State population 16 years old and older. Numbers in thousands)

	Total wildli	Fa vyjatak ara	Wildife-watching activity				
Participants	Total wildin	le watchers	Away fro	m home	Around t	Around the home	
	Number	Percent	Number	Percent	Number	Percent	
Total participants	3,598	100	1,363	100	3,312	100	
Wildlife-watching participants who:							
Did not fish or hunt.	2,584	72	863	63	2,390	72	
Fished or hunted	1,015	28	500	37	923	28	
Fished	969	27	472	35	892	27	
Hunted.	220	6	*120	*9	*196	*6	

* Estimate based on a sample size of 10-29.

Table 36. Participation of Florida Resident Sportspersons in Wildlife-Watching Activities: 2011

(State population 16 years old and older. Numbers in thousands)

Sportspersons	Sportsp	ersons	Ang	lers	Hunters		
Sportspersons	Number	Percent	Number	Percent	Number	Percent	
Total sportspersons	2,068	100	1,991	100	329	100	
Sportspersons who:							
Did not engage in wildlife-watching activities	1,054	51	1,021	51	*110	*33	
Engaged in wildlife-watching activities	1,015	49	969	49	220	67	
Away from home	500	24	472	24	*120	*37	
Around the home	923	45	892	45	*196	*59	

* Estimate based on a sample size of 10-29.

Table 37. Participation in Wildlife-Related Recreation by State Residents Both Inside and Outside Their Resident State: 2011

(Population 16 years old and older. Numbers in thousands)

Participant's		Total partic	ipants	Sportspe	rsons	Wildlife-watching	participants
state of residence	Population	Number	Percent of population	Number	Percent of population	Number	Percent of population
United States, total	239,313	90,108	38	37,397	16	71,776	30
Alabama	3,664	1,490	41	744	20	1,079	29
Alaska	526	337	64	235	45	247	47
Arizona	5,084	1,660	33	721	14	1,281	25
Arkansas	2,238	1,119	50	572	26	828	37
California	28,562	7,360	26	1,898	7	6,475	23
Colorado	3,946	1,854	47	727	18	1,456	37
Connecticut	2,781	1,204	43	347	12	1,093	39
Delaware	699	260	37	101	14	209	30
Florida	14,855	4,652	31	2,068	14	3,598	24
Georgia	7,459	2,752	37	981	13	2,206	30
Hawaii	995	222	22	108	11	161	16
Idaho	1,172	638	54	331	28	464	40
Illinois	9,988	3,493	35	1,487	15	2,784	28
Indiana.	4,965	2,131	43	842	17	1,681	34
Iowa	2,363	1,097	46	586	25	780	33
Kansas	2,163	1,011	47	453	21	776	36
Kentucky	3,376	1,470	44	643	19	1,221	36
Louisiana.	3,449	1,380	40	802	23	840	24
Maine	1,066	520	49	233	22	401	38
Maryland	4,480	1,396	31	426	9	1,224	27
Massachusetts	5,320	1,779	33	464	9	1,530	29
Michigan	7,787	3,709	48	1,636	21	3,067	39
Minnesota	4,133	2,107	51	1,400	34	1,498	36
Mississippi	2,220	1,017	46	700	32	630	28
Missouri	4,667	2,105	45	1,001	21	1,645	35
Montana	777	334	43	223	29	258	33
Nebraska	1,387	499	36	258	19	362	26
Nevada	2,024	594	29	171	8	504	20
New Hampshire	1,066	470	44	168	16	388	36
New Jersey	6,852	2,057	30	709	10	1,708	25
New Merrice	1 551	592	38	252	16	486	31
New Mexico	1,551 15,503	5,143	33	252 1,980	16 13		26
New York	7,264	2,717	37	1,394	13	4,081	20
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Ohio.	8,999	4,078	45	1,603	18	3,155	35
Oklahama	2 020	1.540	55	770	27	1 222	44
Oklahoma	2,828 3,061	1,549 1,396	46	444	15	1,233 1,239	44 40
Oregon.	10,036	4,063	40		13		33
Pennsylvania	848	309	36	1,277	13	3,329 270	33
South Carolina	3,555	1,299	37	615	17	944	32 27
South Dalcata	(21	271	50	100	20	267	40
South Dakota	631	371	59	190	30	267	42
Tennessee	4,945	2,121	43	923	19	1,733	35
TexasUtah	18,681 2,036	5,888 784	32 39	2,711 406	15 20	4,263 558	23 27
Vermont.	512	316	62	134	20 26	273	53
Virginia	6 126	2 500	42	040	1.4	2 212	26
Virginia	6,136	2,580	42	842	14	2,212	36
Washington	5,293	2,311	44	968	18	1,932	37
West Virginia.	1,464	868 2,499	59 56	322 1,198	22 27	751	51
vv 1500115111	4,460 424	2,499	50 59	1,198	34	2,152 182	48 43

(NA) Not available.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 38. Anglers and Hunters by Sportsperson's State of Residence: 2011

(Population 16 years old and older. Numbers in thousands)

Sportsperson's		Fished or	hunted	Fished	only	Hunted	only	Fished and	hunted
state of residence	Population	Number	Percent of population	Number	Percent of population	Number	Percent of population	Number	Percent o population
United States, total	239,313	37,397	16	23,714	10	4,285	2	9,389	
Alabama	3,664	744	20	252	7	*228	*6	264	
Alaska	526	235	45	129	25	*24	*5	82	1
Arizona	5,084	721	14	462	9	*135	*3	*124	*
Arkansas	2,238	572	26	252	11	*105	*5	214	1
California	28,562	1,898	7	1,431	5	198	1	269	1
Colorado	3,946	727	18	567	14	*60	*2	99	
Connecticut	2,781	347	12	265	10	00		76	
Delaware	699	101	12	78	11	*9	*1	*14	*
			1			*78	*1		
Florida	14,855	2,068	14	1,731	12		-	252	
Georgia	7,459	981	13	672	9	*138	*2	171	
Hawaii	995	108	11	85	9			*21	*
Idaho	1,172	331	28	169	14			*119	*1
Illinois	9,988	1,487	15	976	10	*252	*3	260	
Indiana	4,965	842	17	465	9	*56	*1	322	
Iowa	2,363	586	25	369	16	*64	*3	152	
Kansas	2,163	453	21	275	13	*18	*1	159	
Kentucky	3,376	643	19	327	10	*151	*4	165	
Louisiana	3,449	802	23	511	15	*69	*2	222	
	, ·								
Maine	1,066	233	22	92	9	*37	*3	104	1
Maryland	4,480	426	9	337	8			*72	*
Massachusetts	5,320	464	9	398	7			59	
Michigan	7,787	1,636	21	1,128	14	*170	*2	337	
Minnesota	4,133	1,400	34	925	22	*71	*2	403	1
Mississippi	2,220	700	32	263	12	*96	*4	340	1
Missouri	4,667	1,001	21	507	11	132	3	363	
Montana	777	223	29	114	15	*30	*4	78	1
Nebraska	1,387	258	19	143	10	*61	*4	54	1
		171	8	143	6	*15	*1	*34	*
Nevada	2,024				-	.13	.1		
New Hampshire	1,066	168	16	125	12			*39	1
New Jersey	6,852	709	10	593	9	*30	*(Z)	86	
New Mexico	1,551	252	16	185	12	*21	*1	*47	*
New York	15,503	1,980	13	1,241	8	*172	*1	567	
North Carolina	7,264	1,394	19	1,077	15	*88	*1	230	
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Ohio	8,999	1,603	18	1,075	12	*168	*2	360	(
Oklahoma	2,828	770	27	551	19			*193	a
Oregon.	3,061	444	15	263	9	*58	*2	*123	*
			13	203 574	-	269	3	434	
Pennsylvania	10,036	1,277			6	269	3		
Rhode Island	848	94	11	77	9			16	
South Carolina	3,555	615	17	377	11	*42	*1	196	
South Dakota	631	190	30	*58	*9	*27	*4	106	1
Tennessee	4,945	923	19	637	13	*91	*2	196	
Texas	18,681	2,711	15	1,631	9	*356	*2	724	
Utah	2,036	406	20	245	12	*55	*3	106	
Vermont.	512	134	26	64	12	30	6	41	
Virginia	6,136	842	14	488	8	135	2	219	
Washington	5,293	968	14	749	14	*54	*1	165	
West Virginia.	1,464	322	22	111	8	*83	*6	128	
Wisconsin	4,460	1,198	27	434	10	*260	*6	504	1
Wyoming	424	145	34	69	16	*30	*7	46	1

Note: U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 39. Participation in Wildlife-Related Recreation in Each State by Both Residents and Nonresidents of the State: 2011

Stata whoma activity tooly place	Total participa	nts	Sportspersor	15	Wildlife-watching pa	articipants
State where activity took place	Number	Percent	Number	Percent	Number	Percer
United States, total	90,108	100	37,397	42	71,776	8
Alabama	1,732	100	948	55	1,114	6
Alaska	1,014	100	563	55	640	6
Arizona	· · ·		786	37		7
	2,136	100			1,566	
Arkansas	1,323	100	696	53	852	6
California	7,849	100	1,820	23	6,733	8
Colorado	2,315	100	919	40	1,782	7
Connecticut	1,361	100	350	26	1,178	8
Delaware	344	100	177	52	243	7
Florida	6,354	100	3,152	50	4,308	6
Georgia	3,058	100	1,059	35	2,393	7
Hawaii	465	100	158	34	358	3
Idaho	838	100	534	64	558	6
Illinois	3,799	100	1,309	34	3,019	7
Indiana	2,308	100	867	38	1,719	
Iowa	1,255	100	598	48	837	(
Kansas	1,156	100	527	46	792	(
	· · ·				1,319	
Kentucky	1,710	100	713	42	· · · · ·	
Louisiana	1,709	100	904	53	1,010	:
Maine	1,117	100	413	37	838	,
Maryland	1,613	100	445	28	1,362	:
Massachusetts	2,199	100	538	24	1,828	
Michigan	4,397	100	1,938	44	3,199	
Minnesota	2,518	100	1,649	65	1,577	(
			782	58		
Mississippi	1,350	100			781	1
Missouri	2,494	100	1,277	51	1,716	(
Montana	570	100	335	59	402	2
Nebraska	558	100	289	52	384	(
Nevada	734	100	163	22	643	8
New Hampshire	786	100	247	31	630	8
New Jersey	2,438	100	794	33	1,875	7
New Maria	792	100	204	20	5((
New Mexico	783	100	304	39	566	2
New York	5,536	100	2,109	38	4,239	
North Carolina	3,497	100	1,631	47	2,432	
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Ohio	4,344	100	1,561	36	3,197	
Oklahoma	1,727	100	779	45	1,263	-
Oregon.	1,786	100	703	39	1,440	5
5	· · ·	100	1,424	31	3,598	
Pennsylvania	4,564		· · ·			
Rhode Island	402	100	179	45	308	
South Carolina	1,729	100	847	49	1,103	(
South Dakota	662	100	430	65	384	4
Tennessee	2,584	100	994	38	1,955	
Texas	6,305	100	2,713	43	4,376	(
Utah.	1,015	100	493	49	717	
Vermont.	512	100	254	50	370	
Virginia	3,269	100	1,068	33	2,509	-
Virginia						
Washington	2,756	100	1,005	36	2,168	
West Virginia.	1,176	100	447	38	850	7
Wisconsin	3,500	100	1,554	44	2,359	e
Wyoming	775	100	390	50	518	(

(Population 16 years old and older. Numbers in thousands)

* Estimate based on a sample size of 10–29. (NA) Not available.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Table 40. Anglers and Hunters by State Where Fishing or Hunting Took Place: 2011

			Angl	ers					Hunt	ers		
State where fishing or hunting took place	Total anglers, residents and nonresidents		State residents		Nonresi	idents	Total hunters, residents and nonresidents		State residents		Nonresidents	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percer
United States, total	33,112	100	30,037	91	6,964	21	13,674	100	12,890	94	1,942	1
Alabama	683	100	473	69	210	31	535	100	492	92	*44	*
Alaska	538	100	211	39	327	61	125	100	104	83		
Arizona	637	100	533	84	*104	*16	269	100	225	83	*45	*1
Arkansas	555	100	458	83	*97	*17	363	100	316	87		
California	1,674	100	1,576	94	98	6	394	100	377	96		
Colorado	767	100	593	77	175	23	259	100	144	55	*115	*4
Connecticut	342	100	277	81	*65	*19	50	100	46	93		
Delaware	166	100	59	36	*107	*64	23	100	19	84		
Florida	3,092	100	1,895	61	1,197	39	242	100	215	89		
Georgia	829	100	764	92	*65	*8	392	100	293	75	*98	*2
Hawaii	157	100	104	66			*23	*100	*23	*100		
Idaho	447	100	238	53	208	47	246	100	*162	*66	*85	*3
Illinois	1,044	100	955	92	*88	*8	512	100	459	90		
Indiana.	801	100	720	90	*81	*10	392	100	377	96		
Iowa	473	100	416	88	*58	*12	253	100	200	79		
Kansas	400	100	372	93	*28	*7	283	100	170	60	*112	*4
Kentucky	554	100	451	81	*103	*19	347	100	316	91		
		100	700	85	*125	*15	277	100	253	91		
Louisiana	825		193	85 56	149		181		255 141	78	*40	*1
Maine	341	100				44		100		/8 *78	*40	*2 *2
Maryland	426	100	347	81	80	19	88	100	*69	*/8	*19	*2
Massachusetts	532	100	377	71	155	29	56	100	52	93		
Michigan	1,744	100	1,397	80	347	20	529	100	501	95		
Minnesota	1,562	100	1,303	83	259	17	477	100	457	96		
Mississippi	651	100	600	92			483	100	436	90		
Missouri	1,071	100	827	77	244	23	576	100	477	83	*100	*1
Montana	267	100	185	69	82	31	150	100	104	70	*46	*3
Nebraska	207	100	177	85			128	100	110	86		
Nevada	147	100	114	78			43	100	39	91		
New Hampshire	228	100	153	67	75	33	56	100	42	74	*14	*2
New Jersey	766	100	509	66	*257	*34	94	100	93	99		
New Mexico	278	100	213	77	*65	*23	69	100	64	93		
New York	1,882	100	1,585	84	297	16	823	100	739	90	*84	*1
North Carolina	1,525	100	1,196	78	329	22	335	100	259	77	*76	*2
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Ohio	1,342	100	1,257	94	*85	*6	553	100	516	93	*37	*
Oklahoma	729	100	680	93	*49	*7	244	100	219	90		
Oregon.	638	100	373	59	264	41	196	100	181	92		
Pennsylvania	1,101	100	891	81	210	19	775	100	699	90	*76	*1
Rhode Island	175	100	79	45	96	55	20	100	15	77	/0	
South Carolina	744	100	561	75	*182	*25	254	100	180	71	*74	*2
South Dalrot-	200	100	150	50	*110	*42	270	100	107	47	1.4.4	-
South Dakota	268 826	100	156	58 86	*112 *117		270	100	127	47	144	5
Tennessee	826	100	709	86		*14	375	100	276	74 94	*67	
Texas	2,246	100	2,133	95 83	*114 *70	*5	1,147	100	1,080		*67	*
Utah Vermont	414 207	100 100	343 95	83 46	*/0	*17 54	193 90	100 100	158 66	82 74	*35	*1
Virginia	833	100	649 825	78 89	184	22 *11	432	100	326	75 92	*106	*2
Washington	938	100	835		*103	*11	219	100	200			
West Virginia	305	100	222	73	*84	*27	247	100	184	74	*121	+ 1
Wisconsin	1,247	100	910	73	337	27	895	100	763	85	*131	*1
Wyoming	303	100	110	36	*193	*64	140	100	76	54	*64	*4

Note: For the U.S. row, detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia, as described in Appendix D.

Appendix A

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Appendix A. Definitions

Annual household income—Total 2011 income of household members before taxes and other deductions.

Around-the-home wildlife

watching—Activity within 1 mile of home with one of six primary purposes: (1) taking special interest in or trying to identify birds or other wildlife; (2) photographing wildlife; (3) feeding birds or other wildlife; (4) maintaining natural areas of at least one-quarter acre for the benefit of wildlife; (5) maintaining plantings (such as shrubs and agricultural crops) for the benefit of wildlife; and (6) visiting parks and natural areas to observe, photograph, or feed wildlife.

Auxiliary equipment—Equipment owned primarily for wildlife-associated recreation. For the sportspersons section, these include sleeping bags, packs, duffel bags, tents, binoculars and field glasses, special fishing and hunting clothing, foul weather gear, boots and waders, maintenance and repair of equipment, and processing and taxidermy costs. For the wildlifewatching section, these include tents, tarps, frame packs, backpacking and other camping equipment, and blinds. For both sportspersons and wildlife watchers, it also includes electronic auxiliary equipment such as Global Positioning Systems.

Away-from-home wildlife watching-

Trips or outings at least 1 mile from home for the primary purpose of observing, photographing, or feeding wildlife. Trips to zoos, circuses, aquariums, and museums are not included.

Big game—Bear, deer, elk, moose, wild turkey, and similar large animals that are hunted.

Census Divisions

East North Central

Illinois Indiana Michigan Ohio Wisconsin

East South Central

Alabama Kentucky Mississippi Tennessee

Middle Atlantic

New Jersey New York Pennsylvania

Mountain

Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming

New England

Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont

Pacific

Alaska California Hawaii Oregon Washington

South Atlantic

Delaware District of Columbia Florida Georgia Maryland North Carolina South Carolina Virginia West Virginia

West North Central

Kansas Iowa Minnesota Missouri Nebraska North Dakota South Dakota

West South Central

Arkansas Louisiana Oklahoma Texas

Day—Any part of a day spent participating in a given activity. For example, if someone hunted two hours one day and three hours another day, it would be reported as two days of hunting. If someone hunted two hours in the morning and three hours in the afternoon of the same day, it would be considered one day of hunting.

Education—The highest completed grade of school or year of college.

Expenditures—Money spent in 2011 for wildlife-related recreation trips in the United States, wildlife-related recreational equipment purchased in the United States, and other items. The "other items" were books, magazines, and DVDs; membership dues and contributions, land leasing or owning; hunting and fishing licenses; and plantings, all for the purpose of wildliferelated recreation. Expenditures included both money spent by participants for themselves and the value of gifts they received. **Fishing**—The sport of catching or attempting to catch fish with a hook and line, bow and arrow, or spear; it also includes catching or gathering shellfish (clams, crabs, etc.); and the noncommercial seining or netting of fish, unless the fish are for use as bait. For example, seining for smelt is fishing, but seining for bait minnows is not included as fishing.

Fishing equipment—Items owned primarily for fishing:

Rods, reels, poles, and rodmaking components

Lines and leaders

Artificial lures, flies, baits, and dressing for flies or lines

Hooks, sinkers, swivels, and other items attached to a line, except lures and baits

Tackle boxes

Creels, stringers, fish bags, landing nets, and gaff hooks

Minnow traps, seines, and bait containers

Depth finders, fish finders, and other electronic fishing devices

Ice fishing equipment

Other fishing equipment

Freshwater—Reservoirs, lakes, ponds, and the nontidal portions of rivers and streams.

Great Lakes fishing—Fishing in Lakes Superior, Michigan, Huron, St. Clair, Erie, and Ontario, their connecting waters such as the St. Mary's River system, Detroit River, St. Clair River, and the Niagara River, and the St. Lawrence River south of the bridge at Cornwall, New York. Great Lakes fishing includes fishing in tributaries of the Great Lakes for smelt, steelhead, and salmon.

Home—The starting point of a wildlife-related recreational trip. It may be a permanent residence or a temporary or seasonal residence such as a cabin.

Hunting—The sport of shooting or attempting to shoot wildlife with firearms or archery equipment.

Hunting equipment—Items owned primarily for hunting:

Rifles, shotguns, muzzleloaders, and handguns

Archery equipment

Telescopic sights

Decoys and game calls

Ammunition

Hand loading equipment

Hunting dogs and associated costs

Other hunting equipment

Land leasing and owning—Leasing or owning land either singly or in cooperation with others for the primary purpose of fishing, hunting, or wildlife watching on it.

Maintain natural areas—To set aside 1/4 acre or more of natural environment, such as wood lots or open fields, for the primary purpose of benefiting wildlife.

Maintain plantings—To introduce or encourage the growth of food and cover plants for the primary purpose of benefiting wildlife.

Metropolitan Statistical Area

(MSA)—A Metropolitan Statistical Area is a grouping of one or more counties or equivalent entities that contain at least one urbanized area of 50 000 or more inhabitants. The "Outside MSA" classification include census-defined Micropolitan Statistical Areas (or Micro areas). A Micro area is defined as a grouping of one or more counties or equivalent entities that contain at least one urban cluster of at least 10,000 but less than 50,000 inhabitants. Refer to <www.census.gov /population/metro/about/>, for a more detailed definition of the Metropolitan Statistical Area.

Migratory birds—Birds that regularly migrate from one region or climate to another such as ducks, geese, and doves and other birds that may be hunted.

Multiple responses—The term used to reflect the fact that individuals or their characteristics fall into more than one reporting category. An example of a big game hunter who hunted for deer and elk demonstrates the effect of multiple responses. In this case, adding the number of deer hunters (one) and elk hunters (one) would overstate the number of big game hunters (one) because deer and elk hunters are not mutually exclusive categories. In contrast, for example, total participants is the sum of male and female participants, because "male" and "female" are mutually exclusive categories.

Nonresidents—Individuals who do not live in the State being reported. For example, a person living in Texas who watches whales in California is a nonresidential wildlife-watcher in California.

Nonresponse—A term used to reflect the fact that some Survey respondents provide incomplete sets of information. For example, a Survey respondent may have been unable to identify the primary type of hunting for which a gun was bought. Total hunting expenditure estimates will include the gun purchase, but it will not appear as spending for big game or any other type of hunting. Nonresponses result in reported totals that are greater than the sum of their parts.

Observe—To take special interest in or try to identify birds, fish or other wildlife.

Other animals—Coyotes, crows, foxes, groundhogs, prairie dogs, raccoons, alligators, and similar animals that can be legally hunted and are not classified as big game, small game, or migratory birds. They may be classified as unprotected or predatory animals by the State in which they are hunted. Feral pigs are classified as "other animals" in all States except Hawaii, where they are considered big game.

Participants—Individuals who engage in fishing, hunting, or a wildlifewatching activity. Unless otherwise stated, a person has to have hunted, fished, or wildlife watched in 2011 to be considered a participant.

Plantings-See "Maintain plantings."

Primary purpose—The principal motivation for an activity, trip, or expenditure.

Private land—Land owned by a business, nongovernmental organization, private individual, or a group of individuals such as an association or club.

Public land—Land that is owned by local governments (such as county parks and municipal watersheds),

State governments (such as State parks and wildlife management areas), or the federal government (such as National Forests, Recreational Areas, and Wildlife Refuges).

Residents—Individuals who lived in the State being reported. For example, a person who lives in California and watches whales in California is a residential wildlife watcher in California.

Rural—All territory, population, and housing units located outside of urbanized areas and urban clusters, as determined by the U.S. Census Bureau.

Saltwater—Oceans, tidal bays and sounds, and the tidal portions of rivers and streams.

Screening interviews—The first Survey contact with a sample household. Screening interviews are conducted with a household representative to identify respondents who are eligible for in-depth interviews. Screening interviews gather data such as age and sex about individuals in the households. Further information on screening interviews is available on page vii in the "Survey Background and Method" section of this report.

Small game—Grouse, pheasants, quail, rabbits, squirrels, and similar small animals for which States have small game seasons and bag limits.

Special equipment—Big-ticket equipment items that are owned primarily for wildlife-related recreation:

Bass boats

Other types of motor boats

Canoes and other types of nonmotor boats

Boat motors, boat trailer/hitches, and other boat accessories

Pickups, campers, vans, travel or tent trailers, motor homes, house trailers, recreational vehicles (RVs)

Cabins

Off-the-road vehicles such as trail bikes, all terrain vehicles (ATVs), dune buggies, four-wheelers, 4x4 vehicles, and snowmobiles

Other special equipment

Spenders—Individuals who spent money on fishing, hunting, or wildlifewatching activities or equipment and also participated in those activities.

Sportspersons—Individuals who engaged in fishing, hunting, or both.

Trip—An outing involving fishing, hunting, or wildlife watching. A trip may begin from an individual's principal residence or from another place, such as a vacation home or the home of a relative. A trip may last an hour, a day, or many days.

Type of fishing—There are three types of fishing: (1) freshwater except Great Lakes, (2) Great Lakes, and (3) saltwater.

Type of hunting—There are four types of hunting: (1) big game, (2) small game, (3) migratory bird, and (4) other animal.

Unspecified expenditure—An item that was purchased for use in both fishing and hunting, rather than primarily one or the other. Auxiliary equipment, special equipment, magazines and books, and membership dues and contributions are the items for which a purchase could be categorized as "unspecified."

Urban—All territory, population, and housing units located within boundaries that encompass densely settled territory, consisting of core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. Under certain conditions, less densely settled territory may be included, as determined by the Census Bureau.

Visit parks or natural areas—A visit to places accessible to the public and that are owned or leased by a governmental entity, nongovernmental organization, business, or a private individual or group such as an association or club.

Wildlife—Animals such as birds, fish, insects, mammals, amphibians, and reptiles that are living in natural or wild environments. Wildlife does not include animals living in aquariums, zoos, and other artificial surroundings or domestic animals such as farm animals or pets. Wildlife observed, photographed, or

fed—Examples of species that wildlife watchers observe, photograph, and/ or feed are (1) Wild birds—songbirds such as cardinals, robins, warblers, jays, buntings, and sparrows; birds of prey such as hawks, owls, eagles, and falcons; waterfowl such as ducks, geese, and swans; other water birds such as shorebirds, herons, pelicans, and cranes; and other birds such as pheasants, turkeys, road runners, and woodpeckers; (2) Land mammalslarge land mammals such as bears. bison, deer, moose, and elk; small land mammals such as squirrels, foxes, prairie dogs, and rabbits; (3) Fish such as salmon, sharks, and groupers; (4) Marine mammals such as whales, dolphins, and manatees; and (5) Other wildlife such as butterflies, turtles, spiders, and snakes.

Wildlife-related recreation-

Recreational fishing, hunting, and wildlife watching.

Wildlife watching—There are six types of wildlife watching: (1) closely observing, (2) photographing, (3) feeding, (4) visiting parks or natural areas, (5) maintaining plantings, and (6) maintaining natural areas. These activities must be the primary purpose of the trip or the around-the-home undertaking.

Wildlife-watching equipment—Items owned primarily for observing, photographing, or feeding wildlife:

Binoculars and spotting scopes

Cameras, video cameras, special lenses, and other photographic equipment

Film and developing

Commercially prepared and packaged wild bird food

Other bulk food used to feed wild birds

Food for other wildlife

Nest boxes, bird houses, feeders, and baths

Day packs, carrying cases, and special clothing

Other items such as field guides and maps

Appendix B

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Appendix B. 2010 Participation of 6- to 15-Year-Olds: Data From Screening Interviews

The 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation was carried out in two phases. The first (or screening) phase began in April 2011. The main purpose of this phase was to collect information about all persons 16 years old and older in order to develop a sample of potential sportspersons and wildlife watchers for the second (or detailed) phase. However, information was also collected on the number of persons 6 to 15 years old who participated in wildlife-related recreation activities in 2010.

It is important to emphasize that the information reported from the 2011 screen relates to activity only up to and including 2010. Also, these data are reported by one household respondent speaking for all household members rather than the actual participants. In addition, these data are based on long-term recall (at least a 12-month recall), which has been found in Survey research (see *Investigation of Possible Recall/Reference Period Bias in National Surveys of Fishing, Hunting and Wildlife-Associated Recreation, December 1989, Westat, Inc.*) to add bias to the resulting estimates. In many cases, longer recall periods result in overestimating participation and expenditures for wildlife-related recreation.

Tables B-1 through B-4 report data on 6- to 15-year-old participants in 2010. Detailed expenditures and recreational activity data were not gathered for the 6- to 15-year-old participants. Because of differences in methodologies of the screening and the detailed phases of the 2011 Survey, the estimates of the two phases are not comparable. Only participants 16 years old and older were eligible for the detailed phase. The screening phase covered activity for 2010 or earlier; the detailed phase has estimates for only 2011. The detailed phase was a series of interviews of the actual participants conducted at 4- and 8-month intervals. The screening phase was a single interview of one household respondent who reported household events with one year or more recall. The shorter recall period of the detailed phase enabled better data accuracy.

Table B-1. Florida Residents 6 to 15 Years Old Participating in Fishing and Hunting Both Inside and Outside Florida: 2010

(Population 6 to 15 years old. Numbers in thousands)

Sportoporoopo	Sportspersons 6 to 15 years old								
Sportspersons	Number	Percent of sportspersons	Percent of population						
Total sportspersons	672	100	30						
Total anglers Fished only Fished and hunted	661 614 *47	98 91 *7	30 28 *2						
Total hunters Hunted only Hunted and fished	*57 *47	*9 *7	*3 *2						

* Estimate based on a sample size of 10-29. ... Sample size too small (less than 10) to report data reliably.

Note: Detail does not add to total because of multiple responses. Column showing percent of sportspersons is based on the "Total sportspersons" row. Column showing percent of population is based on the state population 6 to 15 years old, including those who did not fish or hunt. Data reported on this table are from screening interviews in which one adult household member responded for household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes state residents who fished or hunted only in other countries.

Table B-2. Selected Characteristics of Florida Resident Anglers and Hunters 6 to 15 Years Old: 2010

(Population 6 to 15 years old. Numbers in thousands)

	Popul	ation	Sportspersons (fished or hunted)			Anglers			Hunters		
Characteristic	Number	Percent	Number	Percent who par- ticipated	Percent	Number	Percent who par- ticipated	Percent	Number	Percent who par- ticipated	Percent
Total persons	2,213	100	672	30	100	661	30	100	*57	*3	*100
Population Density of Residence											
Urban	1,867	84	551	30	82	551	30	83			
Rural	346	16	*120	*35	*18	*110	*32	*17	*37	*11	*65
Population Size of Residence											
Metropolitan Statistical Area (MSA)	2,206	100	668	30	99	658	30	99	*57	*3	*100
1,000,000 or more	1,536	69	445	29	66	443	29	67			
250.000 to 999.999	500	23	177	35	26	177	35	27			
50.000 to 249.999	170	8	*46	*27	*7	*37	*22	*6			
Outside MSA.				27							
Age											
6 to 8 years	648	29	*148	*23	*22	*148	*23	*22			
9 to 11 years	615	28	158	26	24	158	26	24			
12 to 15 years	950	43	365	38	54	355	37	54	*46	*5	*80
Sex											
Male	1.180	53	487	41	73	477	40	72	*49	*4	*86
Female	1,033	47	184	18	27	184	18	28			
Ethnicity											
Hispanic	730	33	*117	*16	*17	*117	*16	*18			
Non-Hispanic	1,483	67	555	37	83	544	37	82	*57	*4	*100
Race											
White	1,445	65	507	35	76	497	34	75	*57	*4	*100
African American	328	15	*91	*28	*14	*91	*28	*14			100
All others.	439	20		20			20				
Annual Household Income											
Less than \$20,000	237	11	*55	*23	*8	*55	*23	*8			
\$20,000 to \$29,999	*177	*8									
\$30,000 to \$39,999	*164	*7									
\$40,000 to \$49,999	*224	*10									
\$50,000 to \$74,999	317	14	*102	*32	*15	*93	*29	*14			
\$75,000 to \$99,999	282	13	*99	*35	*15	*98	*35	*15			
\$100,000 or more	404	18	*177	*44	*26	*177	*44	*27			
Not reported	407	18	*143	*35	*21	*143	*35	*22			

* Estimate based on a sample size of 10-29.

29. ... Sample size too small (less than 10) to report data reliably.

Note: Percent who participated columns show the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who wildlife watched, etc.). Remaining percent columns show the percent of each column's participants who are described by the row heading (the percent of wildlife watchers who lived in urban areas, etc.). Data reported on this table are from screening interviews in which one adult household members responded for household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes state residents who wildlife watched only in other countries.

Table B-3. Florida Residents 6 to 15 Years Old Participating in Wildlife Watching Both Inside and Outside Florida: 2010

(Population 6 to 15 years old. Numbers in thousands)

ent of participants	Percent of population
100	29
42	12
81	24
69	20
*14	*4
34	10
*7	*2
_	*7

* Estimate based on a sample size of 10-29.

Note: Detail does not add to total because of multiple responses. The column showing percent of participation is based on total participants. The column showing percent of population is based on the state population 6 to 15 years old, including those who did not participate in wildlife watching. Data reported on this table are from screening interviews in which one adult household member responded for all household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes persons who wildlife watched only in other countries.

Table B-4. Selected Characteristics of Florida Resident Wildlife Watchers 6 to 15 Years Old: 2010

(Population 6 to 15 years old. Numbers in thousands)

	Population		Total wildlife watchers			Away from Home			Around the home		
Characteristic	Number	Percent	Number	Percent who par- ticipated	Percent	Number	Percent who par- ticipated	Percent	Number	Percent who par- ticipated	Percent
Total persons	2,213	100	646	29	100	271	12	100	520	24	100
Population Density of Residence											
Urban	1,867	84	541	29	84	236	13	87	434	23	83
Rural	346	16	*105	*30	*16	*35	*10	*13	*86	*25	*17
Population Size of Residence											
Metropolitan Statistical Area (MSA)	2,206	100	646	29	100	271	12	100	520	24	100
1,000,000 or more	1,536	69	402	26	62	*152	*10	*56	323	21	62
250,000 to 999,999	500	23	187	37	29	*96	*19	*35	*142	*28	*27
50,000 to 249,999	170	8	*57	*34	*9				*56	*33	*11
Outside MSA											
Age											
6 to 8 years	648	29	*131	*20	*20	*73	*11	*27	*109	*17	*21
9 to 11 years	615	28	266	43	41	*90	*15	*33	*222	*36	*43
12 to 15 years	950	43	249	26	38	*108	*11	*40	*189	*20	*36
Sex											
Male	1,180	53	371	31	57	151	13	56	322	27	62
Female	1,033	47	275	27	43	*120	*12	*44	198	19	38
Ethnicity											
Hispanic	730	33	*109	*15	*17	*41	*6	*15	*98	*13	*19
Non-Hispanic	1,483	67	536	36	83	230	16	85	423	28	81
Race											
White	1,445	65	487	34	75	232	16	86	382	26	73
African American	328	15									
All others	439	20	*104	*24	*16						
Annual Household Income											
Less than \$20,000	237	11									
\$20,000 to \$29,999	*177	*8									
\$30,000 to \$39,999	*164	*7									
\$40,000 to \$49,999	*224	*10									
\$50,000 to \$74,999	317	14	*88	*28	*14	*55	*17	*20	*53	*17	*10
\$75,000 to \$99,999	282	13	*170	*60	*26	*48	*17	*18	*170	*60	*33
\$100,000 or more	404	18	149	37	23	*120	*30	*44	*76	*19	*15
Not reported	407	18									

* Estimate based on a sample size of 10-29.

... Sample size too small (less than 10) to report data reliably.

Note: Percent who participated columns show the percent of each row's population who participated in the activity named by the column (the percent of those living in urban areas who fished, etc.). Remaining percent columns show the percent of each column's participants who are described by the row heading (the percent of anglers who lived in urban areas, etc.). Data reported on this table are from screening interviews in which one adult household member responded for household members 6 to 15 years old. The screening interview required the respondent to recall 12 months worth of activity. Includes state residents who fished or hunted only in other countries.

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Appendix C. Significant Methodological Changes From Previous Surveys and Regional Trends

This appendix provides a description of data collection changes and national and regional trend information based on the 1991, 1996, 2001, 2006, and 2011 Surveys. Since these five surveys used similar methodologies, their published information is directly comparable.

Significant Methodological Differences

The most significant design differences in the five Surveys are as follows:

- The 1991 Survey data was collected by interviewers filling out paper questionnaires. The data entries were keyed in a separate operation after the interview. The 1996, 2001, 2006, and 2011 Survey data were collected by the use of computer-assisted interviews. The questionnaires were programmed into computers, and the interviewer keyed in the responses at the time of the interview.
- 2. The 1991 Survey screening phase was conducted in January and February of 1991, when a household member of the sample households was interviewed on behalf of the entire household. The screening interviews for the 1996, 2001, and 2006 Surveys were conducted April through June of their survey years in conjunction with the first wave of the detailed interviews. The 2011 Survey also conducted screening interviews and the first detailed interviews April through June of 2011, but furthermore had an additional screening and detailed effort from February 2012 to the end of May 2012. The April–June 2011 screening effort had a high noncontact rate because of poor results using sample tele-

phone numbers obtained from a private firm. Census went back to the noncontacted component of the original sample in February-May 2012 and interviewed a subsample, requiring annual recall for those respondents. The Wave 3 screen sample was 12,484 of the total 48,600 household screen sample. A modification of the 2011 sampling scheme was to oversample counties that had relatively high proportions of hunting license purchases.

The screening interviews for all five Surveys consisted primarily of demographic questions and wildlife-related recreation questions concerning activity in the previous year (1990, 1995, etc.) and intentions for recreating in the survey year.

In the 1991 Survey, an attempt was made to contact every sample person in all three detailed interview waves. In 1996, 2001, 2006, and 2011 respondents who were interviewed in the first detailed interview wave were not contacted again until the third wave (unless they were part of the other subsample, i.e., a respondent in both the sportsperson and wildlife watching subsamples could be in the first and third wave of sportsperson interviewing and the second and third wave of wildlife watching interviewing). Also, all interviews in the second wave were conducted only by telephone. In-person interviews were only conducted in the first and third waves. The 2011 wave 3 screen phase was composed of both telephone and in-person interviews.

Section I. Important Instrument Changes in the 1996 Survey

1. The 1991 Survey collected information on all wildlife-related recreation purchases made by participants without reference to where the purchase was made. The 1996 Survey asked in which state the purchase was made.

- 2. In 1991, respondents were asked what kind of fishing they did, i.e., Great Lakes, other freshwater, or saltwater, and then were asked in what states they fished. In 1996, respondents were asked in which states they fished and then were asked what kind of fishing they did. This method had the advantage of not asking about, for example, saltwater fishing when they only fished in a noncoastal state.
- 3. In 1991, respondents were asked how many days they "actually" hunted or fished for a particular type of game or fish and then how many days they "chiefly" hunted or fished for the same type of game or fish rather than another type of game or fish. To get total days of hunting or fishing for a particular type of game or fish, the "actually" day response was used, while to get the sum of all days of hunting or fishing, the "chiefly" days were summed. In 1996, respondents were asked their total days of hunting or fishing in the country and each state, then how many days they hunted or fished for a particular type of game or fish.
- 4. Trip-related and equipment expenditure categories were not the same for all Surveys. "Guide fee" and "Pack trip or package fee" were two separate trip-related expenditure items in 1991, while they were combined into one category in the 1996 Survey. "Boating costs" was added to the 1996 hunting

and wildlife-watching trip-related expenditure sections. "Heating and cooking fuel" was added to all of the trip-related expenditure sections. "Spearfishing equipment" was moved from a separate category to the "other" list. "Rods" and "Reels" were two separate categories in 1991 but were combined in 1996. "Lines, hooks, sinkers, etc." was one category in 1991 but split into "Lines" and "Hooks, sinkers, etc." in 1996. "Food used to feed other wildlife" was added to the wildlife-watching equipment section, "Boats" and "Cabins" were added to the wildlife-watching special equipment section, and "Land leasing and ownership" was added to the wildlife-watching expenditures section.

- 5. Questions asking sportspersons if they participated as much as they wanted were added in 1996. If the sportspersons said no, they were asked why not.
- The 1991 Survey included questions about participation in organized fishing competitions; anglers using bows and arrows, nets or seines, or spearfishing; hunters using pistols or handguns and target shooting in preparation for hunting. These questions were not asked in 1996.
- The 1996 Survey included questions about catch and release fishing and persons with disabilities participating in wildlife-related recreation. These questions were not part of the 1991 Survey.
- 8. The 1991 Survey included questions about average distance traveled to recreation sites. These questions were not included in the 1996 Survey.
- 9. The 1996 Survey included questions about the last trip the respondent took. Included were questions about the type of trip, where the activity took place, and the distance and direction to the site visited. These questions were not asked in 1991.
- 10. The 1991 Survey collected data on hunting, fishing, and wildlife

watching by U.S. residents in Canada. The 1996 Survey collected data on fishing and wildlifewatching by U.S. residents in Canada.

Section II. Important Instrument Changes in the 2001 Survey

- The 1991 and 1996 single race category "Asian or Pacific Islander" was changed to two categories "Asian" and "Native Hawaiian or Other Pacific Islander." In 1991 and 1996, the respondent was required to pick only one category, while in 2001 the respondent could pick any combination of categories. The next question stipulated that the respondent could only be identified with one category and then asked what that category was.
- 2. The 1991 and 1996 land leasing and ownership sections asked the respondent to combine the two types of land use into one and give total acreage and expenditures. In 2001, the two types of land use were explored separately.
- 3. The 1991 and 1996 wildlifewatching sections included questions on birdwatching for aroundthe-home participants only. The 2001 Survey added a question on birdwatching for away-from-home participants. Also, questions on the use of birding life lists and how many species the respondent can identify were added.
- "Recreational vehicles" was added to the sportspersons and wildlifewatchers special equipment section. "House trailer" was added to the sportspersons special equipment section.
- 5. Total personal income was asked in the detailed phase of the 1996 Survey. This was changed to total household income in the 2001 Survey.
- 6. A question was added to the triprelated expenditures section to ascertain how much of the total was spent in the respondent's state of residence when the respondent participated in hunting, fishing, or wildlife watching out-of-state.

- Boating questions were added to the fishing section. The respondent was asked about the extent of boat usage for the three types of fishing.
- 8. The 1996 Survey included questions about the months around-thehome wildlife watchers fed birds. These questions were not repeated in the 2001 Survey.
- 9. The contingent valuation sections of the three types of wildlife-related recreation were altered, using an open-ended question format instead of 1996's dichotomous choice format.

Section III. Important Instrument Changes in the 2006 Survey

- A series of boating questions was added. The new questions dealt with anglers using motorboats and/ or nonmotorboats, length of boat used most often, distance to boat launch used most often, needed improvements to facilities at the launch, whether or not the respondent completed a boating safety course, who the boater fished with most often, and the source and type of information the boater used for his or her fishing.
- 2. Questions regarding catch and release fishing were added. They were whether or not the respondent caught and released fish and, if so, the percent of fish released.
- 3. The proportion of hunting done with a rifle or shotgun, as contrasted with muzzleloader or archery equipment, was asked.
- 4. In the contingent valuation section, where the value of wildlife-related recreation was determined, two quality-variable questions were added: the average length of certain fish caught and whether a deer, elk, or moose was killed. Plus the economic evaluation bid questions were rephrased, from "What is the most your [species] hunting in [State name] could have cost you per trip last year before you would NOT have gone [species] hunting at all in 2001, not even one trip. because it would have been too expensive?", for the hunters, for

example, to "What is the cost that would have prevented you from taking even one such trip in 2006? In other words, if the trip cost was below this amount, you would have gone [species] hunting in [State name], but if the trip cost was above this amount, you would not have gone."

- 5. Questions concerning hunting, fishing, or wildlife watching in other countries were taken out of the Survey.
- Questions about the reasons for not going hunting or fishing, or not going as much as expected, were deleted.
- 7. Disability of participants questions were taken out.
- 8. Determination of the types of sites for wildlife watching was discontinued.
- 9. The birding questions regarding the use of birding life lists and the ability to identify birds based on their sight or sounds were deleted.
- 10. Public transportation costs were divided into two sections, "public transportation by airplane" and "other public transportation, including trains, buses, and car rentals, etc.".

Section IV. Important Instrument Changes in the 2011 Survey

- 1. The series of boating questions added in 2006 was deleted.
- 2. Questions about target shooting and the usage of a shooting range in preparation for hunting were added. The types of weapon used at the shooting range were quantified.
- 3. Questions about plantings expenditures for the purpose of hunting were added.
- 4. "Feral pig" was recategorized from big game to other animals for all states except Hawaii.
- 5. "Ptarmigan" was included as its own small game category, instead of lumped in "other."
- 6. In previous Surveys, "Moose" was included as its own category only for Alaska. For 2011, "Moose" was included as its own big game category, instead of lumped in "other," for all fifty states.
- 7. In previous Surveys, "Wolf" was included as its own category only for Alaska. For 2011, "Wolf" was included as its own other animal category, instead of lumped in "other," for all fifty states.

- 8. The household income categories were modified. The top categories were changed from "\$100,000 or more" to "\$100,000 to \$149,999" and "\$150,000 or more."
- 9. The "Steelhead" category was deleted from the saltwater fish species section, with the idea that it would be included in "other."
- 10. The 2006 around-the-home wildlife-watching category that quantified visitors of "public parks or areas" was rewritten to wildlife watching at "parks or natural areas." This change was to make clear that respondents should include recreating at quasi-governmental and private areas.
- 11. The 2006 wildlife watching equipment category "Film and developing" was rewritten to "Film and photo processing."

Regional Trends

This trends section covers the period from 1991 to 2011. The 1991, 1996, 2001, 2006, and 2011 Surveys used similar methodologies, making all published information for the five Surveys directly comparable.

Table C-1a. Comparison of Wildlife-Related Recreation in the United States: 1991–1996

(U.S. population 16 years old and older. Numbers in thousands. All expenditures in 2011 dollars. 1996 expenditures categories made comparable to 1991)

Participants, days, and expenditures	1991	1996	1991–1996
	(number)	(number)	percent change
Hunting			
Hunters, total	14,063	13,975	^{NS} -1
Hunting days, total	235,806	256,676	^{NS} 9
Hunting expenditures, total	\$20,399,152	\$29,259,999	43
Fishing			
Anglers, total		35,246	^{NS} _1
Fishing days, total		625,893	22
Fishing expenditures, total		\$54,224,581	37
Wildlife Watching			
Wildlife watchers, total Around the home. Away from home. Wildlife-watching days, away from home Wildlife-watching expenditures, total	76,111	62,868	-17
	73,904	60,751	-18
	29,999	23,652	-21
	342,406	313,790	^{NS} -8
	\$30,574,499	\$36,924,875	21

^{NS} Not different from zero at the 5 percent level of significance.

Table C-1b. Comparison of Wildlife-Related Recreation in the United States: 1996–2001

(U.S. population 16 years old and older. Numbers in thousands. All expenditures in 2011 dollars. 1996 and 2001 expenditures categories made comparable to 1991)

Participants, days, and expenditures	1996 (number)	2001 (number)	1996–2001 percent change
Hunting			
Hunters, total Hunting days, total Hunting expenditures, total	256,676	13,034 228,368 \$25,993,960	-7 -11 ^{NS} -11
Fishing			
Anglers, total	625,893	34,071 557,394 \$45,076,739	-3 -11 -17
Wildlife Watching			
Wildlife watchers, total. Around the home. Away from home. Wildlife-watching days, away from home. Wildlife-watching expenditures, total.	60,751 23,652 313,790	66,105 62,928 21,823 372,006 \$42,904,872	5 4 8 19 16

^{NS} Not different from zero at the 5 percent level of significance.

Table C-1c. Comparison of Wildlife-Related Recreation in the United States: 2001–2006

(U.S. population 16 years old and older. Numbers in thousands. All expenditures in 2011 dollars. 2001 and 2006 expenditures categories made comparable to 1991)

Participants, days, and expenditures	2001	2006	2001–2006
	(number)	(number)	percent change
Hunting			
Hunters, total	13,034	12,510	^{NS} _4
Hunting days, total	228,368	219,925	^{NS} _4
Hunting expenditures, total	\$25,993,960	\$25,265,523	^{NS} _3
Fishing			
Anglers, total	34,071	29,952	-12
Fishing days, total	557,394	516,781	-7
Fishing expenditures, total	\$45,076,739	\$46,909,364	NS4
Wildlife Watching			
Wildlife watchers, total Around the home. Away from home. Wildlife-watching days, away from home Wildlife-watching expenditures, total.	66,105	71,132	8
	62,928	67,756	8
	21,823	22,977	^{NS} 5
	372,006	352,070	^{NS} -5
	\$42,904,872	\$40,023,078	NS_7

^{NS} Not different from zero at the 5 percent level of significance.

Table C-1d. Comparison of Wildlife-Related Recreation in the United States: 2006–2011

(U.S. population 16 years old and older. Numbers in thousands. All expenditures in 2011 dollars. 2006 and 2011 expenditures categories made comparable to 1991)

Participants, days, and expenditures	2006 (number)	2011 (number)	2006–2011 percent change
Hunting			
Hunters, total		13,674 281,884 \$32,579,640	9 28 29
Fishing			
Anglers, total	29,952 516,781 \$46,909,364	33,112 553,841 \$41,624,599	11 ^{NS} 7 ^{NS} -11
Wildlife Watching			
Wildlife watchers, total. Around the home. Away from home. Wildlife-watching days, away from home. Wildlife-watching expenditures, total.	352,070	71,776 68,598 22,496 335,625 \$43,636,608	^{NS} 1 ^{NS} 2 ^{NS} 5 NS9

^{NS} Not different from zero at the 5 percent level of significance.

Table C-1e. Comparison of Wildlife-Related Recreation in the United States: 1991–2011

(U.S. population 16 years old and older. Numbers in thousands. All expenditures in 2011 dollars. 2011 expenditures categories made comparable to 1991)

Participants, days, and expenditures	1991 (number)	2011 (number)	1991–2011 percent change
Hunting			
Hunters, total	235,806	13,674 281,884 \$32,579,640	^{NS} _3 20 60
Fishing			
Anglers, total Fishing days, total. Fishing expenditures, total	511,329	33,112 553,841 \$41,624,599	-7 8 ^{NS} 5
Wildlife Watching			
Wildlife watchers, total. Around the home. Away from home. Wildlife-watching days, away from home Wildlife-watching expenditures, total.	73,904 29,999	71,776 68,598 22,496 335,625 \$43,636,608	-6 -7 -25 ^{NS} -2 43

^{NS} Not different from zero at the 5 percent level of significance.

Table C-2. Anglers and Hunters by Census Division: 1991, 1996, 2001, 2006, and 2011

(U.S. population 16 years old and older. Numbers in thousands)

Area and sportsperson	199		199	-	200		200		T	2011	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percen	
UNITED STATES											
Total population	189,964	100	201,472	100	212,298	100	229,245	100	239,313	100	
Sportspersons	39,979	21	39,694	20	37,805	18	33,916	15	37,397	16	
Anglers	35,578	19 7	35,246	17 7	34,067	16 6	29,952	13 5	33,112	14 6	
Hunters	14,063	/	13,975	/	13,034	0	12,510	5	13,674	(
New England											
fotal population	10,180	100	10,306	100	10,575	100	11,233	100	11,593	100	
Sportspersons	1,658	16	1,673	16	1,504	14	1,353	12	1,441	12	
Anglers	1,545 444	15 4	1,520 465	15 5	1,402 386	13 4	1,246 374	11 3	1,355 420	12	
Middle Atlantic											
Total population	29,216	100	29,371	100	29,806	100	31,518	100	32,392	100	
Sportspersons	4,508	15	4,192	14	3,810	13	3,214	10	3,966	12	
Anglers	3,871	13	3,627	12	3,250	11	2,550	8	3,496	11	
Hunters	1,746	6	1,453	5	1,633	5	1,520	5	1,558	5	
East North Central											
Total population	32,188	100	33,121	100	34,082	100	35,609	100	36,199	100	
Sportspersons	7,202	22	6,912	21	6,400	19	5,975	17	6,766	19	
Anglers	6,264 2,789	19 9	6,006 2,712	18 8	5,655 2,421	17	5,190 2,376	15 7	5,861 2,688	16	
	2,789	,	2,712	0	2,421	/	2,370	,	2,000	,	
West North Central											
fotal population	13,504	100	13,875	100	14,430	100	15,458	100	15,860	100	
Sportspersons	4,143	31 27	3,977	29 25	4,239 3,836	29 27	3,836 3,284	25 21	3,980 3,591	25 23	
Anglers	3,647 1,709	13	3,416 1,917	23 14	1,710	12	3,284 1,779	12	1,661	10	
South Atlantic											
Fotal population	33,682	100	36,776	100	39,286	100	43,965	100	46,417	100	
Sportspersons	6,996	21	7,282	20	6,957	18	6,633	15	6,749	15	
Anglers	6,441	19	6,636	18	6,451	16	6,116	14	6,163	13	
Hunters	2,083	6	2,050	6	1,875	5	1,884	4	1,870	4	
East South Central											
Total population	11,667	100	12,459	100	12,976	100	13,722	100	14,206	100	
Sportspersons	2,984 2,635	26 23	2,907 2,514	23 20	2,865 2,543	22 20	2,689 2,436	20 18	3,010 2,444	21 17	
Hunters	1,279	11	1,301	10	1,164	20	1,101	8	1,531	11	
West South Central											
Fotal population	19,926	100	21,811	100	23,337	100	25,407	100	27,195	100	
Sportspersons	5,125	26	5,093	23	4,924	21	4,499	18	4,855	18	
Anglers	4,592	23	4,616	21	4,375	19	3,952	16	4,298	16	
Hunters	1,843	9	1,812	8	1,988	9	1,810	7	1,909	7	
Mountain											
Fotal population	10,092 2,488	100 25	11,966 2,761	100 23	13,308 2,757	100 21	15,651 2,372	100 15	17,013 2,976	100 17	
Sportspersons	2,488	25	2,701 2,411	23	2,757	18	2,372 2,084	13	2,976	15	
Hunters	1,069	11	1,061	9	1,020	8	868	6	1,043	(
Pacific											
Total population	29,508	100	31,787	100	34,498	100	36,681	100	38,438	100	
Sportspersons	4,875	17	4,897	15	4,349	13	3,345	9	3,654	10	
Anglers	4,505	15	4,501	14	4,111	12	3,094	8	3,319	9	
Hunters	1,101	4	1,203	4	837	2	798	2	996	-	

Table C-3. Wildlife-Watching Participants by Census Division: 1991, 1996, 2001, 2006, and 2011

(U.S. population 16 years old and older. Numbers in thousands)

	199	1	199	96	200)1	200	6	201	1
Area and wildlife watcher	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
UNITED STATES										
Total population	189,964	100	201,472	100	212,298	100	229,245	100	239,313	100
Total wildlife watchers	76,111	40	62,868	31	66,105	31	71,132	31	71,776	30
Away from home	29,999	16	23,652	12	21,823	10	22,977	10	22,496	30 9
Around the home.		39	60,751	30	62,928	30	67,756	30	68,598	29
	15,501	57	00,751	50	02,720	50	07,750	50	00,570	2)
New England										
Total population	10,180	100	10,306	100	10,575	100	11,233	100	11,593	100
Total wildlife watchers		45	3,710	36	3,875	37	4,489	40	3,954	34
Away from home		18	1,443	14	1,155	11	1,340	12	1,187	10
Around the home	4,544	45	3,586	35	3,765	36	4,310	38	3,858	33
Middle Atlantic										
Total population	29,216	100	29,371	100	29,806	100	31,518	100	32,392	100
Total wildlife watchers	10,556	36	8,185	28	8,740	29	8,723	28	9,118	28
Away from home	4,166	14	2,960	10	2,849	10	2,729	9	2,561	8
Around the home	10,282	35	8,023	27	8,452	28	8,451	27	8,744	27
East North Central										
Total population	32,188	100	33,121	100	34,082	100	35,609	100	36,199	100
Total wildlife watchers	14,511	45	11,731	35	11,631	34	12,215	34	12,840	35
Away from home	5,572	17	4,501	14	3,571	10	3,792	11	3,168	9
Around the home	14,175	44	11,297	34	11,196	33	11,845	33	12,492	35
West North Central										
Total population	13,504	100	13,875	100	14,430	100	15,458	100	15,860	100
Total wildlife watchers	· · · ·	51	5,089	37	6,206	43	6,741	44	5,479	35
Away from home	· · · ·	20	1,927	14	2,059	14	2,163	14	1,783	11
Around the home	6,722	50	4,900	35	5,938	41	6,447	42	5,201	33
South Atlantic										
Total population	33,682	100	36,776	100	39,286	100	43,965	100	46,417	100
Total wildlife watchers	13,047	39	11,252	31	11,395	29	12,862	29	13,315	29
Away from home	4,450	13	3,992	11	3,469	9	3,208	7	4,393	9
Around the home	12,813	38	10,964	30	10,911	28	12,432	28	12,767	28
East South Central										
Total population	11,667	100	12,459	100	12,976	100	13,722	100	14,206	100
Total wildlife watchers	4,864	42	3,904	31	4,514	35	4,931	36	4,663	33
Away from home		14	1,118	9	1,086	8	1,758	13	1,456	10
Around the home	4,765	41	3,795	30	4,390	34	4,683	34	4,394	31
West South Central										
Total population	19,926	100	21,811	100	23,337	100	25,407	100	27,195	100
Total wildlife watchers		35	5,933	27	5,747	25	6,764	27	7,164	26
Away from home		12	2,096	10	1,822	8	2,127	8	1,728	6
Around the home	6,817	34	5,773	26	5,490	24	6,319	25	7,087	26
Mountain										
Total population	10,092	100	11,966	100	13,308	100	15,651	100	17,013	100
Total wildlife watchers	4,437	44	4,099	34	4,619	35	4,968	32	5,189	30
Away from home	2,215	22	1,967	16	2,019	15	2,004	13	2,230	13
Around the home.	4,145	41	3,855	32	4,282	32	4,605	29	4,716	28
Pacific										
Total population	29,508	100	31,787	100	34,498	100	36,681	100	38,438	100
Total wildlife watchers	10,139	34	8,966	28	9,377	27	9,439	26	10,054	26
Away from home.		17	3,648	11	3,793	11	3,856	11	3,990	10
Around the home.	9,641	33	8,558	27	8,504	25	8,664	24	9,337	24
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Appendix D

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Appendix D. Sample Design and Statistical Accuracy

This appendix is presented in two parts. The first part is the U.S. Census Bureau Source and Accuracy Statement. This statement describes the sampling design for the 2011 Survey and highlights the steps taken to produce estimates from the completed questionnaires. The statement explains the use of standard errors and confidence intervals. It also provides comprehensive information about errors characteristic of surveys and formulas and parameters to calculate an approximate standard error or confidence interval for each number published in this report. The second part, Tables D-1 through D-9, reports estimates and approximate standard errors for selected measures of participation and expenditures for wildlife-related recreation.

Source and Accuracy Statement for the Florida State Report of the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

SOURCE OF DATA

The estimates in this report are based on data collected in the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR) conducted by the Census Bureau and sponsored by the U.S. Fish and Wildlife Service.

The eligible universe for the FHWAR is the civilian noninstitutionalized and nonbarrack military population living in the United States. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes (98 percent of the 4 million institutionalized people in Census 2010).

The 2011 FHWAR was designed to provide state-level estimates of the number of participants in recreational

hunting and fishing and in wildlife watching activities (e.g., wildlife observation). Information was collected on the number of participants, where and how often they participated, the type of wildlife encountered, and the amounts of money spent on wildlife-related recreation.

The survey was conducted in two stages: an initial screening of households to identify likely sportspersons and wildlife-watching participants and a series of follow-up interviews of selected persons to collect detailed data about their wildlife-related recreation during 2011.

SAMPLE DESIGN

The 2011 FHWAR sample was selected from the Census Bureau's master address file (MAF).

The FHWAR is a multistage probability sample, with coverage in all 50 states and the District of Columbia.1 In the first stage of the sampling process, primary sampling units (PSUs) are selected for sample. The PSUs are defined to correspond to the Office of Management and Budget definitions of Core Based Statistical Area definitions and to improve efficiency in field operations. The United States is divided into 2,025 PSUs. These PSUs are grouped into 824 strata. Within each stratum, a single PSU is chosen for the sample, with its probability of selection proportional to its population as of the 2000 decennial census. This PSU represents the entire stratum from which it was selected. In the case of strata consisting of only one PSU, the PSU is chosen with certainty.

Within the selected PSUs, the FHWAR sample was selected from the MAF.

FHWAR Screening Sample

The total screening sample in Florida consisted of 2,374 households. Interviewing for the screen was conducted during April, May, and June 2011. Due to a high noncontact rate, an additional personal visit screening interview, for a subsample of noncontact cases, occurred again in February, March, April, or May 2012. Of all housing units in sample, about **1,977** were determined to be eligible for interview. Interviewers obtained interviews at **1,395** of these units for a Florida response rate of 71 percent.² Florida's weighted response rate was 78 percent. The interviewers asked screening questions for all household members 6 years old and older. Noninterviews occur when the occupants are not found at home after repeated calls or are unavailable for some other reason.

Data for the FHWAR sportspersons sample and wildlife-watchers sample were collected in three waves.³ The first wave started in April 2011, the second in September 2011, and the third in January 2012. In the sportspersons sample, all persons who hunted or fished in 2011 by the time of the screening interview were interviewed in the first wave. The remaining sportspersons in sample were interviewed in the second wave. The reference period was the preceding 4 months for waves 1 and 2. In wave 3, the reference period was either 4, 8, or 12 months depending on when the sample person was first interviewed.

¹ The sample size in the District of Columbia (D.C.) is not of sufficient size to produce reliable estimates for only D.C. The sample responses from D.C. are included in the U.S. totals for complete coverage of the U.S. (excluding Puerto Rico and the U.S. Virgin Islands).

² Response rates are calculated by using APPOR's RR2 formula.

³ The sample cases selected due to high noncontact rates were only interviewed once. They received a screener and if they had some form of participation a detailed questionnaire. These participants did not get three waves of interviewing. The reference period for these sampled cases was between 13 and 16 months.

Detailed Samples

Two independent detailed samples were chosen from the FHWAR screening sample. One consisted of sportspersons (people who hunt or fish) and the other of wildlife watchers (people who observe, photograph, or feed wildlife).

A. Sportspersons

The Census Bureau selected the detailed samples based on information reported during the screening phase. Based on information collected from the household respondent, every person 16 years old and older in the FHWAR screening sample was assigned to a sportspersons stratum. The criteria for the strata included time devoted to hunting or fishing in previous years, participation in hunting or fishing in 2011 by the time of the screening interview, and intentions to participate in hunting and fishing activities during the remainder of 2011.⁴ The four sportspersons categories were:

- 1. *Active*—a person who had already participated in hunting or fishing in 2011 at the time of the screener interview.
- 2. *Likely*—a person who had not participated in 2011 at the time of the screener, but had participated in 2010 OR was likely to participate in 2011.
- 3. *Inactive*—a person who had not participated in 2010 or 2011 AND was somewhat unlikely to participate in 2011.
- Nonparticipant—a person who had not participated in 2010 or 2011 AND was very unlikely to participate in 2011.

Due to the high noncontact rates in wave 1, all persons in the active, likely, and inactive groups were selected with certainty.

Active sportspersons were given the detailed interview twice—at the time of the screening interview (in April, May, or June 2011) and again in January or February 2012.⁵ Likely sportspersons and inactive sportspersons were also interviewed twice—

first in September or October 2011, then in January or February 2012. Persons in the nonparticipant group were not eligible for a detailed interview. About 674 persons were designated for interviews in Florida. The detailed sportspersons sample sizes varied by state to get reliable state-level estimates. During each interview period, about 29 percent of the designated persons were not found at home or were unavailable for some other reason. Overall, about 476 detailed sportspersons interviews were completed at a response rate of 71 percent.

B. Wildlife Watchers

The wildlife-watching detailed sample was also selected based on information reported during the screening phase. Based on information collected from the household respondent, every person 16 years old and older was assigned to a stratum. The criteria for the strata included time devoted to wildlife watching activities in previous years, participation in wildlife watching activities in 2011 by the time of the screening interview, and intentions to participate in wildlife watching activities during the remainder of 2011.⁶ The five wildlife-watching categories were:

- 1. *Active*—a person who had already participated in 2011 at the time of the screening interview.
- 2. *Avid*—a person who had not yet participated in 2011, but in 2010 had taken trips to participate in wildlife-watching activities for 21 or more days or had spent \$300 or more.
- 3. Average—a person who had not yet participated in 2011, but in 2010 had taken trips to wildlife watch for less than 21 days and had spent less than \$300 OR had not participated in wildlifewatching activities but was very likely to in the remainder of 2011.
- 4. *Infrequent*—a person who had not participated in 2010 or 2011,

but was somewhat likely or somewhat unlikely to participate in the remainder of 2011.

5. *Nonparticipant*—a person who had not participated in 2010 or 2011 AND was very unlikely to participate during the remainder of 2011.

Persons were selected for the detailed sample based on these groupings, but persons in the nonparticipant group were not eligible for a detailed interview.

A subsample of each of the other groups was selected to receive a detailed interview with the chance of selection diminishing as the likelihood of participation diminished. Wildlife-watching participants were given the detailed interview twice.⁷ Some received their first detailed interview at the same time as the screening interview (in April, May, or June 2011). The rest received their first detailed interview in September or October 2011. All wildlife- watching participants received their second interview in January or February 2012. Some respondents were given the screener and detailed interview in February, March, April, or May 2012. About 579 persons were designated for interviews in Florida. The detailed wildlife-watching sample sizes varied by state to get reliable state-level estimates. During each interview period, about 32 percent of the designated persons were not found at home or were unavailable for some other reason. Overall, about **394** detailed wildlife watcher interviews were completed at a response rate of 68 percent.

ESTIMATION PROCEDURE

Several stages of adjustments were used to derive the final 2011 FHWAR person weights. A brief description of the major components of the weights is given below. All statistics for the population 6 to 15 years of age were derived from the screening interview. Statistics for the population 16 years old and older come from both the screening and detailed interviews. Estimates that come from the screening sample are presented in Appendix B.

⁴ The sample cases selected due to high noncontact rates were not assigned a sportsperson stratum.

⁵ The sample cases selected due to high noncontact rates were given the detailed sportsperson interview once.

⁶ The sample cases selected due to high noncontact rates were not assigned a wildlife watcher stratum. Wildlife-watching participants in these cases were then subsampled into the detailed questionnaire.

⁷ The sample cases selected due to high noncontact rates were given the detailed wildlife-watching interview once.

A. Screening Sample

Every interviewed person in the screening sample received a screening weight that was the product of the following factors:

- 1. *Base Weight*. The base weight is the inverse of the house-hold's probability of selection.
- 2. Household Noninterview Adjustment. The noninterview adjustment inflates the weight assigned to interviewed households to account for households eligible for interview but for which no interview was obtained.
- 3. *First-Stage Adjustment*. The 824 areas designated for our samples were selected from 2,025 such areas of the United States. Some sample areas represent only themselves and are referred to as self-representing. The remaining areas represent other areas similar in selected characteristics and are thus designated non-self-representing. The first-stage factor reduces the component of variation arising from sampling the non-self-representing areas.
- 4. Second-Stage Adjustment. This adjustment brings the estimates of the total population into agreement with census-based estimates of the civilian nonin-stitutionalized and nonbarrack military populations for each state.

B. Sportspersons Sample

Every interviewed person in the sportspersons detailed sample received a weight that was the product of the following factors:

- 1. *Screening Weight*. This is the person's final weight from the screening sample.
- 2. Sportspersons Stratum Adjustment. This factor inflates the weights of persons selected for the detailed sample to account for the subsampling done within each sportsperson stratum.

- 3. Sportspersons Noninterview Adjustment. This factor adjusts the weights of the interviewed sportspersons to account for sportspersons selected for the detailed sample for whom no interview was obtained. A person was considered a noninterview if he or she was not interviewed in the third wave of interviewing.
- 4. Sportspersons Ratio Adjustment Factor. This is a ratio adjustment of the detailed sample to the screening sample within the sportspersons sampling strata. This adjustment brings the population estimates of persons aged 16 years old and older from the detailed sample into agreement with the same estimates from the screening sample, which was a much larger sample.

C. Wildlife-Watchers Sample

Every interviewed person in the wildlife-watchers detailed sample received a weight that was the product of the following factors:

- 1. *Screening Weight*. This is the person's final weight from the screening sample.
- 2. *Wildlife-Watchers Stratum Adjustment*. This factor inflates the weights of persons selected for the detailed sample to account for the subsampling done within each wildlife watcher stratum.
- 3. *Wildlife-Watchers Noninterview Adjustment.* This factor adjusts the weights of the interviewed wildlife-watching participants to account for wildlife watchers selected for the detailed sample for whom no interview was obtained. A person was considered a noninterview if he or she was not interviewed in the third wave of interviewing.
- 4. *Wildlife-Watchers Ratio Adjustment Factor*. This is a ratio adjustment of the detailed sample to the screening sample within the wildlife-watchers

sampling strata. This adjustment brings the population estimates of persons aged 16 years old and older from the detailed sample into agreement with the same estimates from the screening sample, which was a much larger sample.

ACCURACY OF THE ESTIMATES

A sample survey estimate has two types of error: sampling and nonsampling. The accuracy of an estimate depends on both types of error. The nature of the sampling error is known given the survey design; the full extent of the nonsampling error is unknown.

NONSAMPLING ERROR

For a given estimator, the difference between the estimate that would result if the sample were to include the entire population and the true population value being estimated is known as nonsampling error. There are several sources of nonsampling error that may occur during the development or execution of the survey. It can occur because of circumstances created by the interviewer, the respondent, the survey instrument, or the way the data are collected and processed. For example, errors could occur because:

- The interviewer records the wrong answer, the respondent provides incorrect information, the respondent estimates the requested information, or an unclear survey question is misunderstood by the respondent (measurement error).
- Some individuals who should have been included in the survey frame were missed (coverage error).
- Responses are not collected from all those in the sample or the respondent is unwilling to provide information (nonresponse error).
- Values are estimated imprecisely for missing data (imputation error).
- Forms may be lost; data may be incorrectly keyed, coded, or recoded, etc. (processing error).

The Census Bureau employs quality control procedures throughout the production process, including the overall design of surveys, the wording of questions, and the review of the work of interviewers and coders to minimize these errors. Two types of nonsampling error that can be examined to a limited extent are nonresponse and undercoverage.

Nonresponse. The effect of nonresponse cannot be measured directly, but one indication of its potential effect is the nonresponse rate. For the FHWAR screener interview in Florida, the household-level nonresponse rate was **29** percent. The person-level nonresponse rate for the detailed sportsperson interview in Florida was an additional 29 percent and for the wildlife watchers it was 32 percent. Since the screener nonresponse rate is a household-level rate and the detailed interview nonresponse rate is a personlevel rate, we cannot combine these rates to derive an overall nonresponse rate. Since it is unlikely the nonresponding households to the FHWAR have the same number of persons as the households successfully interviewed, combining these rates would result in an overestimate of the "true" personlevel overall nonresponse rate for the detailed interviews.

Coverage. Overall screener undercoverage is estimated to be about 13 percent. Ratio estimation to independent population controls, as described previously, partially corrects for the bias due to survey undercoverage. However, biases exist in the estimates to the extent that missed persons in missed households or missed persons in interviewed households have different characteristics from those of interviewed persons in the same age group.

Comparability of Data. Data obtained from the 2011 FHWAR and other sources are not entirely comparable. This results from differences in interviewer training and experience and in differing survey processes. This is an example of nonsampling variability not reflected in the standard errors. Therefore, caution should be used when comparing results from different sources. (See Appendix C.)

A Nonsampling Error Warning. Since the full extent of the nonsampling error is unknown, one should be particularly careful when interpreting results based on small differences between estimates. The Census Bureau recommends that data users incorporate information about nonsampling errors into their analyses, as nonsampling error could impact the conclusions drawn from the results. Caution should also be used when interpreting results based on a relatively small number of cases. Summary measures (such as medians and percentage distributions) probably do not reveal useful information when computed on a subpopulation smaller than 90,000 for screener data, 100,000 for the detailed sportsperson data, and 235,000 for the wildlife-watchers data.

SAMPLING ERROR

Since the FHWAR estimates come from a sample, they may differ from figures from an enumeration of the entire population using the same questionnaires, instructions, and enumerators. For a given estimator, the difference between an estimate based on a sample and the estimate that would result if the sample were to include the entire population is known as sampling error. Standard errors, as calculated by methods described in "Standard Errors and Their Use," are primarily measures of the magnitude of sampling error. However, they may include some nonsampling error.

Standard Errors and Their Use. The sample estimate and its standard error enable one to construct a confidence interval. A confidence interval is a range that has a known probability of including the average result of all possible samples. For example, if all possible samples were surveyed under essentially the same general conditions and using the same sample design, and if an estimate and its standard error were calculated from each sample, then approximately 95 percent of the intervals from 1.96 standard errors below the estimate to 1.96 standard errors above the estimate would include the average result of all possible samples. A particular confidence interval may or may not contain the average estimate derived from all possible samples. However, one can say with specified confidence that the interval includes the average estimate calculated from all possible samples. Standard errors may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using

sample estimates. The most common type of hypothesis is that the population parameters are different. An example would be comparing the proportion of anglers to the proportion of hunters. Tests may be performed at various levels of significance. A significance level is the probability of concluding that the characteristics are different when, in fact, they are the same. For example, to conclude that two characteristics are different at the 0.05 level of significance, the absolute value of the estimated difference between characteristics must be greater than or equal to 1.96 times the standard error of the difference. This report uses 95-percent confidence intervals and 0.05 level of significance to determine statistical validity. Consult standard statistical textbooks for alternative criteria.

Estimating Standard Errors. The Census Bureau uses replication methods to estimate the standard errors of FHWAR estimates. These methods primarily measure the magnitude of sampling error. However, they do measure some effects of nonsampling error as well. They do not measure systematic biases in the data associated with nonsampling error. Bias is the average over all possible samples of the differences between the sample estimates and the true value.

Generalized Variance Parameters. While it is possible to compute and present an estimate of the standard error based on the survey data for each estimate in a report, there are a number of reasons why this is not done. A presentation of the individual standard errors would be of limited use, since one could not possibly predict all of the combinations of results that may be of interest to data users. Additionally, data users have access to FHWAR microdata files, and it is impossible to compute in advance the standard error for every estimate one might obtain from those data sets. Moreover, variance estimates are based on sample data and have variances of their own. Therefore, some methods of stabilizing these estimates of variance, for example, by generalizing or averaging over time, may be used to improve their reliability. Experience has shown that certain groups of estimates have similar relationships between their variances and expected values. Modeling or generalizing may provide more stable variance estimates by taking advantage of these similarities. The generalized variance function is a simple model that expresses the variance as a function of the expected value of the survey estimate. The parameters of the generalized variance function are estimated using direct replicate variances. These generalized variance parameters provide a relatively easy method to obtain approximate standard errors for numerous characteristics. Table D-2 provide the generalized variance parameters for FHWAR data. Methods for using the parameters to calculate standard errors of various estimates are given in the next sections.

Standard Errors of Estimated Numbers. The approximate standard error, s_x , of an estimated number shown in this report can be obtained using the following formulas. Formula (1) is used to calculate the standard errors of levels of sportspersons, anglers, and wildlife watchers.

$$s_x = \sqrt{ax^2 + bx} \tag{1}$$

Here, x is the size of the estimate and a and b are the parameters in the tables associated with the particular characteristic.

Formula (2) is used for standard errors of aggregates, i.e., trips, days, and expenditures.

$$s_x = \sqrt{ax^2 + bx + \frac{cx^2}{y}} \tag{2}$$

Here, x is again the size of the estimate; y is the base of the estimate; and a, b, and c are the parameters in the tables associated with the particular characteristic.

Illustration of the Computation of the Standard Error of an Estimated Number

Suppose there were an estimated 37,397,000 persons age 16 years old and older who either fished or hunted in the United States in 2011. Using formula (1) with the parameters a = -0.000070 and b = 16,823 from table D-2, the approximate standard error of the estimated number of 37,397,000 sportspersons age 16 years old and older is

$$s_{\chi} = \sqrt{-0.000070 * 37,397,000^2 + 16,823 * 37,397,000} = 728,857$$

The 95-percent confidence interval for the estimated number of sportspersons 16 years old and older is from 35,968,000 to 38,826,000, i.e., $37,397,000 \pm 1.96 \times 728,857$. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 95 percent of all possible samples.

Suppose there were an estimated 13,674,000 hunters age 16 years old and older who engaged in 281,884,000 days of participation in 2011. Using formula (2) with the parameters a = -0.000284, b = -127,863, and c = 46,699 from table D-2, the approximate standard error on 281,884,000 estimated days on an estimated base of 13,674,000 hunters is

$$s_{x} = \sqrt{-0.000284 * 281,884,000^{2} - 127,863 * 281,884,000 + \frac{46,699 * 281,884,000^{2}}{13,674,000}} = 14,586,000$$

The 95-percent confidence interval on the estimate of 281,884,000 days is from 253,295,000 to 310,473,000, i.e., 281,884,000 \pm 1.96 x 14,586,000. Again, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 95 percent of all possible samples.

Standard Errors of Estimated Percentages. The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends on the size of the percentage and its base. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. When the numerator and the denominator of the percentage are in different categories, use the parameter in the tables indicated by the numerator.

The approximate standard error, $s_{x,p}$, can be obtained by use of the formula

$$s_{x,p} = \sqrt{\frac{bp(100-p)}{x}} \tag{3}$$

Here, x is the total number of sportspersons, hunters, etc., which is the base of the percentage; p is the percentage; and b is the parameter in the tables associated with the characteristic in the numerator of the percentage.

Illustration of the Computation of the Standard Error of an Estimated Percentage

Suppose there were an estimated 13,674,000 hunters age 16 years old and older of whom 18.9 percent hunted migratory birds. From table D-2, the appropriate b parameter is 15,798. Using formula (3), the approximate standard error on the estimate of 18.9 percent is

$$s_{x,p} = \sqrt{\frac{15,798 * 18.9 * (100 - 18.9)}{13,674,000}} = 1.33$$

Consequently, the 95-percent confidence interval for the estimate percentage of migratory bird hunters 16 years old and older is from 16.3 percent to 21.5 percent, i.e., $18.9 \pm 1.96 \times 1.33$.

Standard Error of a Difference. The standard error of the difference between two sample estimates is approximately equal to

$$s_{x-y} = \sqrt{s_x^2 + s_y^2}$$
(4)

where s_x and s_y are the standard errors of the estimates x and y. The estimates can be numbers, percentages, ratios, etc. This will represent the actual standard error quite accurately for the difference between estimates of the same characteristic in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. However, if there is a high positive (negative) correlation between the two characteristics, the formula will overestimate (underestimate) the true standard error.

Illustration of the Computation of the Standard Error of a Difference

Suppose there were an estimated 13,608,000 females in the age range of 18-24 of whom 726,000 or 5.3 percent were sportspersons. Similarly, suppose there were an estimated 12,909,000 males in the same age range of whom 2,160,000 or 16.7 percent were sportspersons. The apparent difference between the percentage of female and male sportspersons is 11.4 percent. Using formula (3) and the appropriate *b* parameter from table D-2, the approximate standard errors of 5.3 percent and 16.7 percent are 0.79 and 1.35, respectively. Using formula (4), the approximate standard error of the estimated difference of 11.4 percent is

$$s_{x-y} = \sqrt{0.79^2 + 1.35^2} = 1.56$$

The 95-percent confidence interval on the difference between 18- to 24-year-old female and male sportspersons is from 8.3 to 14.5, i.e., $11.4 \pm 1.96 \times 1.56$. Since the interval does not contain zero, we can conclude with 95 percent confidence that the percentage of 18- to 24-year-old female sportspersons is less than the percentage of 18- to 24-year-old male sportspersons.

Standard Errors of Estimated Averages. Certain mean values for sportspersons, anglers, etc., shown in the report were calculated as the ratio of two numbers. For example, average days per angler is calculated as:

$$\frac{x}{y} = \frac{\text{total days}}{\text{total anglers}}$$

Standard errors for these averages may be approximated by the use of formula (5) below.

$$s_{x/y} = \frac{x}{y} \sqrt{\left[\frac{s_x}{x}\right]^2 + \left[\frac{s_y}{y}\right]^2 - 2r\frac{s_x s_y}{xy}}$$
(5)

In formula (5), r represents the correlation coefficient between the numerator and the denominator of the estimate. In the above formula, use 0.7 as an estimate of r.

Illustration of the Computation of the Standard Error of an Estimated Average

Suppose that the estimated number of the average days per angler age 16 years old and older for all fishing was 16.7 days. Using formulas (1) and (2) above, we compute the standard error on total days, 553,841,000, and total anglers, 33,112,000, to be 20,329,124 and 693,033, respectively. The approximate standard error on the estimated average of 16.7 days is

$$s_{x/y} = \frac{553,841,000}{33,112,000} \sqrt{\left[\frac{20,329,124}{553,841,000}\right]^2 + \left[\frac{693,033}{33,112,000}\right]^2 - 2 * 0.7 \frac{20,329,124 * 693,033}{553,841,000 * 33,112,000} = 0.45$$

Therefore, the 95-percent confidence interval on the estimated average of 16.7 days is from 15.8 to 17.6, i.e., $16.7 \pm 1.96 \times 0.45$.

Table D–1.	Approximate Standard Errors of Resident Anglers, Days of Fishing by State Residents,
	and Expenditures for Fishing by State Residents

(Numbers in thousands)

State	Particip	oation	Spend	ders	Day	/S	Expenditures	s in dollars
State	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard err
labama	516	57	504	57	10,176	1,516	353,352	89.0
laska	211	16	210	16	3,121	702	283,792	81,20
	586	71	576	71	5,283	1,014	800,892	234,2
rizona		71						
rkansas	467		429	70	15,141	4,103	427,997	192,9
alifornia	1,700	127	1,668	126	25,662	4,251	2,407,827	534,4
olorado	666	56	660	56	8,726	1,330	587,110	134,3
onnecticut	340	36	335	36	5,713	979	501,922	143,3
elaware	92	9	84	9	1,681	774	53,904	21,0
orida	1,991	137	1,866	134	49,500	9,419	3,767,291	740,6
eorgia	844	86	796	84	9,061	1,162	708,539	271,8
awaii	107	10	99	10	1,739	297	183,067	60,2
laho	289	51	258	49	2,424	688	214,435	98,8
linois	1,236	135	1,189	133	15,614	1,664	1,438,080	272,5
diana.	786	82	757	81	21,542	6,448	649,164	199,1
wa	522	45	506	44	6,909	1,283	400,613	139,2
wa	322	43	500	44	0,909	1,285	400,013	139,2
ansas	434	47	382	45	4,694	1,260	271,039	97,3
entucky	492	68	459	66	10,245	2,494	748,710	204,8
ouisiana	733	86	642	82	18,351	6,126	614,348	223,9
aine	197	23	191	23	2,915	646	175,364	54,6
aryland	410	43	388	41	5,676	1,121	675,969	200,5
	-	-			-	,		
assachusetts	457	31	436	31	9,166	1,823	464,082	103,4
ichigan	1,465	155	1,379	151	26,744	4,434	2,270,407	690,6
innesota	1,328	131	1,301	130	24,903	3,462	2,152,446	566,1
ississippi	603	81	557	79	8,700	1,493	492,876	196,8
lissouri	870	66	814	64	14,448	1,854	504,652	101,5
Iontana	192	27	189	27	3,263	909	385,305	169,0
ebraska	197	20	193	20	2,924	684	177,859	59,9
evada	156	18	154	17	2,044	336	180,624	44,0
ew Hampshire	164	21	159	20	4,155	1,448	251,615	94,9
ew Jersey	679	54	633	53	9,578	1,856	1,208,259	233,4
ew Mexico	232	28	224	28	3,868	646	383,861	89,5
	-				· · · ·			
ew York	1,809	164	1,699	159	29,112	6,898	1,998,582	806,0
orth Carolina	1,307	100	1,196	96	23,491	3,757	1,475,942	312,4
orth Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(N
hio	1,435	132	1,287	126	19,116	2,906	2,084,348	790,1
klahoma	744	89	678	86	8,661	1,585	789,216	272,6
regon.	386	48	386	48	4,673	897	424,004	78,0
ennsylvania	1,008	129	849	119	9,926	2,581	401,294	104,6
hode Island	93	7	87	7	1,764	416	96,538	28,1
outh Carolina	574	67	545	66	11,459	2,626	878,388	385,3
					-	-		
outh Dakota	164	27	164	27	3,649	933	185,669	70,1
ennessee	833	83	799	82	17,834	5,611	1,393,250	371,2
exas	2,355	251	2,079	238	34,735	12,578	1,711,265	451,1
ah	351	34	342	34	5,612	991	381,829	105,1
ermont	105	12	103	12	1,885	466	64,264	34,4
rginia	707	61	663	59	10,342	3,032	888,554	202,7
ashington	914	73	893	72	17,818	5,660	1,190,626	328,2
est Virginia.	239	27	237	27	4,767	1,239	443,057	193,3
isconsin	938	99	938	99	15,320	2,946	1,058,160	292,7
yoming	115	13	113	13	2,170	400	115,501	29,1
Journeg	115	13	115	13	2,170	400	115,501	29,

(NA) Not available.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia.

Table D–2. Approximate Standard Errors of Resident Hunters, Days of Hunting by State Residents, and Expenditures for Hunting by State Residents

(Numbers in thousands)

State	Particip	oation	Spend	ders	Day	/S	Expenditures	in dollars
State	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard erro
Alabama	492	53	455	51	10,393	1,625	839,960	224,10
Alaska	106	11	106	11	1,071	220	365,926	121,95
Arizona	259	43	259	43	3,157	1,199	383,974	138,53
Arkansas	320	73	316	73	10,689	2,707	947,623	448,46
	467	51	451	50				
California	407	51	451	50	8,036	1,562	1,067,043	287,16
Colorado	160	24	160	24	1,806	552	288,719	97,41
Connecticut	82	13	82	13	1,348	602	366,741	166,00
Delaware	23	3	21	3	451	262	60,848	30,16
Florida	329	42	320	41	6,636	1,892	939,600	277,47
Georgia	309	45	303	44	7,992	2,731	752,267	345,36
ławaii	23	4	23	4	786	328	55,666	23,85
daho	162	27	162	27	2,009	1,012	182,948	88,14
llinois	512	100	507	99	7,786	1,648	1,265,876	374,92
ndiana	377	63	368	62	10,902	3,530	209,736	75,01
owa	216	31	211	31	4,158	1,495	424,907	160,55
Jwa	210	51	211	51	4,156	1,495	424,907	100,50
Kansas	177	30	176	30	4,144	1,671	296,342	116,39
Centucky	316	52	312	51	11,959	3,404	768,353	262,78
ouisiana	291	36	270	35	6,672	2,441	657,110	250,82
ſaine	141	21	134	20	2,410	422	163,222	63,69
ſaryland	88	19	88	19	1,418	448	278,697	121,3
fassachusetts	66	11	66	11	1,402	406	128,540	47,0
fichigan	507	84	507	84	11,217	2,251	2,398,864	730,9
finnesota	475	53	468	52	7,944	1,943	1,072,204	336,4
Aississippi	436	70	408	70	8,755	2,087	815,823	331,4
Aissouri	495	54	430	53	9,437	1,219	772,614	225,9
A - u t - u -	100	20	107	20	2 159	444	406 274	195.0
Aontana	108	20	107	20	2,158	444	496,374	185,9
lebraska	115	16	115	16	1,576	376	543,421	206,2
levada	49	10	49	10	893	229	141,828	60,3
lew Hampshire	44	6	43	6	1,330	691	47,328	21,7
New Jersey	115	15	110	15	2,921	1,033	222,544	67,2
New Mexico	68	8	67	8	911	479	125,291	53,4
New York	739	89	733	89	17,741	4,707	1,490,461	706,09
Iorth Carolina	317	53	295	51	8,133	1,840	635,322	209,3
lorth Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(N
Dhio	528	78	519	77	8,966	1,833	715,707	358,64
Oklahoma	219	40	169	35	5,201	2,147	340,188	182,82
Dregon.	181	32	178	32	2,264	512	219,069	51,8
ennsylvania	703	91	687	90	17,826	5,097	942,880	262,9
chode Island	17	2	17	2	311	112	26,131	10,1
South Carolina	238	36	238	36	4,239	1,073	418,461	189,0
outh Dakota	122	20	122	20	2 000	1 000	245 226	04.0
outh Dakota	133	28	133	28	2,880	1,009	245,326	94,8
ennessee	286	32	278	31	9,595	4,531	386,714	142,54
exas	1,080	148	1,036	145	19,848	7,946	1,696,128	601,70
Itah	161 71	25 10	161 69	25 10	2,618 1,614	609 474	363,040 301,144	110,6: 181,9
Virginia	354	63	352	63	10,306	3,522	887,041	241,3
Vashington	218	25	218	25	2,756	903	482,244	160,28
Vest Virginia	211	23	211	23	3,254	686	446,272	167,1
Visconsin	763	94	759	94	10,219	2,142	2,258,882	665,5
Vyoming	76	12	76	12	1,170	199	149,128	39,9

(NA) Not available.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia.

Table D–3. Approximate Standard Errors of Resident Away-From-Home Participants, Days of Away-From-Home Participants by State Residents, and Trip-Related Expenditures for Away-From-Home Activities by State Residents (Numbers in thousands)

	Particip	pation	Spend	ders	Day	/S	Expenditure	s in dollars
State	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Alabama	340	63	171	46	1,526	710	93,185	55,424
	118	14	100	13	1,781	530	51,579	20,299
	534	57	489	54	9,488	2,322	433,685	132,310
	120	32	102	29	1,354	613	24,866	15,765
	2,675	226	2,382	215	28,143	4,396	2,331,567	573,878
Colorado	621	79	594	78	5,702	1,569	506,713	190,036
Connecticut	385	47	348	45	9,821	2,190	494,628	115,287
Delaware	71	8	64	8	1,622	476	95,861	31,598
Florida	1,363	161	1,239	154	11,434	2,060	1,206,226	382,981
Georgia	1,008	147	980	146	34,530	22,650	1,605,397	844,468
Hawaii	103	14	90	13	2,824	967	51,761	19,174
Idaho	220	41	207	40	3,610	1,889	81,801	42,573
Illinois	652	86	455	73	6,149	1,873	526,970	203,522
Indiana	477	66	408	61	3,483	827	404,132	192,082
Iowa	215	40	192	38	3,248	1,272	227,914	48,811
Kansas	168	35	135	32	1,157	338	48,036	16,183
Kentucky	298	45	272	43	2,686	1,010	93,567	39,353
Louisiana	221	34	192	32	4,993	2,286	442,317	278,361
Maine	110	20	91	18	4,792	2,262	49,014	18,927
Maryland	392	35	351	33	4,498	1,142	293,681	95,705
Massachusetts	453	48	404	45	9,269	1,970	272,223	60,839
	855	134	806	131	9,981	3,136	390,960	137,694
	483	98	362	86	7,522	2,719	468,161	186,975
	135	38	110	35	4,364	2,072	68,752	23,862
	622	85	605	84	9,364	2,829	427,866	132,714
Montana	96	16	78	15	1,409	473	143,443	54,829
Nebraska	150	26	146	26	2,564	1,099	145,444	77,436
Nevada	191	43	165	41	2,522	612	173,529	62,184
New Hampshire	89	14	84	14	1,357	323	59,358	14,898
New Jersey	564	53	476	49	8,083	1,859	576,828	189,985
New Mexico	200	29	166	26	4,589	1,403	131,576	47,280
New York	1,263	210	1,136	200	25,120	7,037	1,514,114	647,118
North Carolina	505	115	456	109	8,750	3,254	615,949	230,280
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Ohio.	730	78	695	76	7,285	1,832	188,675	64,962
Oklahoma	411	43	394	42	3,128	767	120,334	59,569
Oregon	401	50	377	48	6,515	2,090	507,648	186,210
Pennsylvania	734	158	493	131	7,801	2,708	86,767	33,193
Rhode Island	66	9	65	9	988	312	88,059	30,587
South Carolina	219	58	198	55	3,138	1,278	145,758	55,107
South Dakota	108	13	92	12	1,151	493	35,834	13,244
Tennessee	682	147	630	142	6,346	2,031	306,802	78,400
Texas	977	158	879	150	10,885	4,487	335,013	117,313
Utah	263	35	252	34	2,985	579	129,357	44,742
Vermont.	85	16	65	14	2,042	539	24,749	6,911
Virginia	553	83	518	81	4,854	1,049	354,336	110,249
Washington	693	122	659	119	12,377	3,413	415,979	121,660
West Virginia	255	77	251	76	3,337	1,742	132487	81,458
Wisconsin	453	85	327	74	5,737	2,848	268,866	156,056
Wyoming	104	11	95	11	1,276	413	51,858	18,170

(NA) Not available.

Note: Detail does not add to total because of multiple responses. U.S. totals include responses from participants residing in the District of Columbia.

Table D–4. Parameters a and b for Calculating Approximate Standard Errors of Sportspersons, Anglers, Hunters, and Wildlife-Watching Participants

(These parameters are to be used only to calculate estimates of standard errors for characteristics developed from the screening sample)

State	6 years old and older		6 to 15 years old only	
State	а	b	а	ł
United States, total	-0.000043	12,272	-0.000387	15,783
Alabama	-0.001517	6,503	-0.009621	5,974
Alaska	-0.001275	795	-0.010120	986
Arizona	-0.000765	4,622	-0.003646	3,484
Arkansas	-0.001766	4,647	-0.014655	5,761
California	-0.000236	7,936	-0.002632	13,492
		,		
Colorado	-0.000805	3,719	-0.006685	4,508
Connecticut	-0.000429	1,384	-0.004817	2,14
Delaware	-0.000758	614	-0.009410	1,05
Florida	-0.000354	6,040	-0.004700	10,40
Georgia	-0.000756	6,717	-0.003496	4,98
Hawaii	-0.000603	694	-0.007618	1,18
Idaho	-0.001708	2,389	-0.017208	3,90
Illinois	-0.000633	7,425	-0.005382	9,34
	-0.000849	-		
Indiana.		4,951	-0.012557	10,92
Iowa	-0.000988	2,714	-0.008723	3,35
Kansas	-0.001014	2,584	-0.009102	3,49
Kentucky	-0.001476	5,802	-0.009316	5,16
Louisiana	-0.000840	3,418	-0.014093	8,74
Maine	-0.001824	2,210	-0.016808	2,44
Maryland.	-0.000570	2,976	-0.008290	6,12
	0.000004			
Massachusetts	-0.000394	2,406	-0.003000	2,36
Michigan	-0.001153	10,458	-0.009872	12,62
Minnesota	-0.001905	9,166	-0.015878	10,74
Mississippi	-0.001191	3,137	-0.012208	5,05
Missouri	-0.000858	4,672	-0.004859	3,768
Montana	-0.001690	1,418	-0.015626	1,81
Nebraska	-0.001546	2,519	-0.015670	3,80
Nevada	-0.000431	1,029	-0.007455	2,73
New Hampshire	-0.000920	1,125	-0.015100	2,35
New Jersey	-0.000359	2,868	-0.003386	3,83
NY NY 1				
New Mexico	-0.000706	1,294	-0.006025	1,70
New York	-0.000416	7,444	-0.005818	13,95
North Carolina	-0.000905	7,706	-0.008882	11,09
North Dakota	(NA)	(NA)	(NA)	(NA
Ohio.	-0.000807	8,454	-0.006870	10,15
Oklahoma	-0.001132	3,772	-0.008501	4,29
Oregon.	-0.001359	4,806	-0.010991	5,22
Pennsylvania	-0.000593	6,843	-0.005995	9,01
Rhode Island	-0.000308	300	-0.003287	40
South Carolina	-0.000739	3,060	-0.005611	3,30
South Dakota	-0.001620	1,194	-0.034414	3,64
Tennessee	-0.000730	4,204	-0.003532	2,88
Texas	-0.000807	18,178	-0.004712	18,12
Utah	-0.001050	2,638	-0.008515	4,05
Vermont	-0.001401	811	-0.014942	1,00
Virginia	-0.000533	3,805	-0.004771	4,81
Washington	-0.000640	3,938	-0.006644	5,69
West Virginia.	-0.001618	2,714	-0.015297	3,26
Wisconsin	-0.002449	12,656	-0.016762	11,85
Wyoming.	-0.002057	1,013	-0.029622	2,038
·· , ·······B· · · · · · · · · · · · · ·	0.002007	1,015	0.027022	2,050

Table D–5. Parameters a and b for Calculating Approximate Standard Errors for Levels for the Detailed Sportspersons Sample

State	Sportspersons and anglers 16 years	old and older	Hunters 16 years old and older		
State	a	b	а		
United States, total	-0.000070	16,823	-0.000066	15,79	
Alabama	-0.002013	7,375	-0.001789	6,55	
Alaska	-0.003854	2,028	-0.002828	1,48	
Arizona	-0.001928	9,801	-0.001483	7,53	
Arkansas	-0.006403	14,328	-0.008765	19,61	
California	-0.000352	10,066	-0.000199	5,67	
Camornia	-0.000352	10,000	-0.000199	5,07	
Colorado	-0.001432	5,651	-0.000959	3,78	
Connecticut	-0.001549	4,309	-0.000814	2,26	
Delaware	-0.001485	1,038	-0.000692	48	
Florida	-0.000737	10,943	-0.000364	5,40	
Georgia	-0.001334	9,948	-0.000897	6,69	
Hawaii	-0.001157	1,151	-0.000846	84	
Idaho	-0.010247	12,009	-0.004564	5,34	
Illinois	-0.001679	16,769	-0.002058	20,55	
	-0.002038				
IndianaIowa	-0.002058	10,118 4,887	-0.002294 -0.002076	11,39	
10wa	-0.002008	4,007	-0.002070	4,90	
Kansas	-0.002932	6,342	-0.002590	5,60	
Kentucky	-0.003245	10,954	-0.002763	9,32	
Louisiana	-0.003723	12,838	-0.001421	4,89	
Maine	-0.003040	3,241	-0.003340	3,56	
Maryland	-0.001084	4,855	-0.000949	4,25	
Massachusetts	-0.000437	2,325	-0.000367	1,95	
Michigan	-0.002590	20,167	-0.001899	14,79	
Minnesota	-0.004611	19,060	-0.001598	6,60	
	-0.004811	14,944	-0.006339	,	
Mississippi	-0.001315	6,139	-0.001437	14,07	
Montana	-0.006507	5,056	-0.005775	4,48	
Nebraska	-0.001667	2,313	-0.001801	2,49	
Nevada	-0.001056	2,136	-0.001108	2,24	
New Hampshire	-0.002879	3,070	-0.000896	95	
New Jersey	-0.000704	4,827	-0.000287	1,96	
New Mexico	-0.002617	4,059	-0.000648	1,00	
New York	-0.001079	16,730	-0.000725	11,24	
North Carolina	-0.001281	9,305	-0.001279	9,29	
North Dakota.	(NA)	(NA)	(NA)	(NA	
Ohio.	-0.001605	14,444	-0.001351	12,15	
	0.005114	14.461	0.000771	-	
Oklahoma	-0.005114	14,461	-0.002771	7,83	
Oregon.	-0.002276	6,968	-0.001995	6,10	
Pennsylvania	-0.001820	18,266	-0.001269	12,74	
Rhode Island	-0.000764	649	-0.000291	24	
South Carolina	-0.002655	9,438	-0.001677	5,96	
South Dakota	-0.009550	6,028	-0.011761	7,42	
Tennessee	-0.002018	9,981	-0.000754	3,72	
Texas	-0.001644	30,704	-0.001150	21,49	
Utah	-0.001969	4,009	-0.002043	4,15	
Vermont	-0.003247	1,662	-0.003046	1,55	
Virginia	-0.000965	5,920	-0.001933	11,86	
Washington	-0.001320	6,986	-0.000561	2,97	
West Virginia.	-0.002455	3,594	-0.001928	2,82	
Wisconsin	-0.002985	13,311	-0.003141	14,00	
Wyoming	-0.004945	2,095	-0.005055	2,14	

State	Sportspersons a	nd anglers 16 years	old and older	Hunte	ers 16 years old and	older
State	a	b	с	a	b	с
Jnited States, total	0.001159	-575,615	45,670	0.001923	-978,460	44,416
Alabama	0.021918	-163,227	21,197	0.026237	-310,700	20,618
Alaska	0.068721	-3,823	2,765	0.086885	-80,157	2,587
Arizona	0.072204	-64,996	7,713	0.112668	32,711	4,512
Arkansas	0.190512	-51,366	5,554	0.208269	3,305	4,958
California	0.041958	323,332	11,979	0.056429	1,177,647	6,717
Colorado	0.038767	15,704	8,931	0.080446	-49,174	5,370
Connecticut.	0.062963	-54,211	6,250	0.156423	-403,680	4,065
Delaware	0.138101	-7,091	1,280	0.206480	-291	823
Florida	0.031125	129,668	13,980	0.044416	-273,423	13,786
Georgia	0.133758	-35,054	10,761	0.180457	-30,025	9,196
Hawaii	0.099271	-1,810	905	0.154210	-1,865	677
Idaho	0.197816	-5,230	3,806	0.216778	170,971	2,339
Illinois	0.016086	-95,430	23,661	0.059422	-369,151	14,496
Indiana.	0.084408	56,304	7,293	0.113115	42,035	5,378
Iowa.	0.110741	-6,756	5,107	0.110417	-42,033	6,849
Kansas	0.119262	-8,287	3,770	0.130458	-38,144	4 212
Kentucky	0.032291		19,693			4,212
5		-262,907		0.050336	-549,944	21,014
Louisiana	0.125543	72,794	4,657	0.123353	-129,712	6,086
Maine	0.073133	-64,912	4,685	0.133009	-24,957	2,602
Maryland	0.069557	-8,036	7,163	0.119862	-92,688	6,155
Massachusetts	0.041124	13,503	3,733	0.092555	-231	2,727
Michigan	0.071988	-130,103	28,404	0.026267	-153,883	33,794
Minnesota	0.056048	-43,079	17,112	0.064508	-189,054	15,975
Mississippi	0.143495	-50,131	8,984	0.146486	14,053	8,097
Missouri	0.027623	-7,268	10,503	0.066759	-24,068	8,944
Montana	0.178611	-16,817	2,622	0.105263	-209,610	3,801
Nebraska	0.100459	-1,618	2,551	0.119872	-19,296	2,785
Nevada	0.040428	-34,230	2,962	0.141457	-114,260	1,968
New Hampshire	0.127497	6,106	2,383	0.176749	14,447	1,443
New Jersey	0.027546	11,544	6,195	0.036515	-45,032	6,045
New Mexico	0.036052	-17,835	4,123	0.147509	-35,750	2,313
New York	0.152342	-343,859	17,854	0.209665	-176,671	10,911
North Carolina	0.029116	-209,241	18,945	0.064157	-163,564	13,190
North Dakota.	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Ohio.	0.128010	-37,131	20,232	0.216544	-1,019,186	18,675
Oklahoma	0.098427	-170,608	14,307	0.276027	126,332	2,101
Oregon.	0.010568	7,416	9,002	0.011236	96,792	7,900
Pennsylvania	0.039841	-43,889	24,057	0.037830	-316,859	27,692
Rhode Island	0.077596	-203.9579	657	0.110230	-39,344	696
South Carolina	0.180012	-120,717	6,857	0.181351	-87,421	5,445
South Dakota	0.114248	-43,160	4,683	0.102506	-203,831	6,355
Tennessee	0.051884	-61,213	15,306	0.073335	-522,076	17.760
Itah	0.049244 0.063366	-64,415 -20,537	42,177	0.077228	-819,919	50,873
Utah	0.271264	-10,725	4,266 1,629	0.066238 0.339375	-2,994 -128,675	4,293 1,810
Virginia	0.024500	02 405	11 6 40			
Virginia	0.034590	-93,405	11,648	0.037134	-222,277	13,083
Washington	0.067952	22,119	7,169	0.080042	-119,224	6,687
West Virginia	0.173583	-44,746	4,014	0.117366	-52,107	4,868
		215 022	20 102	0.057107	164,685	22,483
Wisconsin	0.045614 0.037366	-215,022 -31,308	29,192 2,986	0.032006	-10,196	3,038

Table D–6. Parameters a, b, and c for Calculating Approximate Standard Errors for Expenditures for the Detailed Sportspersons Sample

State Sportspersons and angler			old and older	Hunters	16 years old and old	er
State	a b c			a b		
United States, total	0.000068	-160,414	51,951	-0.000284	-127,863	46,69
Alabama	-0.006409	-33,141	16,434	-0.001309	-24,163	13,81
Alaska	0.040044	-1,378	2,306	0.014819	-3,686	3,26
Arizona	0.010858	-12,760	16,639	0.094988	-10.415	13,60
Arkansas	0.029081	-47,335	22,178	-0.069327	-298,461	51,64
California	0.018455	62,656	11,126	0.002617	35,822	14,33
Colorado	0.012264	-4,831	7,675	0.057492	-4,094	6,12
Connecticut.	0.010321	-20,427	7,687	0.178663	1,319	1,60
Delaware	0.202009	-718	940	0.322859	-120	3
Florida	0.030335	-13,138	12,228	0.050279	-17,145	11,04
Georgia	-0.016400	-22,749	29,830	0.034924	-19,534	26,05
Hawaii	0.011790	-1,565	1,950	0.134936	-560	9
Idaho	0.044270	113	10,482	0.221214	-2,323	5,4
Illinois	-0.005565	-7,990	21,553	-0.015684	-60,913	34,90
				0.088709		
Indiana	0.079426	-2,044	8,077		7,770	5,8
Iowa	0.012302	-22,937	13,314	0.074986	-46,595	14,14
Kansas	0.061820	-2,259	4,674	0.158439	10,639	2
Kentucky	0.023655	-6,641	17,832	0.015712	-15,751	21,03
Louisiana	0.105459	53,216	2,251	0.124945	55,464	1
Maine	0.026901	-3,659	4,612	-0.011197	-41,449	8,3
Maryland	0.023534	-8,872	6,975	0.039987	-4,806	5,5
Massachusetts	0.032450	-2,312	3,371	0.038816	-2,548	3,0
Michigan	0.006455	-21,327	31,990	-0.023017	-23,908	33,1
Minnesota	0.000310	-20,823	26,365	0.008351	-106,597	30,8
	0.001714	-39,317	19,444	0.020445	-27,887	,
Mississippi	0.004697	-8,884	19,444	-0.002402	9,637	17,2 8,9
Montana	0.055324	-1,581	4,356	-0.059715	-48,367	13,4
			,		· · · ·	,
Nebraska	0.037329	-2,510	3,593	0.034127	-72	2,64
Nevada	0.005007	-8,090	4,055	0.008052	600	2,7
New Hampshire	0.112057	177	1,530	0.259509	1,299	40
New Jersey	0.030384	-392	4,901	0.103886	9	2,43
New Mexico	-0.011244	-8,297	9,568	0.230217	-2,553	3,3
New York	0.046461	-16,384	18,549	0.060195	14,380	6,9
North Carolina	0.013151	-7,442	16,655	-0.007341	-5,733	18,7
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(N.
Ohio	0.008805	44,579	17,178	-0.000533	-55,316	25,6
Oklahoma	0.010053	17,862	15,896	0.135080	27,988	6,50
Oregon.	0.017087	-5,837	8,095	0.009877	-8,838	8,1
Pennsylvania	0.050758	-16,535	18,668	0.056836	-15,548	18,1
Rhode Island	0.046582	-1,416	914	0.102558	-994	4
South Carolina	0.039217	-3,630	7,815	0.020949	-8,305	10,72
South Dakota	-0.000329	-9,205	11,194	0.070309	-4,221	7,1
Tennessee	0.084448	-9,998	12,576	0.203468	-3,342	5,6
Texas	0.114686	-85,855	44,518	0.128279	-71,291	38,42
Utah	0.009602	-5,402	7,922	0.007556	-7,585	7,9
Vermont.	0.042093	-2,395	2,132	0.067655	-2,349	1,4
Virginia	0.079698	778	4,363	0.112100	9,122	1,34
Washington	0.095993	-3,056	4,652	0.084185	-13,640	6,12
West Virginia	0.042905	-11,238	6,458	0.012519	-13,442	7,6
Wisconsin	0.042903	-12,514	22,081	0.012319	-19,455	
						18,8
Wyoming	-0.003362	-3,606	4,480	-0.030790	-4,007	4,80

Table D–7. Parameters a, b, and c for Calculating Approximate Standard Errors for Days or Trips for the Detailed Sportspersons Sample

Table D–8. Parameters a and b for Calculating Approximate Standard Errors for Levels of Wildlife-Watching Participants for the Detailed Wildlife-Watching Sample

State	Away-from-home partic	ipants	Wildlife-watching participants1		
State	а	b	a		
nited States, total	-0.000134	32,078	-0.000119	28,47	
Alabama	-0.003523	12,908	-0.009869	36,16	
Alaska	-0.004221	2,221	-0.005350	2,81	
Arizona	-0.001319	6,703	-0.001925	9,78	
Arkansas	-0.003939	8,814	-0.003938	8,81	
California	-0.000739	21,116	-0.000937	26,76	
Colorado	-0.003019	11,913	-0.003309	13,05	
Connecticut	-0.002392	6,653	-0.002609	7,25	
Delaware	-0.001438	1,005	-0.002547	1,78	
Florida	-0.001411	20,956	-0.001591	23,63	
Georgia	-0.003335	24,875	-0.007832	58,42	
Hawaii	-0.002051	2,041	-0.001805	1,79	
Idaho	-0.007948	9,315	-0.008539	10,00	
Illinois	-0.001219	12,172	-0.001994	19,91	
Indiana	-0.002020	10,030	-0.006775	33,6	
Iowa	-0.003386	8,000	-0.003220	7,60	
Kansas	-0.003728	8,064	-0.003222	6,90	
Kentucky	-0.002201	7,431	-0.005428	18,32	
Louisiana	-0.001619	5,582	-0.009544	32,91	
Maine	-0.003739	3,986	-0.006455	6,88	
Maryland	-0.000762	3,414	-0.001982	8,8	
Massachusetts	-0.001036	5,512	-0.001839	9,7	
Michigan	-0.003032	23,610	-0.003331	25,9	
Minnesota	-0.005468	22,603	-0.006274	25,9	
Mississippi	-0.005131	11,393	-0.005454	12,1	
Missouri	-0.002842	13,264	-0.003139	14,6	
Montana	-0.004110	3,194	-0.004772	3,70	
Nebraska	-0.003608	5,004	-0.004078	5,6	
Nevada	-0.005369	10,865	-0.004111	8,3	
New Hampshire	-0.002275	2,425	-0.002428	2,5	
New Jersey	-0.000795	5,449	-0.001272	8,7	
New Mexico	-0.003021	4,686	-0.004748	7,3	
New York	-0.002450	37,975	-0.002910	45,1	
North Carolina	-0.003857	28,014	-0.004098	29,7	
North Dakota	(NA)	(NA)	(NA)	(NA	
Ohio	-0.001006	9,055	-0.003043	27,3	
Oklahoma	-0.001850	5,230	-0.005081	14,30	
Oregon.	-0.002304	7,055	-0.004554	13,94	
Pennsylvania	-0.003639	36,519	-0.004874	48,91	
Rhode Island	-0.001580	1,340	-0.001829	1,5	
South Carolina	-0.004536	16,126	-0.004877	17,33	
South Dakota.	-0.002833	1,788	-0.013684	8,6	
Tennessee	-0.007450	36,840	-0.004097	20,2	
Texas	-0.001436	26,817	-0.001909	35,65	
Utah	-0.002560	5,211	-0.002329	4,74	
Vermont	-0.007044	3,605	-0.006399	3,2	
Virginia	-0.002247	13,787	-0.002743	16,82	
Washington	-0.004645	24,585	-0.003371	17,84	
West Virginia.	-0.019113	27,981	-0.015998	23,42	
Wisconsin	-0.004020	17,926	-0.005124	22,85	

(NA) Not available

¹ Use these parameters for total wildlife-watching participants and around-the-home participants.

Stato		Expenditures			Days or trips			
State	a	b	с	a	b			
United States, total	0.001308	-1,548,024	112,362	0.002307	826,023	54,10		
Alabama	0.292431	-9.893	10,505	-0.079778	174,629	61,74		
Alaska	0.108738	-34,916	4,682	0.016446	-58,833	12,42		
Arizona	0.077675	-4,716	7,536	-0.027772	286,426	30,68		
			9,078		-194,867	,		
Arkansas	0.313406	-11,247		0.062790	,	34,37		
California	0.048430	-43,155	28,990	0.006079	-38,139	52,62		
Colorado	0.124349	-14,729	9,702	0.026976	183,987	10,25		
Connecticut	0.007486	-436,089	16,607	-0.024420	125,914	23,60		
Delaware	0.061895	-18,947	3,005	-0.074027	13,351	10,78		
Florida	0.083730	104,408	21,053	0.007541	-194,343	57,11		
Georgia	0.249488	-25,092	26,678	0.050793	-3,332,773	479,80		
Hawaii	0.120445	-32,991	1,567	0.083382	-9,149	3,82		
	0.223371				,			
Idaho		-147,314	10,203	-0.062345	-258,027	89,69		
Illinois	0.107605	-13,356	18,919	0.044699	-354,008	68,80		
Indiana.	0.193872	-322,885	13,396	-0.040883	-166,121	69,13		
Iowa	0.021305	94,648	4,636	0.079467	-75,095	20,80		
Kansas	0.072491	6,025	5,519	-0.013518	-72,502	27,15		
Kentucky	0.157856	-96,510	5,459	0.029898	-95,012	43,74		
Louisiana	0.362140	107,638	6,464	0.246426	368,942	-24,40		
Maine	0.094142	-35,394	5,069	0.150679	-50,401	9,08		
Maryland	0.095353	39,360	3,760	-0.020442	-46,263	37,32		
Massachusetts	0.014009	-163,624	14,762	-0.020104	-59,530	32,4		
Michigan	0.072396	489	41,625	0.046186	1,002,661	-40,9		
Minnesota	0.096860	-27,052	22,699	0.018847	-405,415	80,00		
Mississippi	0.040018	23,616	8,811	-0.060202	-43,904	39,90		
Missouri	0.077023	-29,229	11,649	0.021741	-290,522	62,54		
Montana	0.102248	27,322	3,406	-0.004215	-16,717	12,34		
Nebraska	0.250670	-146,886	4,935	0.027770	347,687	3.04		
Nevada	0.100312	-90,487	4,723	-0.038534	-44,832	21,99		
New Hampshire	0.024368	-13,607	3,264	0.043269	9,164	5		
New Jersey	0.089631	-120,587	9,071	-0.020528	-231,435	57,54		
New Mexico	0.110251	1,905	3,130	0.021449	197,267	5 0		
			,			5,8		
New York	0.122911	-1,425,885	68,948	0.006340	-44,103	93,3		
North Carolina	0.017031	-326,265	56,212	-0.058093	-593,772	133,44		
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(N.		
Ohio	0.080684	-39,489	26,461	0.001012	-1,543	45,57		
Oklahoma	0.235454	57,625	3,593	0.014729	-152,377	38,65		
Oregon.	0.099298	-158,238	13,407	0.010117	-157,164	46,8		
Pennsylvania	0.084612	-12,972	30,509	-0.007189	-465,695	137,5		
Rhode Island	0.097369	-15,709	1,525	-0.006225	65,378	2,64		
South Carolina	0.063035	-24,816	15,855	0.022948	-180,925	43,93		
South Dakota	0.071413	123,949	5 (70)	0.089793	0.007	10.0		
South Dakota			5,679		-8,087	10,8		
Tennessee	0.031635	-32,698	21,276	0.086824	-18,925	12,7		
Texas	0.072728	-140,319	44,225	0.058100	-1,079,923	206,1		
Utah	0.085970 0.038545	-75,950 -10,496	8,631 2,590	-0.041299 -0.014657	-141,530 6,845	33,22 6,8		
			,					
Virginia	0.077984	46,506	9,684	-0.013749	-12,650	34,8		
Washington	0.046435	-44,547	25,839	-0.074088	-88,929	109,01		
West Virginia.	0.369202	18,732	2,180	0.243904	-8,874	7,93		
	0.25(24(222 512	26,643	-0.019357	-228,892	138,51		
Wisconsin	0.256246	-223,513	20,045	-0.019337	-220,092	156,51		

Table D–9. Parameters a, b, and c for Calculating Approximate Standard Errors for Expenditures and Days or Trips for Wildlife-Watching Sample



U.S. Department of the Interior U.S. Fish & Wildlife Service

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An Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence, 1994-2003

Report to the National Institute of Justice, United States Department of Justice

By

Christopher S. Koper (Principal Investigator)

With

Daniel J. Woods and Jeffrey A. Roth

June 2004

Jerry Lee Center of Criminology University of Pennsylvania 3814 Walnut Street Philadelphia, PA 19104



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PREFACE

Gun violence continues to be one of America's most serious crime problems. In 2000, over 10,000 persons were murdered with firearms and almost 49,000 more were shot in the course of over 340,000 assaults and robberies with guns (see the Federal Bureau of Investigation's annual *Uniform Crime Reports* and Simon et al., 2002). The total costs of gun violence in the United States – including medical, criminal justice, and other government and private costs – are on the order of at least \$6 to \$12 billion per year and, by more controversial estimates, could be as high as \$80 billion per year (Cook and Ludwig, 2000).

However, there has been good news in recent years. Police statistics and national victimization surveys show that since the early 1990s, gun crime has plummeted to some of the lowest levels in decades (see the *Uniform Crime Reports* and Rennison, 2001). Have gun controls contributed to this decline, and, if so, which ones?

During the last decade, the federal government has undertaken a number of initiatives to suppress gun crime. These include, among others, the establishment of a national background check system for gun buyers (through the Brady Act), reforms of the licensing system for firearms dealers, a ban on juvenile handgun possession, and Project Safe Neighborhoods, a collaborative effort between U.S. Attorneys and local authorities to attack local gun crime problems and enhance punishment for gun offenders.

Perhaps the most controversial of these federal initiatives was the ban on semiautomatic assault weapons and large capacity ammunition magazines enacted as Title XI, Subtitle A of the *Violent Crime Control and Law Enforcement Act of 1994*. This law prohibits a relatively small group of weapons considered by ban advocates to be particularly dangerous and attractive for criminal purposes. In this report, we investigate the ban's impacts on gun crime through the late 1990s and beyond. This study updates a prior report on the short-term effects of the ban (1994-1996) that members of this research team prepared for the U.S. Department of Justice and the U.S. Congress (Roth and Koper, 1997; 1999).

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1. IMPACTS OF THE FEDERAL ASSAULT WEAPONS BAN, 1994-2003: KEY FINDINGS AND CONCLUSIONS

This overview presents key findings and conclusions from a study sponsored by the National Institute of Justice to investigate the effects of the federal assault weapons ban. This study updates prior reports to the National Institute of Justice and the U.S. Congress on the assault weapons legislation.

The Ban Attempts to Limit the Use of Guns with Military Style Features and Large Ammunition Capacities

- Title XI, Subtitle A of the Violent Crime Control and Law Enforcement Act of 1994 imposed a 10-year ban on the "manufacture, transfer, and possession" of certain semiautomatic firearms designated as assault weapons (AWs). The ban is directed at semiautomatic firearms having features that appear useful in military and criminal applications but unnecessary in shooting sports or self-defense (examples include flash hiders, folding rifle stocks, and threaded barrels for attaching silencers). The law bans 18 models and variations by name, as well as revolving cylinder shotguns. It also has a "features test" provision banning other semiautomatics having two or more military-style features. In sum, the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) has identified 118 models and variations that are prohibited by the law. A number of the banned guns are foreign semiautomatic rifles that have been banned from importation into the U.S. since 1989.
- The ban also prohibits most ammunition feeding devices holding more than 10 rounds of ammunition (referred to as large capacity magazines, or LCMs). An LCM is arguably the most functionally important feature of most AWs, many of which have magazines holding 30 or more rounds. The LCM ban's reach is broader than that of the AW ban because many non-banned semiautomatics accept LCMs. Approximately 18% of civilian-owned firearms and 21% of civilian-owned handguns were equipped with LCMs as of 1994.
- The ban exempts AWs and LCMs manufactured before September 13, 1994. At that time, there were upwards of 1.5 million privately owned AWs in the U.S. and nearly 25 million guns equipped with LCMs. Gun industry sources estimated that there were 25 million pre-ban LCMs available in the U.S. as of 1995. An additional 4.7 million pre-ban LCMs were imported into the country from 1995 through 2000, with the largest number in 1999.
- Arguably, the AW-LCM ban is intended to reduce gunshot victimizations by limiting the national stock of semiautomatic firearms with large ammunition capacities which enable shooters to discharge many shots rapidly and other features conducive to criminal uses. The AW provision targets a relatively small number of weapons based on features that have little to do with the weapons'

operation, and removing those features is sufficient to make the weapons legal. The LCM provision limits the ammunition capacity of non-banned firearms.

The Banned Guns and Magazines Were Used in Up to A Quarter of Gun Crimes Prior to the Ban

- AWs were used in only a small fraction of gun crimes prior to the ban: about 2% according to most studies and no more than 8%. Most of the AWs used in crime are assault pistols rather than assault rifles.
- LCMs are used in crime much more often than AWs and accounted for 14% to 26% of guns used in crime prior to the ban.
- AWs and other guns equipped with LCMs tend to account for a higher share of guns used in murders of police and mass public shootings, though such incidents are very rare.

The Ban's Success in Reducing Criminal Use of the Banned Guns and Magazines Has Been Mixed

- Following implementation of the ban, the share of gun crimes involving AWs declined by 17% to 72% across the localities examined for this study (Baltimore, Miami, Milwaukee, Boston, St. Louis, and Anchorage), based on data covering all or portions of the 1995-2003 post-ban period. This is consistent with patterns found in national data on guns recovered by police and reported to ATF.
- The decline in the use of AWs has been due primarily to a reduction in the use of assault pistols (APs), which are used in crime more commonly than assault rifles (ARs). There has not been a clear decline in the use of ARs, though assessments are complicated by the rarity of crimes with these weapons and by substitution of post-ban rifles that are very similar to the banned AR models.
- However, the decline in AW use was offset throughout at least the late 1990s by steady or rising use of other guns equipped with LCMs in jurisdictions studied (Baltimore, Milwaukee, Louisville, and Anchorage). The failure to reduce LCM use has likely been due to the immense stock of exempted pre-ban magazines, which has been enhanced by recent imports.

It is Premature to Make Definitive Assessments of the Ban's Impact on Gun Crime

• Because the ban has not yet reduced the use of LCMs in crime, we cannot clearly credit the ban with any of the nation's recent drop in gun violence. However, the ban's exemption of millions of pre-ban AWs and LCMs ensured that the effects

of the law would occur only gradually. Those effects are still unfolding and may not be fully felt for several years into the future, particularly if foreign, pre-ban LCMs continue to be imported into the U.S. in large numbers.

The Ban's Reauthorization or Expiration Could Affect Gunshot Victimizations, But Predictions are Tenuous

- Should it be renewed, the ban's effects on gun violence are likely to be small at best and perhaps too small for reliable measurement. AWs were rarely used in gun crimes even before the ban. LCMs are involved in a more substantial share of gun crimes, but it is not clear how often the outcomes of gun attacks depend on the ability of offenders to fire more than ten shots (the current magazine capacity limit) without reloading.
- Nonetheless, reducing criminal use of AWs and especially LCMs could have nontrivial effects on gunshot victimizations. The few available studies suggest that attacks with semiautomatics – including AWs and other semiautomatics equipped with LCMs – result in more shots fired, more persons hit, and more wounds inflicted per victim than do attacks with other firearms. Further, a study of handgun attacks in one city found that 3% of the gunfire incidents resulted in more than 10 shots fired, and those attacks produced almost 5% of the gunshot victims.
- Restricting the flow of LCMs into the country from abroad may be necessary to achieve desired effects from the ban, particularly in the near future. Whether mandating further design changes in the outward features of semiautomatic weapons (such as removing all military-style features) will produce measurable benefits beyond those of restricting ammunition capacity is unknown. Past experience also suggests that Congressional discussion of broadening the AW ban to new models or features would raise prices and production of the weapons under discussion.
- If the ban is lifted, gun and magazine manufacturers may reintroduce AW models and LCMs, perhaps in substantial numbers. In addition, pre-ban AWs may lose value and novelty, prompting some of their owners to sell them in undocumented secondhand markets where they can more easily reach high-risk users, such as criminals, terrorists, and other potential mass murderers. Any resulting increase in crimes with AWs and LCMs might increase gunshot victimizations for the reasons noted above, though this effect could be difficult to measure.

2. PROVISIONS OF THE ASSAULT WEAPONS BAN

2.1. Assault Weapons

Enacted on September 13, 1994, Title XI, Subtitle A of the *Violent Crime Control* and Law Enforcement Act of 1994 imposes a 10-year ban on the "manufacture, transfer, and possession" of certain semiautomatic firearms designated as assault weapons (AWs).¹ The AW ban is not a prohibition on all semiautomatics. Rather, it is directed at semiautomatics having features that appear useful in military and criminal applications but unnecessary in shooting sports or self-defense. Examples of such features include pistol grips on rifles, flash hiders, folding rifle stocks, threaded barrels for attaching silencers, and the ability to accept ammunition magazines holding large numbers of bullets.² Indeed, several of the banned guns (e.g., the AR-15 and Avtomat Kalashnikov models) are civilian copies of military weapons and accept ammunition magazines made for those military weapons.

As summarized in Table 2-1, the law specifically prohibits nine narrowly defined groups of pistols, rifles, and shotguns. A number of the weapons are foreign rifles that the federal government has banned from importation into the U.S. since 1989. Exact copies of the named AWs are also banned, regardless of their manufacturer. In addition, the ban contains a generic "features test" provision that generally prohibits other semiautomatic firearms having two or more military-style features, as described in Table 2-2. In sum, the federal Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) has identified 118 model and caliber variations that meet the AW criteria established by the ban.³

Figures 2-1 and 2-2 illustrate a few prominent AWs and their features. Figure 2-1 displays the Intratec TEC-9 assault pistol, the AW most frequently used in crime (e.g., see Roth and Koper 1997, Chapter 2). Figure 2-2 depicts the AK-47 assault rifle, a weapon of Soviet design. There are many variations of the AK-47 produced around the world, not all of which have the full complement of features illustrated in Figure 2-2.

¹ A semiautomatic weapon fires one bullet for each squeeze of the trigger. After each shot, the gun automatically loads the next bullet and cocks itself for the next shot, thereby permitting a somewhat faster rate of fire relative to non-automatic firearms. Semiautomatics are not to be confused with fully automatic weapons (i.e., machine guns), which fire continuously as long as the trigger is held down. Fully automatic weapons have been illegal to own in the United States without a federal permit since 1934.

² Ban advocates stress the importance of pistol grips on rifles and heat shrouds or forward handgrips on pistols, which in combination with large ammunition magazines enable shooters to discharge high numbers of bullets rapidly (in a "spray fire" fashion) while maintaining control of the firearm (Violence Policy Center, 2003). Ban opponents, on the other hand, argue that AW features also serve legitimate purposes for lawful gun users (e.g., see Kopel, 1995).

³ This is based on AWs identified by ATF's Firearms Technology Branch as of December 1997.

Firearm	Description	1993 Blue Book Price	Pre-Ban Federal Legal Status	Examples of Legal Substitutes
Avtomat Kalashnikov (AK) (by Norinco, Mitchell, Poly Technologies)	Chinese, Russian, other foreign and domestic: .223 or 7.62x39mm caliber, semiauto. rifle; 5, 10, or 30 shot magazine, may be supplied with bayonet	\$550 (generic import); add 10-15% for folding stock models	Imports banned in 1989.	Norinco NHM 90/91 ¹
Uzi, Galil	Israeli: 9mm, .41, or .45 caliber semiauto. carbine, mini- carbine, or pistol. Magazine capacity of 16, 20, or 25, depending on model and type (10 or 20 on pistols).	\$550-\$1050 (Uzi) \$875-\$1150 (Galil)	Imports banned in 1989	Uzi Sporter ²
Beretta AR-70	Italian: .222 or .223 caliber semiauto. paramilitary design rifle; 5, 8, or 30 shot magazine.	\$1050	Imports banned in 1989.	
Colt AR-15	Domestic: primarily .223 caliber paramilitary rifle or carbine; 5 shot magazines, often comes with two 5-shot detachable magazines. Exact copies by DPMS, Eagle, Olympic, and others.	\$825-\$1325	Legal (civilian version of military M-16)	Colt Sporter, Match H-Bar, Target models
Fabrique National FN/FAL, FN/LAR, FNC	Belgian design: .308 caliber semiauto. rifle or .223 combat carbine with 30 shot magazine. Rifle comes with flash hider, 4 position fire selector on automatic models. Discontinued in 1988.	\$1100-\$2500	Imports banned in 1989.	L1A1 Sporter (FN, Century) ²
Steyr AUG	Austrian: .223/5.56mm caliber semiauto. paramilitary design rifle.	\$2500	Imports banned in 1989	
SWD M-10, 11, 11/9, 12	Domestic: 9mm, .380, or .45 caliber paramilitary design semiauto. pistol; 32 shot magazine. Also available in semiauto. carbine and fully automatic variations.	\$215 (M-11/9)	Legal	Cobray PM11, 12
TEC-9, DC9, 22	Domestic: 9mm caliber semiauto. paramilitary design pistol, 10 or 32 shot magazine.; .22 caliber semiauto. paramilitary design pistol, 30 shot magazine.	\$145-\$295	Legal	TEC-AB
Revolving Cylinder Shotguns	Domestic: 12 gauge, 12 shot rotary magazine; paramilitary configuration	\$525 (Street Sweeper)	Legal	

Table 2-1. Firearms Banned by the Federal Assault Weapons Ban

¹ Imports were halted in 1994 under the federal embargo on the importation of firearms from China.

² Imports banned by federal executive order, April 1998.

Weapon Category	Military-Style Features (Two or more qualify a firearm as an assault weapon)
Semiautomatic pistols accepting detachable magazines:	 ammunition magazine that attaches outside the pistol grip threaded barrel capable of accepting a barrel extender, flash hider, forward handgrip, or silencer heat shroud attached to or encircling the barrel weight of more than 50 ounces unloaded semiautomatic version of a fully automatic weapon
Semiautomatic rifles accepting detachable magazines:	 folding or telescoping stock pistol grip that protrudes beneath the firing action bayonet mount flash hider or threaded barrel designed to accommodate one grenade launcher
Semiautomatic shotguns:	 folding or telescoping stock pistol grip that protrudes beneath the firing action fixed magazine capacity over 5 rounds ability to accept a detachable ammunition magazine

Table 2-2. Features Test of the Federal Assault Weapons Ban

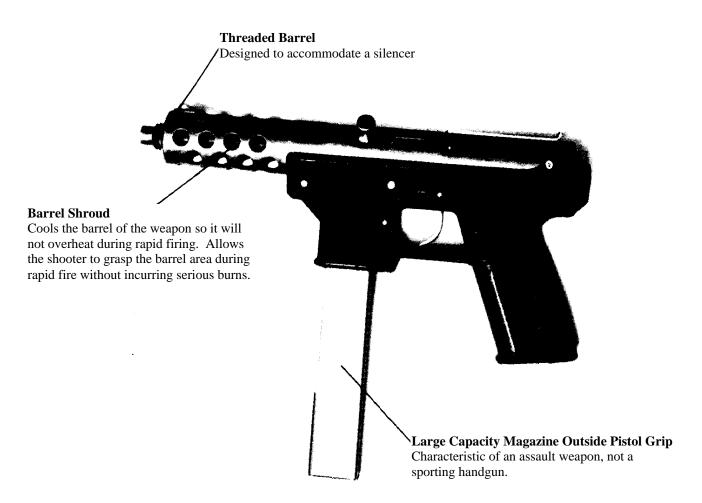
2.2. Large Capacity Magazines

In addition, the ban prohibits most ammunition feeding devices holding more than 10 rounds of ammunition (referred to hereafter as large capacity magazines, or LCMs).⁴ Most notably, this limits the capacity of detachable ammunition magazines for semiautomatic firearms. Though often overlooked in media coverage of the law, this provision impacted a larger share of the gun market than did the ban on AWs. Approximately 40 percent of the semiautomatic handgun models and a majority of the semiautomatic rifle models being manufactured and advertised prior to the ban were sold with LCMs or had a variation that was sold with an LCM (calculated from Murtz et al., 1994). Still others could accept LCMs made for other firearms and/or by other manufacturers. A national survey of gun owners found that 18% of all civilian-owned firearms and 21% of civilian-owned handguns were equipped with magazines having 10 or more rounds as of 1994 (Cook and Ludwig, 1996, p. 17). The AW provision did not affect most LCM-compatible guns, but the LCM provision limited the capacities of their magazines to 10 rounds.

⁴ Technically, the ban prohibits any magazine, belt, drum, feed strip, or similar device that has the capacity to accept more than 10 rounds or ammunition, or which can be readily converted or restored to accept more than 10 rounds of ammunition. The ban exempts attached tubular devices capable of operating only with .22 caliber rimfire (i.e., low velocity) ammunition.

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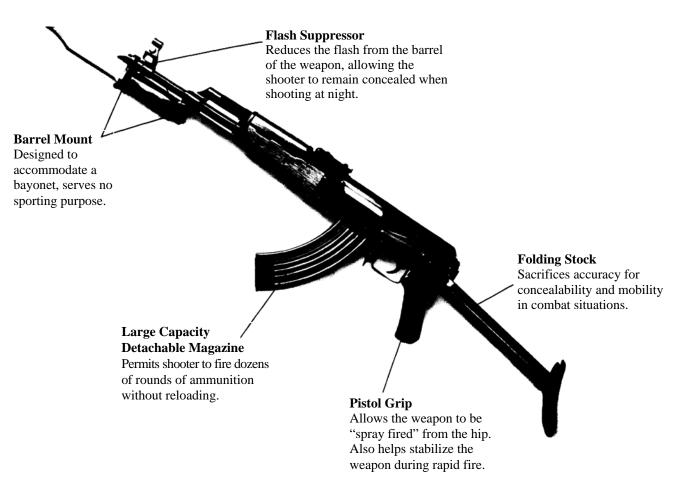
Figure 2-1. Features of Assault Weapons: The Intratec TEC-9 Assault Pistol



Adapted from exhibit of the Center to Prevent Handgun Violence.

As discussed in later chapters, an LCM is perhaps the most functionally important feature of many AWs. This point is underscored by the AW ban's exemptions for semiautomatic rifles that cannot accept a detachable magazine that holds more than five rounds of ammunition and semiautomatic shotguns that cannot hold more than five rounds in a fixed or detachable magazine. As noted by the U.S. House of Representatives, most prohibited AWs came equipped with magazines holding 30 rounds and could accept magazines holding as many as 50 or 100 rounds (U.S. Department of the Treasury, 1998, p. 14). Also, a 1998 federal executive order (discussed below) banned further importation of foreign semiautomatic rifles capable of accepting LCMs made for military rifles. Accordingly, the magazine ban plays an important role in the logic and interpretations of the analyses presented here.

Figure 2-2. Features of Assault Weapons: The AK-47 Assault Rifle



Adapted from exhibit of the Center to Prevent Handgun Violence.

2.3. Foreign Rifles Accepting Large Capacity Military Magazines

In April of 1998, the Clinton administration broadened the range of the AW ban by prohibiting importation of an additional 58 foreign semiautomatic rifles that were still legal under the 1994 law but that can accept LCMs made for military assault rifles like the AK-47 (U.S. Department of the Treasury, 1998).⁵ Figure 2-3 illustrates a few such rifles (hereafter, LCMM rifles) patterned after the banned AK-47 pictured in Figure 2-2. The LCMM rifles in Figure 2-3 do not possess the military-style features incorporated into the AK-47 (such as pistol grips, flash suppressors, and bayonet mounts), but they accept LCMs made for AK-47s.⁶

⁵ In the civilian context, AWs are semiautomatic firearms. Many semiautomatic AWs are patterned after military firearms, but the military versions are capable of semiautomatic and fully automatic fire.

⁶ Importation of some LCMM rifles, including a number of guns patterned after the AK-47, was halted in 1994 due to trade sanctions against China (U.S. Department of the Treasury, 1998).

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Figure 2-3. Foreign Semiautomatic Rifles Capable of Accepting Large Capacity Military Magazines: AK47 Copies Banned by Executive Order in 1998



MAK90

WUM 1

Taken from U.S. Department of the Treasury (1998)

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2.4. Ban Exemptions

2.4.1. Guns and Magazines Manufactured Prior to the Ban

The ban contains important exemptions. AWs and LCMs manufactured before the effective date of the ban are "grandfathered" and thus legal to own and transfer. Around 1990, there were an estimated 1 million privately owned AWs in the U.S. (about 0.5% of the estimated civilian gun stock) (Cox Newspapers, 1989, p. 1; American Medical Association Council on Scientific Affairs, 1992), though those counts probably did not correspond exactly to the weapons prohibited by the 1994 ban. The leading domestic AW producers manufactured approximately half a million AWs from 1989 through 1993, representing roughly 2.5% of all guns manufactured in the U.S. during that time (see Chapter 5).

We are not aware of any precise estimates of the pre-ban stock of LCMs, but gun owners in the U.S. possessed an estimated 25 million guns that were equipped with LCMs or 10-round magazines in 1994 (Cook and Ludwig, 1996, p. 17), and gun industry sources estimated that, including aftermarket items for repairing and extending magazines, there were at least 25 million LCMs available in the United States as of 1995 (Gun Tests, 1995, p. 30). As discussed in Chapter 7, moreover, an additional 4.8 million pre-ban LCMs were imported into the U.S. from 1994 through 2000 under the grandfathering exemption.

2.4.2. Semiautomatics With Fewer or No Military Features

Although the law bans "copies or duplicates" of the named gun makes and models, federal authorities have emphasized exact copies. Relatively cosmetic changes, such as removing a flash hider or bayonet mount, are sufficient to transform a banned weapon into a legal substitute, and a number of manufacturers now produce modified, legal versions of some of the banned guns (examples are listed in Table 2-1). In general, the AW ban does not apply to semiautomatics possessing no more than one military-style feature listed under the ban's features test provision.⁷ For instance, prior to going out of business, Intratec, makers of the banned TEC-9 featured in Figure 2-1, manufactured an AB-10 ("after ban") model that does not have a threaded barrel or a barrel shroud but is identical to the TEC-9 in other respects, including the ability to accept an ammunition magazine outside the pistol grip (Figure 2-4). As shown in the illustration, the AB-10 accepts grandfathered, 32-round magazines made for the TEC-9, but post-ban magazines produced for the AB-10 must be limited to 10 rounds.

⁷ Note, however, that firearms imported into the country must still meet the "sporting purposes test" established under the federal Gun Control Act of 1968. In 1989, ATF determined that foreign semiautomatic rifles having any one of a number of named military features (including those listed in the features test of the 1994 AW ban) fail the sporting purposes test and cannot be imported into the country. In 1998, the ability to accept an LCM made for a military rifle was added to the list of disqualifying features. Consequently, it is possible for foreign rifles to pass the features test of the federal AW ban but not meet the sporting purposes test for imports (U.S. Department of the Treasury, 1998).

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Another example is the Colt Match Target H-Bar rifle (Figure 2-5), which is a legalized version of the banned AR-15 (see Table 2-1). AR-15 type rifles are civilian weapons patterned after the U.S. military's M-16 rifle and were the assault rifles most commonly used in crime before the ban (Roth and Koper, 1997, Chapter 2). The postban version shown in Figure 2-5 (one of several legalized variations on the AR-15) is essentially identical to pre-ban versions of the AR-15 but does not have accessories like a flash hider, threaded barrel, or bayonet lug. The one remaining military feature on the postban gun is the pistol grip. This and other postban AR-15 type rifles can accept LCMs made for the banned AR15, as well as those made for the U.S. military's M-16. However, post-ban magazines manufactured for these guns must hold fewer than 11 rounds.

The LCMM rifles discussed above constituted another group of legalized AWtype weapons until 1998, when their importation was prohibited by executive order. Finally, the ban includes an appendix that exempts by name several hundred models of rifles and shotguns commonly used in hunting and recreation, 86 of which are semiautomatics. While the exempted semiautomatics generally lack the military-style features common to AWs, many take detachable magazines, and some have the ability to accept LCMs.⁸

2.5. Summary

In the broadest sense, the AW-LCM ban is intended to limit crimes with semiautomatic firearms having large ammunition capacities – which enable shooters to discharge high numbers of shots rapidly – and other features conducive to criminal applications. The gun ban provision targets a relatively small number of weapons based on outward features or accessories that have little to do with the weapons' operation. Removing some or all of these features is sufficient to make the weapons legal. In other respects (e.g., type of firing mechanism, ammunition fired, and the ability to accept a detachable magazine), AWs do not differ from other legal semiautomatic weapons. The LCM provision of the law limits the ammunition capacity of non-banned firearms.

⁸ Legislators inserted a number of amendments during the drafting process to broaden the consensus behind the bill (Lennett 1995). Among changes that occurred during drafting were: dropping a requirement to register post-ban sales of the grandfathered guns, dropping a ban on "substantial substitutes" as well as "exact copies" of the banned weapons, shortening the list of named makes and models covered by the ban, adding the appendix list of exempted weapons, and mandating the first impact study of the ban that is discussed below.

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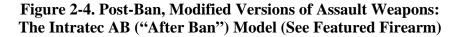




Figure 2-5. Post-Ban, Modified Versions of Assault Weapons: The Colt Match Target HBAR Model



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3. CRIMINAL USE OF ASSAULT WEAPONS AND LARGE CAPACITY MAGAZINES BEFORE THE BAN

During the 1980s and early 1990s, AWs and other semiautomatic firearms equipped with LCMs were involved in a number of highly publicized mass murder incidents that raised public concern about the accessibility of high powered, military-style weaponry and other guns capable of discharging high numbers of bullets in a short period of time (Cox Newspapers, 1989; Kleck, 1997, pp.124-126,144; Lenett, 1995). In one of the worst mass murders ever committed in the U.S., for example, James Huberty killed 21 persons and wounded 19 others in a San Ysidro, California MacDonald's restaurant on July 18, 1984 using an Uzi carbine, a shotgun, and another semiautomatic handgun. On September 14, 1989, Joseph Wesbecker, armed with an AK-47 rifle, two MAC-11 handguns, and a number of other firearms, killed 7 persons and wounded 15 others at his former workplace in Louisville, Kentucky before taking his own life. Another particularly notorious incident that precipitated much of the recent debate over AWs occurred on January 17, 1989 when Patrick Purdy used a civilian version of the AK-47 military rifle to open fire on a schoolyard in Stockton, California, killing 5 children and wounding 29 persons.

There were additional high profile incidents in which offenders using semiautomatic handguns with LCMs killed and wounded large numbers of persons. Armed with two handguns having LCMs (and reportedly a supply of extra LCMs), a rifle, and a shotgun, George Hennard killed 22 people and wounded another 23 in Killeen, Texas in October 1991. In a December 1993 incident, a gunman named Colin Ferguson, armed with a handgun and LCMs, opened fire on commuters on a Long Island train, killing 5 and wounding 17.

Indeed, AWs or other semiautomatics with LCMs were involved in 6, or 40%, of 15 mass shooting incidents occurring between 1984 and 1993 in which six or more persons were killed or a total of 12 or more were wounded (Kleck, 1997, pp.124-126, 144). Early studies of AWs, though sometimes based on limited and potentially unrepresentative data, also suggested that AWs recovered by police were often associated with drug trafficking and organized crime (Cox Newspapers, 1989; also see Roth and Koper, 1997, Chapter 5), fueling a perception that AWs were guns of choice among drug dealers and other particularly violent groups. All of this intensified concern over AWs and other semiautomatics with large ammunition capacities and helped spur the passage of AW bans in California, New Jersey, Connecticut, and Hawaii between 1989 and 1993, as well as the 1989 federal import ban on selected semiautomatic rifles. Maryland also passed AW legislation in 1994, just a few months prior to the passage of the 1994 federal AW ban.⁹

Looking at the nation's gun crime problem more broadly, however, AWs and LCMs were used in only a minority of gun crimes prior to the 1994 federal ban, and AWs were used in a particularly small percentage of gun crimes.

⁹ A number of localities around the nation also passed AW bans during this period.

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3.1. Criminal Use of Assault Weapons

Numerous studies have examined the use of AWs in crime prior to the federal ban. The definition of AWs varied across the studies and did not always correspond exactly to that of the 1994 law (in part because a number of the studies were done prior to 1994). In general, however, the studies appeared to focus on various semiautomatics with detachable magazines and military-style features. According to these accounts, AWs typically accounted for up to 8% of guns used in crime, depending on the specific AW definition and data source used (e.g., see Beck et al., 1993; Hargarten et al., 1996; Hutson et al., 1994; 1995; McGonigal et al., 1993; New York State Division of Criminal Justice Services, 1994; Roth and Koper, 1997, Chapters 2, 5, 6; Zawitz, 1995). A compilation of 38 sources indicated that AWs accounted for 2% of crime guns on average (Kleck, 1997, pp.112, 141-143).¹⁰

Similarly, the most common AWs prohibited by the 1994 federal ban accounted for between 1% and 6% of guns used in crime according to most of several national and local data sources examined for this and our prior study (see Chapter 6 and Roth and Koper, 1997, Chapters 5, 6):

- Baltimore (all guns recovered by police, 1992-1993): 2%
- Miami (all guns recovered by police, 1990-1993): 3%
- Milwaukee (guns recovered in murder investigations, 1991-1993): 6%
- Boston (all guns recovered by police, 1991-1993): 2%
- St. Louis (all guns recovered by police, 1991-1993): 1%
- Anchorage, Alaska (guns used in serious crimes, 1987-1993): 4%
- National (guns recovered by police and reported to ATF, 1992-1993): 5%¹¹
- National (gun thefts reported to police, 1992-Aug. 1994): 2%
- National (guns used in murders of police, 1992-1994): 7-9%¹²
- National (guns used in mass murders of 4 or more persons, 1992-1994): 4-13%¹³

Although each of the sources cited above has limitations, the estimates consistently show that AWs are used in a small fraction of gun crimes. Even the highest

¹⁰ The source in question contains a total of 48 estimates, but our focus is on those that examined all AWs (including pistols, rifles, and shotguns) as opposed to just assault rifles.

¹¹ For reasons discussed in Chapter 6, the national ATF estimate likely overestimates the use of AWs in crime. Nonetheless, the ATF estimate lies within the range of other presented estimates.

¹² The minimum estimate is based on AW cases as a percentage of all gun murders of police. The maximum estimate is based on AW cases as a percentage of cases for which at least the gun manufacturer was known. Note that AWs accounted for as many as 16% of gun murders of police in 1994 (Roth and Koper, 1997, Chapter 6; also see Adler et al., 1995).

¹³ These statistics are based on a sample of 28 cases found through newspaper reports (Roth and Koper, 1997, Appendix A). One case involved an AW, accounting for 3.6% of all cases and 12.5% of cases in which at least the type of gun (including whether the gun was a handgun, rifle, or shotgun and whether the gun was a semiautomatic) was known. Also see the earlier discussion of AWs and mass shootings at the beginning of this chapter.

estimates, which correspond to particularly rare events such mass murders and police murders, are no higher than 13%. Note also that the majority of AWs used in crime are assault pistols (APs) rather than assault rifles (ARs). Among AWs reported by police to ATF during 1992 and 1993, for example, APs outnumbered ARs by a ratio of 3 to 1 (see Chapter 6).

The relative rarity of AW use in crime can be attributed to a number of factors. Many AWs are long guns, which are used in crime much less often than handguns. Moreover, a number of the banned AWs are foreign weapons that were banned from importation into the U.S. in 1989. Also, AWs are more expensive (see Table 2-1) and more difficult to conceal than the types of handguns that are used most frequently in crime.

3.1.1. A Note on Survey Studies and Assault Weapons

The studies and statistics discussed above were based primarily on police information. Some survey studies have given a different impression, suggesting substantial levels of AW ownership among criminals and otherwise high-risk juvenile and adult populations, particularly urban gang members (Knox et al., 1994; Sheley and Wright, 1993a). A general problem with these studies, however, is that respondents themselves had to define terms like "military-style" and "assault rifle." Consequently, the figures from these studies may lack comparability with those from studies with police data. Further, the figures reported in some studies prompt concerns about exaggeration of AW ownership (perhaps linked to publicity over the AW issue during the early 1990s when a number of these studies were conducted), particularly among juvenile offenders, who have reported ownership levels as high as 35% just for ARs (Sheley and Wright, 1993a).¹⁴

Even so, most survey evidence on the actual use of AWs suggests that offenders rarely use AWs in crime. In a 1991 national survey of adult state prisoners, for example, 8% of the inmates reported possessing a "military-type" firearm at some point in the past (Beck et al., 1993, p. 19). Yet only 2% of offenders who used a firearm during their conviction offense reported using an AW for that offense (calculated from pp. 18, 33), a figure consistent with the police statistics cited above. Similarly, while 10% of adult inmates and 20% of juvenile inmates in a Virginia survey reported having owned an AR, none of the adult inmates and only 1% of the juvenile inmates reported having carried them at crime scenes (reported in Zawitz, 1995, p. 6). In contrast, 4% to 20% of inmates surveyed in eight jails across rural and urban areas of Illinois and Iowa reported having used an AR in committing crimes (Knox et al., 1994, p. 17). Nevertheless, even assuming the accuracy and honesty of the respondents' reports, it is not clear what

¹⁴ As one example of possible exaggeration of AW ownership, a survey of incarcerated juveniles in New Mexico found that 6% reported having used a "military-style rifle" against others and 2.6% reported that someone else used such a rifle against them. However, less than 1% of guns recovered in a sample of juvenile firearms cases were "military" style guns (New Mexico Criminal Justice Statistical Analysis Center, 1998, pp. 17-19; also see Ruddell and Mays, 2003).

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weapons they were counting as ARs, what percentage of their crimes were committed with ARs, or what share of all gun crimes in their respective jurisdictions were linked to their AR uses. Hence, while some surveys suggest that ownership and, to a lesser extent, use of AWs may be fairly common among certain subsets of offenders, the overwhelming weight of evidence from gun recovery and survey studies indicates that AWs are used in a small percentage of gun crimes overall.

3.1.2. Are Assault Weapons More Attractive to Criminal Users Than Other Gun Users?

Although AWs are used in a small percentage of gun crimes, some have argued that AWs are more likely to be used in crime than other guns, i.e., that AWs are more attractive to criminal than lawful gun users due to the weapons' military-style features and their particularly large ammunition magazines. Such arguments are based on data implying that AWs are more common among crime guns than among the general stock of civilian firearms. According to some estimates generated prior to the federal ban, AWs accounted for less than one percent of firearms owned by civilians but up to 11% of guns used in crime, based on firearms reported by police to ATF between 1986 and 1993 (e.g., see Cox Newspapers, 1989; Lennett, 1995). However, these estimates were problematic in a number of respects. As discussed in Chapter 6, ATF statistics are not necessarily representative of the types of guns most commonly recovered by police, and ATF statistics from the late 1980s and early 1990s in particular tended to overstate the prevalence of AWs among crime guns. Further, estimating the percentage of civilian weapons that are AWs is difficult because gun production data are not reported by model, and one must also make assumptions about the rate of attrition among the stock of civilian firearms.

Our own more recent assessment indicates that AWs accounted for about 2.5% of guns produced from 1989 through 1993 (see Chapter 5). Relative to previous estimates, this may signify that AWs accounted for a growing share of civilian firearms in the years just before the ban, though the previous estimates likely did not correspond to the exact list of weapons banned in 1994 and thus may not be entirely comparable to our estimate. At any rate, the 2.5% figure is comparable to most of the AW crime gun estimates listed above; hence, it is not clear that AWs are used disproportionately in most crimes, though AWs still seem to account for a somewhat disproportionate share of guns used in murders and other serious crimes.

Perhaps the best evidence of a criminal preference for AWs comes from a study of young adult handgun buyers in California that found buyers with minor criminal histories (i.e., arrests or misdemeanor convictions that did not disqualify them from purchasing firearms) were more than twice as likely to purchase APs than were buyers with no criminal history (4.6% to 2%, respectively) (Wintemute et al., 1998a). Those with more serious criminal histories were even more likely to purchase APs: 6.6% of those who had been charged with a gun offense bought APs, as did 10% of those who had been charged with two or more serious violent offenses. AP purchasers were also more likely to be arrested subsequent to their purchases than were other gun purchasers. Among gun buyers with prior charges for violence, for instance, AP buyers were more than twice as likely as other handgun buyers to be charged with any new offense and three times as likely to be charged with a new violent or gun offense. To our knowledge, there have been no comparable studies contrasting AR buyers with other rifle buyers.

3.2. Criminal Use of Large Capacity Magazines

Relative to the AW issue, criminal use of LCMs has received relatively little attention. Yet the overall use of guns with LCMs, which is based on the combined use of AWs and non-banned guns with LCMs, is much greater than the use of AWs alone. Based on data examined for this and a few prior studies, guns with LCMs were used in roughly 14% to 26% of most gun crimes prior to the ban (see Chapter 8; Adler et al., 1995; Koper, 2001; New York Division of Criminal Justice Services, 1994).

- Baltimore (all guns recovered by police, 1993): 14%
- Milwaukee (guns recovered in murder investigations, 1991-1993): 21%
- Anchorage, Alaska (handguns used in serious crimes, 1992-1993): 26%
- New York City (guns recovered in murder investigations, 1993): 16-25%¹⁵
- Washington, DC (guns recovered from juveniles, 1991-1993): 16%¹⁶
- National (guns used in murders of police, 1994): 31%-41%¹⁷

Although based on a small number of studies, this range is generally consistent with national survey estimates indicating approximately 18% of all civilian-owned guns and 21% of civilian-owned handguns were equipped with LCMs as of 1994 (Cook and Ludwig, 1996, p. 17). The exception is that LCMs may have been used disproportionately in murders of police, though such incidents are very rare.

As with AWs and crime guns in general, most crime guns equipped with LCMs are handguns. Two handgun models manufactured with LCMs prior to the ban (the Glock 17 and Ruger P89) were among the 10 crime gun models most frequently recovered by law enforcement and reported to ATF during 1994 (ATF, 1995).

¹⁵ The minimum estimate is based on cases in which discharged firearms were recovered, while the maximum estimate is based on cases in which recovered firearms were positively linked to the case with ballistics evidence (New York Division of Criminal Justice Services, 1994).

¹⁶ Note that Washington, DC prohibits semiautomatic firearms accepting magazines with more than 12 rounds (and handguns in general).

¹⁷ The estimates are based on the sum of cases involving AWs or other guns sold with LCMs (Adler et al., 1995, p.4). The minimum estimate is based on AW-LCM cases as a percentage of all gun murders of police. The maximum estimate is based on AW-LCM cases as a percentage of cases in which the gun model was known.

3.3. Summary

In sum, AWs and LCMs were used in up to a quarter of gun crimes prior to the 1994 AW-LCM ban. By most estimates, AWs were used in less than 6% of gun crimes even before the ban. Some may have perceived their use to be more widespread, however, due to the use of AWs in particularly rare and highly publicized crimes such as mass shootings (and, to a lesser extent, murders of police), survey reports suggesting high levels of AW ownership among some groups of offenders, and evidence that some AWs are more attractive to criminal than lawful gun buyers.

In contrast, guns equipped with LCMs – of which AWs are a subset – are used in roughly 14% to 26% of gun crimes. Accordingly, the LCM ban has greater potential for affecting gun crime. However, it is not clear how often the ability to fire more than 10 shots without reloading (the current magazine capacity limit) affects the outcomes of gun attacks (see Chapter 9). All of this suggests that the ban's impact on gun violence is likely to be small.

4. OVERVIEW OF STUDY DESIGN, HYPOTHESES, AND PRIOR FINDINGS

Section 110104 of the AW-LCM ban directed the Attorney General of the United States to study the ban's impact and report the results to Congress within 30 months of the ban's enactment, a provision which was presumably motivated by a sunset provision in the legislation (section 110105) that will lift the ban in September 2004 unless Congress renews the ban. In accordance with the study requirement, the National Institute of Justice (NIJ) awarded a grant to the Urban Institute to study the ban's shortterm (i.e., 1994-1996) effects. The results of that study are available in a number of reports, briefs, and articles written by members of this research team (Koper and Roth, 2001a; 2001b; 2002a; Roth and Koper, 1997; 1999).¹⁸ In order to understand the ban's longer-term effects, NIJ provided additional funding to extend the AW research. In 2002, we delivered an interim report to NIJ based on data extending through at least the late 1990s (Koper and Roth, 2002b). This report is based largely on the 2002 interim report, but with various new and updated analyses extending as far as 2003. It is thus a compilation of analyses conducted between 1998 and 2003. The study periods vary somewhat across the analyses, depending on data availability and the time at which the data were collected.

4.1. Logical Framework for Research on the Ban

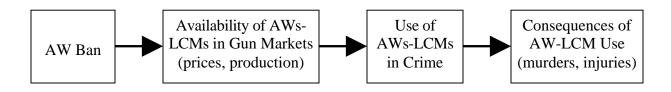
An important rationale for the AW-LCM ban is that AWs and other guns equipped with LCMs are particularly dangerous weapons because they facilitate the rapid firing of high numbers of shots, thereby potentially increasing injuries and deaths from gun violence. Although AWs and LCMs were used in only a modest share of gun crimes before the ban, it is conceivable that a decrease in their use might reduce fatal and nonfatal gunshot victimizations, even if it does not reduce the overall rate of gun crime. (In Chapter 9, we consider in more detail whether forcing offenders to substitute other guns and smaller magazines can reduce gun deaths and injuries.)

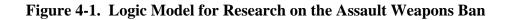
It is not clear how quickly such effects might occur, however, because the ban exempted the millions of AWs and LCMs that were manufactured prior to the ban's effective date in September 1994. This was particularly a concern for our first study, which was based on data extending through mid-1996, a period potentially too short to observe any meaningful effects. Consequently, investigation of the ban's effects on gun markets – and, most importantly, how they have affected criminal use of AWs and LCMs – has played a central role in this research. The general logic of our studies, illustrated in Figure 4-1, has been to first assess the law's impact on the availability of AWs and LCMs, examining price and production (or importation) indices in legal markets and relating them to trends in criminal use of AWs and LCMs. In turn, we can relate these market patterns to trends in the types of gun crimes most likely to be affected by changes in the use of AWs and LCMs. However, we cannot make definitive assessments of the

¹⁸ The report to Congress was the Roth and Koper (1997) report.

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ban's impact on gun violence until it is clear that the ban has indeed reduced criminal use of AWs and LCMs.





4.2. Hypothesized Market Effects

4.2.1. A General Description of Gun Markets

Firearms are distributed in markets commonly referred to as primary and secondary markets. Illicit gun transactions occur in both markets. Primary markets include wholesale and retail transactions by federally-licensed gun dealers, referred to as federal firearm licensees. Licensed dealers are required to, among things, follow federal and state background procedures to verify the eligibility of purchasers, observe any legally required waiting period prior to making transfers, and maintain records of gun acquisitions and dispositions (though records are not required for sales of ammunition magazines).

Despite these restrictions, survey data suggest that as many as 21% of adult gun offenders obtained guns from licensed dealers in the years prior to the ban (Harlow, 2001, p. 6; also see Wright and Rossi, 1986, pp. 183,185). In more recent years, this figure has declined to 14% (Harlow, 2001, p. 6), due likely to the Brady Act, which established a national background check system for purchases from licensed dealers, and reforms of the federal firearms licensing system that have greatly reduced the number of licensed gun dealers (see ATF, 2000; Koper, 2002). Some would-be gun offenders may be legally eligible buyers at the time of their acquisitions, while others may seek out corrupt dealers or use other fraudulent or criminal means to acquire guns from retail dealers (such as recruiting a legally entitled buyer to act as a "straw purchaser" who buys a gun on behalf of a prohibited buyer).

Secondary markets encompass second-hand gun transactions made by nonlicensed individuals.¹⁹ Secondary market participants are prohibited from knowingly transferring guns to ineligible purchasers (e.g., convicted felons and drug abusers). However, secondary transfers are not subject to the federal record-keeping and background check requirements placed on licensed dealers, thus making the secondary

¹⁹ Persons who make only occasional sales of firearms are not required to obtain a federal firearms license (ATF, 2000, p. 11).

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market almost entirely unregulated and, accordingly, a better source of guns for criminal users.²⁰ In the secondary market, ineligible buyers may obtain guns from a wide variety of legitimate or illegitimate gun owners: relatives, friends, fences, drug dealers, drug addicts, persons selling at gun shows, or other strangers (e.g., see Wright and Rossi, 1986; Sheley and Wright, 1993a). Of course, ineligible purchasers may also steal guns from licensed gun dealers and private gun owners.

Secondary market prices are generally lower than primary market prices (because the products are used), though the former may vary substantially across a range of gun models, places, circumstances, and actors. For example, street prices of AWs and other guns can be 3 to 6 times higher than legal retail prices in jurisdictions with strict gun controls and lower levels of gun ownership (Cook et al., 1995, p. 72). Nonetheless, experts note that primary and secondary market prices correspond to one another, in that relatively expensive guns in the primary market are also relatively expensive in the secondary market. Moreover, in any given locality, trends in secondary market prices can be expected to track those in the primary market because a rise in primary market prices for new weapons will increase demand for used weapons and therefore increase secondary market prices (Cook et al., 1995, p. 71).

4.2.2. The AW-LCM Ban and Gun Markets

In the long term, we can expect prices of the banned guns and magazines to gradually rise as supplies dwindle. As prices rise, more would-be criminal users of AWs and LCMs will be unable or unwilling to pay the higher prices. Others will be discouraged by the increasing non-monetary costs (i.e., search time) of obtaining the weapons. In addition, rising legal market prices will undermine the incentive for some persons to sell AWs and LCMs to prohibited buyers for higher premiums, thereby bidding some of the weapons away from the channels through which they would otherwise reach criminal users. Finally, some would-be AW and LCM users may become less willing to risk confiscation of their AWs and LCMs as the value of the weapons increases. Therefore, we expect that over time diminishing stocks and rising prices will lead to a reduction in criminal use of AWs and LCMs.²¹

²⁰ Some states require that secondary market participants notify authorities about their transactions. Even in these states, however, it is not clear how well these laws are enforced.

²¹ We would expect these reductions to be apparent shortly after the price increases (an expectation that, as discussed below, was confirmed in our earlier study) because a sizeable share of guns used in crime are used within one to three years of purchase. Based on analyses of guns recovered by police in 17 cities, ATF (1997, p. 8) estimates that guns less than 3 years old (as measured by the date of first retail sale) comprise between 22% and 43% of guns seized from persons under age 18, between 30% and 54% of guns seized from persons ages 18 to 24, and between 25% and 46% of guns seized from persons over 24. In addition, guns that are one year old or less comprise the largest share of relatively new crime guns (i.e., crime guns less than three years old) (Pierce et al., 1998, p. 11). Similar data are not available for secondary market transactions, but such data would shorten the estimated time from acquisition to criminal use.

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However, the expected timing of the market processes is uncertain. We can anticipate that AW and LCM prices will remain relatively stable for as long as the supply of grandfathered weapons is adequate to meet demand. If, in anticipation of the ban, gun manufacturers overestimated the demand for AWs and LCMs and produced too many of them, prices might even fall before eventually rising. Market responses can be complicated further by the continuing production of legal AW substitute models by some gun manufacturers. If potential AW buyers are content with an adequate supply of legal AW-type weapons having fewer military features, it will take longer for the grandfathered AW supply to constrict and for prices to rise. Similarly, predicting LCM price trends is complicated by the overhang of military surplus magazines that can fit civilian weapons (e.g., military M-16 rifle magazines that can be used with AR-15 type rifles) and by the market in reconditioned magazines. The "aftermarket" in gun accessories and magazine extenders that can be used to convert legal guns and magazines into banned ones introduces further complexity to the issue.

4.3. Prior Research on the Ban's Effects

To summarize the findings of our prior study, Congressional debate over the ban triggered pre-ban speculative price increases of upwards of 50% for AWs during 1994, as gun distributors, dealers, and collectors anticipated that the weapons would become valuable collectors' items. Analysis of national and local data on guns recovered by police showed reductions in criminal use of AWs during 1995 and 1996, suggesting that rising prices made the weapons less accessible to criminal users in the short-term aftermath of the ban.

However, the speculative increase in AW prices also prompted a pre-ban boost in AW production; in 1994, AW manufacturers produced more than twice their average volume for the 1989-1993 period. The oversupply of grandfathered AWs, the availability of the AW-type legal substitute models mentioned earlier, and the steady supply of other non-banned semiautomatics appeared to have saturated the legal market, causing advertised prices of AWs to fall to nearly pre-speculation levels by late 1995 or early 1996. This combination of excess supply and reduced prices implied that criminal use of AWs might rise again for some period around 1996, as the large stock of AWs would begin flowing from dealers' and speculators' gun cases to the secondary markets where ineligible purchasers may obtain guns more easily.

We were not able to gather much specific data about market trends for LCMs. However, available data did reveal speculative, pre-ban price increases for LCMs that were comparable to those for AWs (prices for some LCMs continued to climb into 1996), leading us to speculate – incorrectly, as this study will show (see Chapter 8) – that there was some reduction in LCM use after the ban.²²

²² To our knowledge, there have been two other studies of changes in AW and LCM use during the postban period. One study reported a drop in police recoveries of AWs in Baltimore during the first half of 1995 (Weil and Knox, 1995), while the other found no decline in recoveries of AWs or LCMs in Milwaukee homicide cases as of 1996 (Hargarten et al., 2000). Updated analyses for both of these cities

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Determining whether the reduction in AW use (and perhaps LCM use) following the ban had an impact on gun violence was more difficult. The gun murder rate dropped more in 1995 (the first year following the ban) than would have been expected based on preexisting trends, but the short post-ban follow-up period available for the analysis precluded a definitive assessment as to whether the reduction was statistically meaningful (see especially Koper and Roth, 2001a). The reduction was also larger than would be expected from the AW-LCM ban, suggesting that other factors were at work in accelerating the decline. Using a number of national and local data sources, we also examined trends in measures of victims per gun murder incident and wounds per gunshot victim, based on the hypothesis that these measures might be more sensitive to variations in the use of AWs and LCMs. These analyses revealed no ban effects, thus failing to show confirming evidence of the mechanism through which the ban was hypothesized to affect the gun murder rate. However, newly available data presented in subsequent chapters suggest these assessments may have been premature, because any benefits from the decline in AW use were likely offset by steady or rising use of other guns equipped with LCMs, a trend that was not apparent at the time of our earlier study.

We cautioned that the short-term patterns observed in the first study might not provide a reliable guide to longer-term trends and that additional follow-up was warranted. Two key issues to be addressed were whether there had been a rebound in AW use since the 1995-1996 period and, if so, whether that rebound had yet given way to a long-term reduction in AW use. Another key issue was to seek more definitive evidence on short and long-term trends in the availability and criminal use of LCMs. These issues are critical to assessing the effectiveness of the AW-LCM ban, but they also have broader implications for other important policy concerns, namely, the establishment of reasonable timeframes for sunset and evaluation provisions in legislation. In other words, how long is long enough in evaluating policy and setting policy expiration dates?

are presented in Chapters 6 and 8.

5. MARKET INDICATORS FOR ASSAULT WEAPONS: PRICES AND PRODUCTION

This chapter assesses the ban's impact on the availability of AWs in primary and secondary markets, as measured by trends in AW prices and post-ban production of legal AW substitute models. Understanding these trends is important because they influence the flow of grandfathered weapons to criminals and the availability of non-banned weapons that are close substitutes for banned ones. In the next chapter, we assess the impact of these trends on criminal use of AWs, as approximated by statistics on gun seizures by police. (Subsequent chapters present similar analyses for LCMs.)

Following our previous methods, we compare trends for AWs to trends for various non-banned firearms. The AW analyses generally focus on the most common AWs formerly produced in the U.S., including Intratec and SWD-type APs and AR-15type ARs produced by Colt and others. In addition, we selected a small number of domestic pistol and rifle models made by Calico and Feather Industries that fail the features test provision of the AW legislation and that were relatively common among crime guns reported by law enforcement agencies to ATF prior to the ban (see Roth and Koper, 1997, Chapter 5). Together, this group of weapons represented over 80% of AWs used in crime and reported to ATF from 1993 through 1996, and the availability of these guns was not affected by legislation or regulations predating the AW-LCM ban.²³ We also examine substitution of legalized, post-ban versions of these weapons, including the Intratec AB-10 and Sport-22, FMJ's PM models (substitutes for the SWD group), Colt Sporters, Calico Liberty models, and others. We generally did not conduct comparative analyses of named foreign AWs (the Uzi, Galil, and AK weapons) because the 1989 federal import ban had already limited their availability, and their legal status was essentially unchanged by the 1994 ban.

The exact gun models and time periods covered vary across the analyses (based on data availability and the time at which data were collected). The details of each analysis are described in the following sections.

5.1. Price Trends for Assault Weapons and Other Firearms

To approximate trends in the prices at which AWs could be purchased throughout the 1990s, we collected annual price data for several APs, ARs, and non-banned comparison firearms from the *Blue Book of Gun Values* (Fjestad, 1990-1999). The *Blue Book* provides national average prices for an extensive list of new and used firearms based on information collected at gun shows and input provided by networks of dealers

²³ The Intratec group includes weapons made by AA Arms. The SWD group contains related models made by Military Armaments Corporation/Ingram and RPB Industries. The AR-15 group contains models made by Colt and copies made by Bushmaster, Olympic Arms, Eagle Arms, SGW Enterprises, Essential Arms, DPMS, and Sendra.

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and collectors. The *Blue Book* is utilized widely in the gun industry, though prices in any given locality may differ notably from the averages appearing in the *Blue Book*.

To assess time trends in gun prices, we conducted hedonic price analyses (Berndt, 1990) in which the gun prices were regressed upon a series of year and model indicators. The coefficients for the year indicators show annual changes in the prices of the guns relative to 1994 (the year the ban went into effect), controlling for time-stable differences in the prices of various gun models. Since manufacturers' suggested retail prices (MSRP) were not available for banned AWs during post-ban years, we utilized prices for AWs in 100% condition for all years.²⁴ For non-banned firearms, we used MSRP.²⁵ For all models, we divided the gun prices by annual values of the gross domestic product price deflator provided in the December 2001 and 2000 issues of *Economic Indicators* and logged these adjusted prices.

Each model presented below is based on data pooled across a number of firearm models and years, so that observation P_{jt} represents the price of gun model j during year t. We weighted each observation, P_{jt} , based on cumulative estimates of the production of model j from 1985 or 1986 (depending on data availability) through year t using data provided by gun manufacturers to ATF and published by the Violence Policy Center (1999).^{26, 27}

²⁴ Project staff also collected prices of weapons in 80% condition. However, the levels and annual changes of the 80% prices were very highly correlated (0.86 to 0.99) with those of the 100% condition prices. Therefore, we limited the analysis to the 100% prices.

²⁵ We utilized prices for the base model of each AW and comparison firearm (in contrast to model variations with special features or accessories).

²⁶ The regression models are based on equal numbers of observations for each gun model. Hence, unweighted regressions would give equal weight to each gun model. This does not seem appropriate, however, because some guns are produced in much larger numbers than are other guns. Weighting the regression models by production estimates should therefore give us a better sense of what one could "typically" expect to pay for a generic gun in each study category (e.g., a generic assault pistol). Several of the selected weapons began production in 1985 or later. In other cases, available production data extended back to only the mid-1980s. Published production figures for handguns are broken down by type (semiautomatic, revolver) and caliber and thus provide perfect or very good approximations of production for the handgun models examined in this study. Rifle production data, however, are not disaggregated by gun type, caliber, or model. For the ARs under study, the production counts should be reasonable approximations of AR production because most of the rifles made by the companies in question prior to the ban were ARs. The rifles used in the comparison (i.e., non-banned) rifle analysis are made by companies (Sturm Ruger, Remington, and Marlin) that produce numerous semiautomatic and nonsemiautomatic rifle models. However, the overall rifle production counts for these companies should provide some indication of differences in the availability of the comparison rifles relative to one another. Because production data were available through only 1997 at the time this particular analysis was conducted (Violence Policy Center, 1999), we used cumulative production through 1997 to weight the 1998 and 1999 observations for the comparison handgun and comparison rifle models. This was not a consideration for AWs since their production ceased in 1994 (note that the AW production figures for 1994 may include some post-ban legal substitute models manufactured after September 13, 1994). Nonetheless, weighting had very little effect on the inferences from either of the comparison gun models.

5.1.1. Assault Pistol Prices

The analysis of AP prices focuses on the Intratec TEC-9/DC-9, TEC-22, SWD M-11/9, and Calico M950 models. Regression results are shown in Table 5-1, while Figure 5-1 graphically depicts the annual trend in prices for the period 1990 through 1999. None of the yearly coefficients in Table 5-1 is statistically significant, thus indicating that average annual AP prices did not change during the 1990s after adjusting for inflation. Although the model is based on a modest number of observations (n=40) that may limit its statistical power (i.e., its ability to detect real effects), the size of the yearly coefficients confirm that prices changed very little from year to year. The largest yearly coefficient is for 1990, and it indicates that AP prices were only 4% higher in 1990 than in 1994.²⁸

This stands in contrast to our earlier finding (Roth and Koper, 1997, Chapter 4) that prices for SWD APs may have risen by as much as 47% around the time of the ban. However, the earlier analyses were based on semi-annual or quarterly analyses advertised by gun distributors and were intended to capture short-term fluctuations in price that assumed greater importance in the context of the first AW study, which could examine only short-term ban outcomes. *Blue Book* editions released close in time to the ban (e.g., 1995) also cautioned that prices for some AWs were volatile at that time. This study emphasizes longer-term price trends, which appear to have been more stable.²⁹

²⁸ To interpret the coefficient of each indicator variable in terms of a percentage change in the dependent variable, we exponentiate the coefficient, subtract 1 from the exponentiated value, and multiply the difference by 100.

²⁹ Although the earlier analysis of AP prices focused on the greatest variations observed in semi-annual prices, the results also provide indications that longer-term trends were more stable. Prices in 1993, for example, averaged roughly 73% of the peak prices reached at the time the ban was implemented (i.e., late 1994), while prices in early 1994 and late 1995 averaged about 83% and 79% of the peak prices, respectively. Hence, price variation was much more modest after removing the peak periods around the time of the ban's implementation (i.e., late 1994 and early 1995). The wider range of APs used in the current study may also be responsible for some of the differences between the results of this analysis and the prior study.

	Assault Pis	Assault Pistols (n=40)		Comparison Handguns (n=38)	
	Estimate	T Value	Estimate	T Value	
Constant	1.56	26.94***	-0.21	-6.81***	
1990	0.04	1.07	0.12	2.07^{**}	
1991	0.01	0.30	0.09	1.79 [*]	
1992	-0.01	-0.32	0.05	1.30	
1993	-0.03	-1.09	0.02	0.48	
1995	0.01	0.22	-0.02	-0.48	
1996	-0.01	-0.45	-0.09	-2.69***	
1997	-0.03	-1.13	-0.11	-3.26***	
1998	0.00	-0.10	-0.07	-1.99 [*]	
1999	-0.02	-0.58	-0.14	-4.02***	
Tec-9	-0.67	-11.95***			
Tec-22	-0.89	-15.59***			
SWD	-0.64	-11.49***			
Davis P32			0.09	3.63***	
Davis P380			0.20	8.20***	
Lorcin L380			0.29	11.35***	
F value	27.79		16.24		
(p value)	<.01		<.01		
Adj. R-square	0.89		0.83		

Table 5-1. Regression of Assault Pistol and Comparison Handgun Prices on Annual Time Indicators, 1990-1999, Controlling for Gun Model

Time indicators are interpreted relative to 1994. Assault pistol model indicators are interpreted relative to Calico 9mm. Comparison handgun models are interpreted relative to Lorcin .25 caliber.

* Statistically significant at p<=.10.

** Statistically significant at p<=.05.

*** Statistically significant at p<=.01.

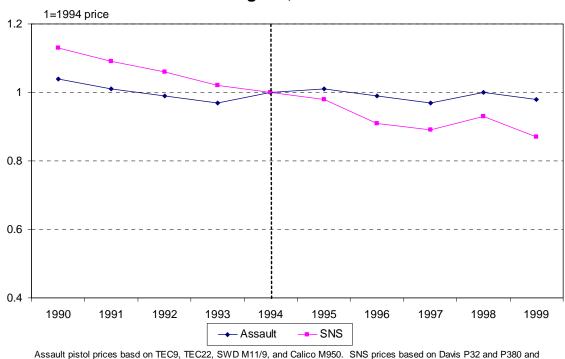


Figure 5-1. Annual Price Trends for Assault Pistols and SNS Handguns, 1990-1999

5.1.2. Comparison Handgun Prices

Lorcin L25 and L380.

For comparison, Table 5-1 and Figure 5-1 illustrate price trends for a number of non-banned, cheaply priced, and readily concealable semiautomatic handgun models: the Davis P32 and P380 and the Lorcin L25 and L380. Such guns are often referred to as Saturday night specials (SNS). By a number of accounts, SNS-type guns, and Davis and Lorcin models in particular, are among the guns most frequently used in crime (ATF, 1995; 1997; Kennedy et al., 1996; Wintemute, 1994). Although the differences between APs and SNS handguns (particularly the fact that most SNS handguns do not have LCMs) suggest they are likely to be used by gun consumers with different levels of firearms experience and sophistication, the SNS guns are arguably a good comparison group for APs because both groups of guns are particularly sensitive to criminal demand. Like AP buyers, SNS buyers are more likely than other gun buyers to have criminal histories and to be charged with new offenses, particularly violent or firearm offenses, subsequent to their purchases (Wintemute et al., 1998b).

Prices of SNS handguns dropped notably throughout the 1990s. Prices for SNS handguns were 13% higher in 1990 than in 1994. Prices then dropped another 13% from 1994 to 1999. This suggests that although AP prices remained generally stable throughout the 1990s, they increased relative to prices of other guns commonly used in crime. We say more about this below.

5.1.3. Assault Rifle Prices

To assess trends in prices of ARs, we examined prices for several Colt and Olympic rifle models in the AR-15 class, as well as Calico models M900 and M951 and Feather models AT9 and AT22.³⁰ Because rifle production data are not disaggregated by weapon type (semiautomatic, bolt action, etc.), caliber, or model, the regressions could only be weighted using overall rifle production counts for each company. For this reason, we calculated the average price of the ARs made by each company for each year and modeled the trends in these average prices over time, weighting by each company's total rifle production.³¹

Results shown in Table 5-2 and Figure 5-2 demonstrate that AR prices rose significantly during 1994 and 1995 before falling back to pre-ban levels in 1996 and remaining there through 1999. Prices rose 16% from 1993 to 1994 and then increased another 13% in 1995 (representing an increase of nearly one third over the 1993 level). Yet by 1996, prices had fallen to levels virtually identical to those before 1994. These patterns are consistent with those we found earlier for the 1992-1996 period (Roth and Koper, 1997, Chapter 4), though the annual price fluctuations shown here were not as dramatic as the quarterly changes shown in the earlier study.

Note, however, that these patterns were not uniform across all of the AR categories. The results of the model were driven largely by the patterns for Colt rifles, which are much more numerous than the other brands. Olympic rifles increased in price throughout the time period, while prices for most Calico and Feather rifles tended to fall throughout the 1990s without necessarily exhibiting spikes around the time of the ban.

³⁰ Specifically, we tracked prices for the Match Target Lightweight (R6530), Target Government Model (R6551), Competition H-Bar (R6700), and Match Target H-Bar (R6601) models by Colt and the Ultramatch, Service Match, Multimatch M1-1, AR15, and CAR15 models by Olympic Arms. Each of these models has a modified, post-ban version. We utilized prices for the pre-ban configurations during post-ban years. ³¹ Prices for the different models made by a given manufacturer tended to follow comparable trends, thus

strengthening the argument for averaging prices.

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	Assault Ri	Assault Rifles (n=36)		Comparison Rifles (n=27)	
	Estimate	T value	Estimate	T value	
Constant	1.31	21.15***	1.40	76.75***	
1991	-0.12	-1.98*	-0.01	-0.21	
1992	-0.13	-2.26**	0.01	0.30	
1993	-0.15	-2.78**	0	-0.13	
1995		2.47**	0.03	1.08	
1996	-0.11	-2.27**			
1997	-0.11	-2.23**	0.03	1.46	
1998	-0.12	-2.47**	0.02	0.91	
1999 Colt (AR-15 type)	-0.14	-2.71**	0.03	1.21	
Colt (AR-15 type)	1.07	19.93***			
Olympic (AR-15 type)	1.14	16.08***			
Calico	0.43	5.53***			
Ruger				20.07***	
Remington			0.29	21.69***	
F statistic	50.52			63.62	
(p value)	<.01			<.01	
Adj. R-square	0.94			0.96	

 Table 5-2. Regression of Assault Rifle and Comparison Semiautomatic Rifle Prices

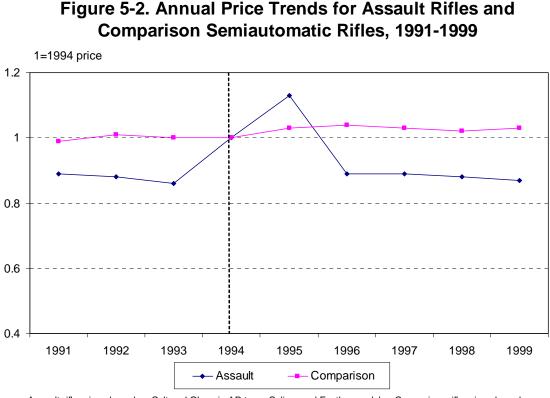
 on Annual Time Indicators, 1991-1999, Controlling for Gun Make

Time indicators interpreted relative to 1994. Assault rifle makes interpreted relative to Feather. Comparison rifle makes interpreted relative to Marlin.

* Statistically significant at p<=.10.

** Statistically significant at p<=.05.

*** Statistically significant at p<=.01.



Assault rifle prices based on Colt and Olympic AR-type, Calico, and Feather models. Comparison rifle prices based on selected Remington, Marlin, and Sturm Ruger models.

5.1.4. Comparison Semiautomatic Rifles.

The analysis of comparison rifle prices includes the Remington 7400, Marlin Model 9, and Sturm Ruger Mini-14 and Mini-30 models (the Ruger model prices were averaged for each year). The AW legislation exempted each of these semiautomatic rifles by name, though the exemption does not apply to Mini-14 models with folding stocks (a feature included in the ban's features test). The Ruger models are of particular interest since they are among only four exempted guns that can accept LCMs made for military rifles (U.S. Department of the Treasury, 1998, p. 23), though Ruger produced LCMs only for the Mini-14 model and substituted a 5-round magazine for this gun in 1989 (Fjestad, 2002, pp. 1361-1362). The Marlin model was also manufactured with an LCM prior to 1990 (Fjestad, 2002, p. 917). The Remington model is manufactured with a detachable 4-round magazine.

Prices for these guns remained steady throughout the decade (see Table 5-2 and Figure 5-2). The largest change was a 4% increase (non-significant) in prices in 1996 relative to prices in 1994. Therefore, the rifle price spikes in 1994 and 1995 were specific to assault rifles. However, the steady annual price trends may mask short-term fluctuations that we found

previously (Roth and Koper, 1997, Chapter 4) for some non-banned semiautomatic rifles (including the Ruger Mini-14) during 1994 and early 1995.³²

5.2. Production Trends for Assault Weapons and Other Firearms

To more fully assess the ban's effects on gun markets, examination of pre and post-ban trends in production of AWs and legal AW substitutes is a useful complement to studying price trends. Our earlier work revealed a spike in AW production during 1994 as the ban was being debated. Post-ban production of legal AW substitutes should reveal additional information about the reaction of gun markets to the ban. If production of these models has fallen off dramatically, it may suggest that the market for AWs has been temporarily saturated and/or that consumers of AWs favor the original AW models that have more military-style features. Stable or rising production levels, on the other hand, may indicate substantial consumer demand for AW substitutes, which would suggest that consumers consider the legal substitute models to be as desirable as the banned models.

5.2.1. Production of Assault Pistols and Other Handguns

Figure 5-3 presents production trends for a number of domestic AP manufacturers from 1985 through 2001 (the most recent year available for data on individual manufacturers).³³ After rising in the early 1990s and surging notably to a peak in 1994, production by these companies dropped off dramatically, falling 80% from 1993-1994 to 1996-1997 and falling another 35% by 1999-2000 (Table 5-3).³⁴ Makers of Intratec and SWD-type APs continued manufacturing modified versions of their APs for at least a few years following the ban, but at much lower volumes than that at which they produced APs just prior to the ban. Companies like AA Arms and Calico produced very few or no AP-type pistols from 1995 onward, and Intratec – producers of the APs most frequently used in crime – went out of business after 1999.

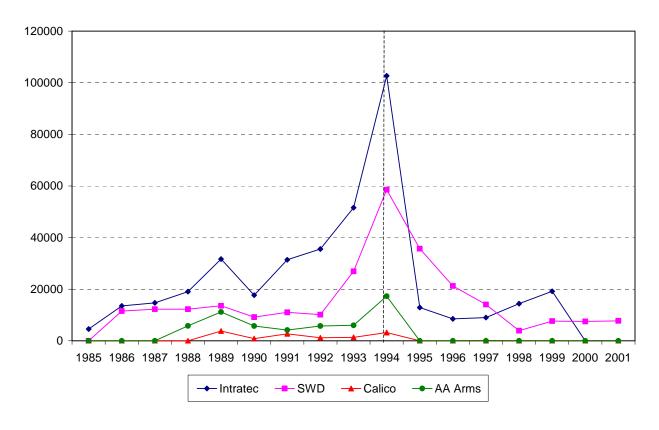
However, the pattern of rising and then falling production was not entirely unique to APs. Table 5-3 shows that production of all handguns and production of SNS-type pistols both declined sharply in the mid to late 1990s following a peak in 1993. Nonetheless, the trends –

³² We attributed those short-term fluctuations to pre-ban uncertainty regarding which semiautomatic rifles would be prohibited by the ban. Also note that the prior findings were based on a different set of comparison semiautomatic rifles that included a number of foreign rifles. We concentrated on domestically produced rifles for this updated analysis in order to make more explicit links between rifle price and production trends (data for the latter are available only for domestic firearms).

³³ Production figures for individual manufacturers through 2000 have been compiled by the Violence Policy Center (2002). Year 2001 data are available from ATF via the Internet (see www.atf.treas.gov). National gun production totals through 1998 are also available from ATF (2000, p. A-3).

³⁴ The assault pistol production figures used here and in the price analysis include 9mm and .22 caliber pistols made by Intratec, 9mm pistols manufactured by AA Arms, all non-.22 caliber pistols manufactured by S.W. Daniels, Wayne Daniels, and Military Armaments Corporation (which together constitute the SWD group), and .22 and 9mm pistols manufactured by Calico. Intratec produces a few non-AW models in .22 and 9mm calibers, so the Intratec figures will overstate production of assault pistols and their legal substitutes to some degree. The comparison, SNS production figures are based on all handguns produced by Lorcin Engineering and Davis Industries.

both peak and decline – were more dramatic for APs than for other handguns. Production of APs rose 69% from 1990-1991 to 1993-1994, while SNS production and overall handgun production each increased 47%. From 1993-1994 to 1996-1997, production of AP-type handguns, SNS models, and all handguns declined 80%, 66%, and 47%, respectively. Further, production of AP-type handguns continued to decline at a faster rate than that of other handguns through the end of the decade.³⁵





³⁵ Lorcin, a prominent SNS brand that we examined for the price and production analyses, went out of business after 1998. Unlike the situation in the AP market (where, to our knowledge, former AP makers have not been replaced on any large scale), the SNS market appears to have compensated somewhat to offset the loss of Lorcin. The SNS change from 1996-1997 to 1999-2000 is based on examination of a larger group of SNS-type makers, including Lorcin, Davis, Bryco, Phoenix Arms, and Hi-Point. Production among this group declined by 22% from 1996-1997 to 1999-2000, a decline greater than that for total handgun production but less than that for AP-type production.

Firearm Category	% Change 1990/91 to 1993/94	% Change 1993/94 to 1996/97	% Change 1996/97 to 1999/2000
Total Handguns	47%	-47%	-10%
Assault Pistols (or Post-Ban Models)	69%	-80%	-35%
SNS Handguns	47%	-66%	-22%
Total Rifles	22%	8%	18%
Assault Rifles (or Post-Ban Models)	81%	-51%	156%
Comparison Rifles	15%	13%	-16%

Table 5-3. Production Trends for Assault Weapons and Other Firearms, 1990-2000*

* Total handgun and rifle figures include all production by U.S. manufacturers. Assault pistols include Intratec group, SWD group, and Calico models. SNS figures are based on Lorcin Engineering and Davis Industries for changes up through 1996-1997. Because Lorcin went out of business after 1998, the SNS change from 1996-1997 to 1999-2000 is based on a larger group of SNS makers including Lorcin, Davis, Bryco, Phoenix Arms, and Hi-Point. Assault rifles include AR-15 type models by Colt and others. Comparison rifles include Sturm Ruger, Remington, and Marlin.

5.2.2. Production of Assault Rifles and Other Rifles

As shown in Figure 5-4, production of AR-15 type rifles surged during the early 1990s, reaching a peak in 1994.³⁶ AR production during the early 1990s rose almost 4 times faster than total rifle production and over 5 times faster than production of the comparison rifles examined in the price analysis (Table 5-3). Yet, by 1996 and 1997, production of legalized AR-type rifles had fallen by 51%, as production of other rifles continued increasing. AR production trends reversed again during the late 1990s, however, rising over 150%.³⁷ Total rifle production increased much more modestly during this time (18%), while production of the comparison rifles declined.

³⁶ Note again that the AR and legalized AR production figures are approximations based on all rifles produced by the companies in question (rifle production data are not available by type, caliber, or model), but it appears that most rifles made by these companies during the study period were AR-type rifles. Also, the figures for the comparison rifle companies (Ruger, Marlin, and Remington) are based on all rifles produced by these companies (the price analysis focused on selected semiautomatic models). ³⁷ There was also a notable shift in market shares among AR makers, as Bushmaster overtook Colt as the

³⁷ There was also a notable shift in market shares among AR makers, as Bushmaster overtook Colt as the leading producer of AR-15 type rifles (Figure 5-4).

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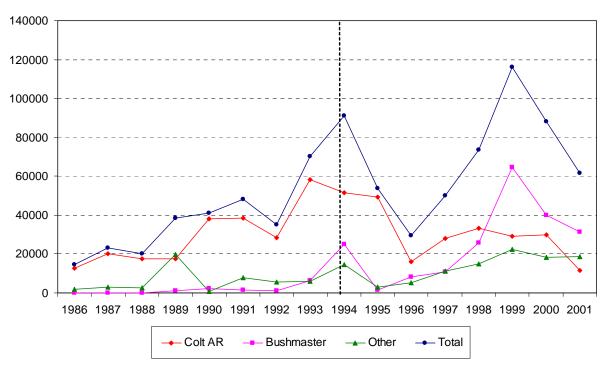


Figure 5-4. Assault Rifle Production, 1986-2001 (AR-15 Type)

5.3. Summary and Interpretations

Below, we offer some interpretations of the patterns found in the price and production analyses, keeping in mind that these analyses were largely descriptive, so causal inferences must be made cautiously. As documented in our earlier study, Congressional debate over the AW-LCM ban triggered speculative price increases for AWs in the months leading up to the ban's enactment. This study's examination of longer-term, annual price trends suggests that this speculative effect was very brief (and perhaps quite variable across jurisdictions) for APs but persisted through 1995 for ARs. This implies that speculators and sophisticated gun collectors (who we suspect played a large role in driving price trends) have more interest in ARs, which tend to be higher in quality and price than APs.

Responding to the speculative price growth, AW manufacturers boosted their production of AWs in 1994. Although total handgun and rifle production were increasing during the early 1990s, the rise in AW production was steeper, and there was a production peak unique to AWs in 1994 (production of other handguns peaked in 1993). It seems that this boost in the supply of grandfathered AWs was sufficient to satisfy speculative demand, thereby restoring national average AP prices to pre-ban levels within a year of the ban and doing the same for AR prices by 1996. AW prices remained stable through the late 1990s, and production of legalized AW-type weapons dropped off

Other: Olympic, Eagle/Armalite, DPMS, Essential Arms, Sendra.

substantially, at least through 1998. This suggests that the supply of grandfathered AWs was sufficient to meet demand through the late 1990s.

However, prices of APs rose relative to other handguns commonly used in crime during the 1990s. Handgun prices and production declined in general during the late 1990s, implying a decrease in demand for APs and other handguns that probably stemmed from the nation's declining crime rates.³⁸ But the AW ban's restriction of the AP supply, combined with the interest of speculators and collectors in these guns, may have prevented AP prices from falling as did prices for other handguns. The market patterns also suggest that consumers of APs are not as easily satisfied by legalized APs with fewer military-style features; despite the increasing value of APs (in relative terms), post-ban production of legalized APs declined faster than did production of other handguns, and some AP makers went out of business.

Prices of ARs, on the other hand, remained steady during the late 1990s (after the speculative price bubble of 1994-1995) both in absolute terms and relative to other rifles. The failure of AR prices to rise in at least relative terms, as occurred for APs, and the temporary drop in production of AR-type rifles after the ban may signify that the AR market was saturated relative to the AP market for a least a number of years following the ban. However, demand for AR-type rifles later rebounded, as evidenced by the resurgence in production of legalized, AR-type rifles in the late 1990s. In fact, more of these guns were produced in 1999 than in 1994. Unlike AP users, therefore, rifle users appear to be readily substituting the legalized AR-type rifles for the banned ARs, which may be another factor that has kept prices of the latter rifles from rising. All of this suggests that rifle owners, who have a lower prevalence of criminal users than do handgun owners, can more easily substitute rifles with fewer or no military features for the hunting and other sporting purposes that predominate among rifle consumers.

Another relevant factor may have been a surge in the supply of foreign semiautomatic rifles that can accept LCMs for military weapons (the LCMM rifles discussed in Chapter 2) during the early 1990s. Examples of LCMM rifles include legalized versions of banned AK-47, FN-FAL, and Uzi rifles. Importation of LCMM rifles rose from 19,147 in 1991 to 191, 341 in 1993, a nine-fold increase (Department of the Treasury, 1998, p. 34). Due to an embargo on the importation of firearms from China (where many legalized AK-type rifles are produced), imports of LCMM rifles dropped

³⁸ It seems likely that the rise and fall of handgun production was linked to the rising crime rates of the late 1980s and early 1990s and the falling crime rates of the mid and late 1990s. Self-defense and fear of crime are important motivations for handgun ownership among the general population (e.g., Cook and Ludwig, 1996; McDowall and Loftin, 1983), and the concealability and price of handguns make them the firearms of choice for criminal offenders. It is likely that the peak in 1993 was also linked to the Congressional debate and passage of the Brady Act, which established a background check system for gun purchases from retail dealers. It is widely recognized in the gun industry that the consideration of new gun control legislation tends to increase gun sales.

The decline in production was more pronounced for SNS handguns, whose sales are likely to be particularly sensitive to crime trends. Criminal offenders make disproportionate use of these guns. We can also speculate that they are prominent among guns purchased by low-income citizens desiring guns for protection. In contrast, the poor quality and reliability of these guns make them less popular among more knowledgeable and affluent gun buyers.

back down to 21,261 in 1994. Importation of all foreign LCMM rifles was ended by federal executive order in 1998.

ATF has reported that criminal use of LCMM rifles increased more quickly during the early 1990s than did that of other military-style rifles (U.S. Department of the Treasury, 1998, p. 33; also see Chapter 6). Accordingly, it is possible that the availability of LCMM rifles also helped to depress the prices of domestic ARs and discourage the production of legalized ARs during the 1990s, particularly if criminal users of rifles place a premium on the ability to accept LCMs. It is noteworthy, moreover, that the rebound in domestic production of legalized ARs came on the heels of the 1998 ban on LCMM rifles, perhaps suggesting the LCMM ban increased demand for domestic rifles accepting LCMs.

In sum, this examination of the AW ban's impact on gun prices and production suggests that there has likely been a sustained reduction in criminal use of APs since the ban but not necessarily ARs. Since most AWs used in crime are APs, this should result in an overall decline in AW use. In the following chapter, we examine the accuracy of this prediction.

6. CRIMINAL USE OF ASSAULT WEAPONS AFTER THE BAN

6.1. Measuring Criminal Use of Assault Weapons: A Methodological Note

In this chapter, we examine trends in the use of AWs using a number of national and local data sources on guns recovered by law enforcement agencies (we focus on the domestic AW models discussed at the beginning of the previous chapter). Such data provide the best available indicator of changes over time in the types (and especially the specific makes and models) of guns used in violent crime and possessed and/or carried by criminal and otherwise deviant or high-risk persons. The majority of firearms recovered by police are tied to weapon possession and carrying offenses, while the remainder are linked primarily to violent crimes and narcotics offenses (e.g., see ATF, 1976; 1977; 1997; Brill, 1977). In general, up to a quarter of guns confiscated by police are associated with violent offenses or shots fired incidents (calculated from ATF, 1977, pp. 96-98; 1997; Brill, 1977, pp. 24,71; Shaw, 1994, pp. 63, 65; also see data presented later in this chapter). Other confiscated guns may be found by officers, turned in voluntarily by citizens, or seized by officers for temporary safekeeping in situations that have the potential for violence (e.g., domestic disputes).

Because not all recovered guns are linked to violent crime investigations, we present analyses based on all gun recoveries and gun recoveries linked to violent crimes where appropriate (some of the data sources are based exclusively, or nearly so, on guns linked to violent crimes). However, the fact that a seized gun is not clearly linked to a violent crime does not rule out the possibility that it had been or would have been used in a violent crime. Many offenders carry firearms on a regular basis for protection and to be prepared for criminal opportunities (Sheley and Wright, 1993a; Wright and Rossi, 1986). In addition, many confiscated guns are taken from persons involved in drugs, a group involved disproportionately in violence and illegal gun trafficking (National Institute of Justice, 1995; Sheley and Wright, 1993a). In some instances, criminal users, including those fleeing crime scenes, may have even possessed discarded guns found by patrol officers. For all these reasons, guns recovered by police should serve as a good approximation of the types of guns used in violent crime, even though many are not clearly linked to such crimes.

Two additional caveats should be noted with respect to tracking the use of AWs. First, we can only identify AWs based on banned makes and models. The databases do not contain information about the specific features of firearms, thus precluding any assessment of non-banned gun models that were altered after purchase in ways making them illegal. In this respect, our numbers may understate the use of AWs, but we know of no data source with which to evaluate the commonality of such alterations. Second, one cannot always distinguish pre-ban versions of AWs from post-ban, legalized versions of the same weapons based on weapon make and model information (this occurs when the post-ban version of an AW has the same name as the pre-ban version), a factor which may have caused us to overstate the use of AWs after the ban. This was more of a problem for our assessment of ARs, as will be discussed below. Finally, we generally emphasize trends in the percentage of crime guns that are AWs in order to control for overall trends in gun violence and gun recoveries. Because gun violence was declining throughout the 1990s, we expected the number of AW recoveries to drop independently of the ban's impact.

6.2. National Analysis of Guns Reported By Police to the Federal Bureau of Alcohol, Tobacco, and Firearms

6.2.1. An Introduction to Gun Tracing Data

In this section, we examine national trends in AW use based on firearm trace requests submitted to ATF by federal, state, and local law enforcement personnel throughout the nation. A gun trace is an investigation that typically tracks a gun from its manufacture to its first point of sale by a licensed dealer. Upon request, ATF traces guns seized by law enforcement as a service to federal, state, and local agencies. In order to initiate a trace on a firearm, the requesting law enforcement agency provides information about the firearm, such as make, model, and serial number.

Although ATF tracing data provide the only available national sample of the types of guns used in crime and otherwise possessed or carried by criminal and high-risk groups, they do have limitations for research purposes. Gun tracing is voluntary, and police in most jurisdictions do not submit trace requests for all, or in some cases any, guns they seize. Crime and tracing data for 1994, for example, suggest that law enforcement agencies requested traces for 27% of gun homicides but only 1% of gun robberies and gun assaults known to police during that year (calculated from ATF, 1995 and Federal Bureau of Investigation, 1995, pp. 13, 18, 26, 29, 31, 32).

The processes by which state and local law enforcement agencies decide to submit guns for tracing are largely unknown, and there are undoubtedly important sources of variation between agencies in different states and localities. For example, agencies may be less likely to submit trace requests in states that maintain their own registers of gun dealers' sales. Knowledge of ATF's tracing capabilities and procedures,³⁹ as well as participation in federal/state/local law enforcement task forces, are some of the other factors that may affect an agency's tracing practices. Further, these factors are likely to vary over time, a point that is reinforced below.

Therefore, firearms submitted to ATF for tracing may not be representative of the

³⁹ To illustrate, ATF cannot (or does not) trace military surplus weapons, imported guns without the importer name (generally, pre-1968 guns), stolen guns, or guns without a legible serial number (Zawitz 1995). Tracing guns manufactured before 1968 is also difficult because licensed dealers were not required to keep records of their transactions prior to that time. Throughout much of the 1990s, ATF did not generally trace guns older than 5-10 years without special investigative reasons (Kennedy et al., 1996, p. 171). Our data are based on trace requests rather than successful traces, but knowledge of the preceding operational guidelines might have influenced which guns law enforcement agencies chose to trace in some instances.

types of firearms typically seized by police. In general, not much is known about the nature of potential bias in tracing data. In prior studies, however, AWs tended to be more common in tracing data than in more representative samples of guns confiscated by police (Kleck, 1997, pp. 112, 141). This suggests that police have been more likely historically to initiate traces for seized AWs than for other seized guns. Although comparisons across studies are complicated by police or used in particular types of crimes generally suggest that AWs accounted for up to 6% of crime guns and about 2% on average prior to the federal AW ban (see Chapter 3 and Kleck, 1997, p. 141), whereas studies of pre-ban tracing data indicated that 8% of traced guns, and sometimes as many as 11%, were AWs (Cox Newspapers, 1989; Lenett, 1995; Zawitz, 1995).

Changes over time in the tracing practices of law enforcement agencies present additional complexities in analyzing tracing data. Due to improvements in the tracing process, ATF promotional efforts, and special initiatives like the Youth Crime Gun Interdiction Initiative (see ATF, 1997; 1999 and more recent reports available via the Internet at www.atf.treas.gov),⁴⁰ the utilization of tracing grew substantially throughout the 1990s in jurisdictions that chose to participate (also see ATF, 2000; Roth and Koper, 1997). To illustrate, trace requests to ATF rose from roughly 42,300 in 1991 to 229,500 in 2002 (see Table 6-1 in the next section), an increase of 443%. This growth reflects changes in tracing practices (i.e., changes in the number of agencies submitting trace requests and/or changes in the percentage of recovered guns for which participating agencies requested traces) rather than changes in gun crime; gun homicides, for example, were falling throughout the 1990s (see Table 6-1 in the next section) and were a third lower in 2002 than in 1991.

Therefore, an increase in trace requests for AWs does not necessarily signal a real increase in the use of AWs. Further, examining trends in the percentage of trace requests associated with AWs is also problematic. Because law enforcement agencies were more likely to request traces for AWs than for other guns in years past, we can expect the growth rate in tracing for non-AWs to exceed the growth rate in traces for AWs as gun tracing becomes more comprehensive. Consequently, AWs are likely to decline over time as a share of trace requests due simply to reporting effects, except perhaps during periods when AWs figure prominently in public discourse on crime.⁴¹

⁴⁰ As part of this initiative, police in a few dozen large cities are submitting trace requests to ATF for all guns that they confiscate. The initiative began with 17 cities in 1996 and has since spread to 55 major urban jurisdictions.

⁴¹ To illustrate, assume that a hypothetical police agency recovers 100 guns a year, 2 of which are AWs, and that the agency has a selective tracing policy that results in the submission of trace requests for 20 of the guns, including 1 of the recovered AWs. Under this scenario, the department would be almost three times as likely to request traces for AWs as for other guns. If the department adopted a policy to request traces on all guns (and again recovered 2 AWs and 98 other guns), AW traces would double and traces of other guns would increase by more than 400%. Moreover, AWs would decline from 5% of traced guns to 2% of traced guns due simply to the change in tracing policy.

6.2.2. Traces of Assault Weapons, 1990-2002

Figure 6-1 illustrates the share of all traces that were for AWs from 1990 through 2002. A more detailed assessment of annual changes in traces for AWs and other guns is presented in Table 6-1. Changes in gun murders are also shown in Table 6-1 to emphasize the differences in trends for tracing and gun crime. Below, we summarize key points from the analysis. Due to the instrumentation problems inherent in tracing data, statistical tests are not presented.⁴²

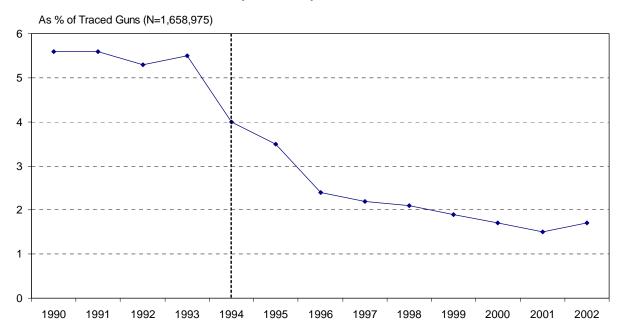


Figure 6-1. Police Recoveries of Assault Weapons Reported to ATF (National), 1990-2002

Includes Intratec group, SWD group, AR-15 group, and selected Calico and Feather models.

⁴² Nearly 30% of the tracing records lack specific gun model designations (the crucial elements for conducting a trace are the gun make and serial number). For the makes and types of guns likely to be AWs, however, the missing model rate was slightly under 10%. Further, we were able to identity some of the latter weapons as AWs with reasonable confidence based on the makes, types, and calibers alone. Nevertheless, we conducted a supplemental analysis using only those records for which the gun model was identified. The results of that analysis were substantively very similar to those presented below.

	Gun	,	AW	AP	AR	AWand	Wielert	AW	LCMM
<u>Year</u>	<u>Gun</u> Murdara	<u>All</u> Tracco				AW and AW	<u>Violent</u> Crime	<u>Aw</u> Violent	<u>LCMM</u> Rifle
	Murders (1)	Traces (2)	$\underline{\text{Traces}^*}$	Traces	Traces				
	(1)	(2)	(3)	(4)	(5)	Substitute	Traces (7)	<u>Crime</u>	Traces**
						<u>Traces</u>	(7)	Traces	(9)
1001	0.04	1.40/	1.404	9 4 9 4	<i>co (</i>	(6)	100/	(8)	
1991	9%	14%	14%	24%	-6%	14%	19%	20%	
		(42281)	(2378)	(1775)	(603)	(2378)	(6394)	(344)	
1992	-1%	6%	1%	4%	-7%	1%	3%	7%	
		(44992)	(2398)	(1838)	(560)	(2398)	(6558)	(367)	
			()	(/		()	()		
1993	5%	20%	25%	20%	42%	25%	26%	41%	252%
		(54189)	(2994)	(2199)	(795)	(2994)	(8248)	(516)	(183)
1994	-4%	53%	11%	23%	-21%	11%	22%	-18%	223%
		(82791)	(3337)	(2706)	(631)	(3337)	(10083)	(424)	(592)
1995	-10%	-6%	-19%	-24%	8%	-18%	23%	-15%	-10%
		(77503)	(2730)	(2051)	(679)	(2747)	(12439)	(362)	(530)
1996	-9%	66%	12%	13%	10%	17%	67%	27%	40%
		(128653)	(3059)	(2309)	(750)	(3214)	(20816)	(459)	(743)
1997	-7%	42%	31%	31%	34%	36%	11%	13%	24%
		(183225)	(4019)	(3017)	(1002)	(4362)	(23147)	(519)	(925)
1998	-11%	5%	0%	-9%	26%	7%	3%	-22%	33%
1770	-11/0	(192115)	(4014)	(2751)	(1263)	(4681)	(23844)	(404)	(1227)
		(192113)	(4014)	(2751)	(1203)	(4001)	(23044)	(404)	(1227)
1999	-8%	-2%	-11%	-12%	-8%	-6%	3%	0%	-18%
1777	070	(188296)	(3581)	(2414)	(1167)	(4406)	(24663)	(404)	(1003)
		(1002)0)	(5501)	(2111)	(1107)	(1100)	(21005)	(101)	(1005)
2000	1%	-3%	-11%	-16%	0%	-6%	-13%	-25%	-14%
		(182961)	(3196)	(2027)	(1169)	(4143)	(21465)	(305)	(859)
		(()	()	()	(,	()	(()
2001	-1%	18%	1%	5%	-6%	3%	20%	6%	-3%
		(215282)	(3238)	(2138)	(1100)	(4273)	(25822)	(322)	(833)
		()	(0-00)	()	(1100)	(-=,5)	()	()	(000)
2002	6%	7%	19%	4%	48%	12%	20%	65%	4%
	270	(229525)	(3839)	(2214)	(1625)	(4765)	(30985)	(531)	(865)
* D	1 7	· /		· · · · · ·		lico and Feat	· · · · · · · · · · · · · · · · · · ·	(001)	(000)

Table 6-1. Annual Percentage Changes in Gun Murders and Police Requests to ATF for Traces of Assault Weapons and Other Firearms, 1991-2002 (Number of Traces in Parentheses)

* Based on Intratec group, SWD group, AR-15 group, and Calico and Feather models.

** Foreign semiautomatic rifles accepting large capacity military magazines (banned by executive order in 1998). (Data are not shown for 1991 and 1992 because very few of these guns were traced in those years.)

6.2.2.1. Assault Weapons as a Percentage of Crime Gun Traces

As shown in Figure 6-1, AWs declined from 5.4% of crime gun traces in 1992-1993 to 1.6% in 2001-2002, a decline of 70%. Although this downward trend could be attributable in large part to changes in tracing practices, it is noteworthy that it did not begin until 1994 (the year of the ban); during the pre-ban years, 1990 to 1993, AWs accounted for a steady share of traces despite a 46% increase in total tracing volume. It is also remarkable that about 3,200 AWs were traced in both 2000 and 2001, which is virtually identical to the average number traced during 1993 and 1994 (3,166) even though total traces increased more than 190% during the same period (Table 6-1, columns 2 and 3).⁴³

6.2.2.2. Annual Changes in Traces for Assault Weapons and Other Guns

Throughout most of the post-ban period (particularly 1995 to 2001), AW traces either increased less or declined more than total traces (Table 6-1, columns 2 and 3), a pattern that is also consistent with a decline in the use of AWs relative to other guns, though it too may be distorted by changes in tracing practices. This pattern was largely consistent whether analyzing all traces or only traces associated with violent crimes (columns 7 and 8).⁴⁴

The years when total traces declined or were relatively flat are arguably the most informative in the series because they appear to have been less affected by changes in tracing practices. For example, there was a 6% decline in total trace requests from 1994 to 1995 (the years featured in our earlier study) that coincided with a 10% drop in gun murders (Table 6-1, column 1). Therefore, it seems tracing practices were relatively stable (or, conversely, reporting effects were relatively small) from 1994 to 1995. The 19% reduction in AW traces during this same period implies that AW use was declining faster than that of other guns. Furthermore, there were fewer AW traces in 1995 than in 1993, the year prior to the ban. The fact that this occurred during a period when the AW issue was very prominent (and hence police might have been expected to trace more of the AWs they recovered) arguably strengthens the causal inference of a ban effect.⁴⁵

Total traces also declined slightly (2%-3%) in 1999 and 2000. In each of those years, the decline was greater for AWs (11%). Thus, in years when tracing declined overall, AW traces fell 3 to 6 times faster than did total traces. Put another way, AWs fell between 9% and 13% as a percentage of all traces in each of these years.

The general pattern of AW traces increasing less or declining more than those of

⁴³ These general findings are consistent with those of other tracing analyses conducted by ATF (2003 Congressional Q&A memo provided to the author) and the Brady Center to Prevent Gun Violence (2004).

⁴⁴ A caveat is that requests without specific crime type information are often grouped with weapons offenses (ATF, 1999). Therefore, traces associated with violent crimes are likely understated to some degree.

⁴⁵ This inference is also supported by our earlier finding that trace requests for AWs declined by only 8% in states that had their own AW bans prior to the federal ban (Roth and Koper, 1997, Chapter 5).

other crime guns was clearly apparent for APs but less consistent for ARs (Table 6-1, columns 4 and 5). For example, AR traces went up 26% in 1998 while total traces went up only 5% and AP traces declined 9%. In 2000, total and AP traces fell 3% and 16%, respectively, but AR traces remained flat. This is consistent with predictions derived from the price and production analyses described above. But note that the post-ban AR counts could be overstated because the data do not distinguish pre-ban from post-ban versions of some popular AR-15 type rifles like the Colt Sporter and Bushmaster XM-15. (Also note that the percentage of traces for ARs did fall from 1.4% in 1992-1993 to 0.6% in 2001-2002.)

More generally, the use of post-ban AW-type weapons (including both legalized APs and ARs) has not been widespread enough to completely offset the apparent decline in the use of banned AWs. Combined traces for banned AWs and AW substitutes (Table 6-1, column 6) also followed the pattern of increasing less or declining more than did total traces throughout most of the period, though the differences were not as pronounced as those between AWs and total traces. In 1999 and 2000, for example, AWs traces dropped 11%, while combined traces for AWs and legal substitutes declined only 6%. Still, the latter figure was greater than the 2%-3% drop for total traces.

Finally, traces of the LCMM rifles banned by executive order in 1998 were generally rising to that point, reaching levels as high as those for AR-15 type rifles (Table 6-1, column 9). Since 1998, however, the number of traces for LCMM rifles has fallen substantially. Despite a 4% increase from 2001 to 2002, the number of LCMM traces in 2002 (865) was 30% lower than the peak number traced in 1998 (1,227). Tentatively, this suggests that the 1998 extension of the ban has been effective in curtailing weapons that offenders may have been substituting for the ARs banned in 1994.

6.2.2.3. Did Use of Assault Weapons Rebound in 2002?

In 2002, tracing volume increased 7%, which closely matched the 6% increase in gun murders for that year. In contrast to the general pattern, AW traces increased by 19%, suggesting a possible rebound in AW use independent of changes in tracing practices, a development that we have predicted elsewhere (Roth and Koper, 1997) based on the boom in AW production leading up to the ban. The disproportionate growth in AW traces was due to ARs, however, so it could partially reflect increasing use of postban AR-type rifles (see the discussion above).

Moreover, this pattern could be illusory. With data from the most recent years, it was possible to run a supplementary analysis screening out traces of older weapons (not shown). Focusing on just those guns recovered and traced in the same year for 2000 through 2002 revealed that recoveries of AWs declined in 2001, more so for ARs (16%) than for APs (9%), while total traces increased 1%.⁴⁶ Traces for APs and ARs then

⁴⁶ The tracing database indicates when guns were recovered and when they were traced. However, the recovery dates were missing for 30% of the records overall and were particularly problematic for years prior to 1998. For this reason, the main analysis is based on request dates. The auxiliary analysis for 2000-

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increased in 2002 (1% and 6%, respectively) but by less than total traces (8%). Therefore, the disproportionate growth in AR traces in 2002 shown in Table 6-1 may have been due to tracing of older AWs by newly participating police agencies.

6.2.2.4. Summary of the ATF Gun Tracing Analysis

Complexities arising from recent changes in the use of gun tracing by law enforcement warrant caution in the interpretation of ATF gun tracing data. Notwithstanding, the data suggest that use of AWs in crime, though relatively rare from the start, has been declining. The percentage of gun traces that were for AWs plummeted 70% between 1992-1993 and 2001-2002 (from 5.4% to 1.6%), and this trend did not begin until the year of the AW ban. On a year-to-year basis, AW traces generally increased less or declined by more than other gun traces. Moreover, in years when tracing volume declined – that is, years when changes in reporting practices were least likely to distort the data – traces of AWs fell 3 to 6 times faster than gun traces in general. The drop in AW use seemed most apparent for APs and LCMM rifles (banned in 1998). Inferences were less clear for domestic ARs, but assessment of those guns is complicated by the possible substitution of post-ban legal variations.

6.3. Local Analyses of Guns Recovered By Police

Due to concerns over the validity of national ATF tracing data for investigating the types of guns used in crime, we sought to confirm the preceding findings using local data on guns recovered by police. To this end, we examined data from half a dozen localities and time periods.

- All guns recovered by the Baltimore Police Department from 1992 to 2000 (N=33,933)
- All guns recovered by the Metro-Dade Police Department (Miami and Dade County, Florida) from 1990 to 2000 (N=39,456)
- All guns recovered by the St. Louis Police Department from 1992 to 2003 (N=34,143)
- All guns recovered by the Boston Police Department (as approximated by trace requests submitted by the Department to ATF) from 1991 to 1993 and 2000 to 2002 (N=4,617)⁴⁷

²⁰⁰² focuses on guns both recovered and traced in the same year because it is likely that some guns recovered in 2002 had not yet been traced by the spring of 2003 when this database was created. Using only guns recovered and traced in the same year should mitigate this bias.

⁴⁷ The Boston Police Department has been tracing guns comprehensively since 1991 (Kennedy et al., 1996). However, we encountered difficulties in identifying Boston Police Department traces for several years in the mid-1990s. For this reason, we chose to contrast the 1991 to 1993 period with the 2000 to 2002 period.

- Guns recovered during murder investigations in Milwaukee County from 1991 to 1998 (N=592)⁴⁸
- Guns linked to serious crimes in Anchorage and other parts of Alaska and submitted to state firearm examiners for evidentiary testing from 1987 to 2000 (N=900)⁴⁹

The selection of these particular locations and samples reflects data availability.⁵⁰ The locations were not selected randomly, and some of the samples are small for conducting trend analysis of relatively rare events (i.e., AW recoveries). Accordingly, we must use caution in generalizing the results to other places. However, the data sources reflect a wide geographic range and cover post-ban periods extending through at least the latter 1990s (and typically through the year 2000 or beyond). To the extent that the results are similar across these jurisdictions, therefore, we can have more confidence that they reflect national patterns.

In each jurisdiction, we examined pre-post changes in recoveries of AWs (focusing on the domestic AW group defined earlier) and substitution of post-ban AW models for the banned models. Where possible, we conducted separate analyses of all AW recoveries and those linked specifically to violent crimes.⁵¹ We also differentiated between AP and AR trends using the larger databases from Baltimore, Miami, and St. Louis. But since most of these databases do not extend more than two years beyond 1998, we do not present analyses specifically for LCMM rifles.

Key summary results are summarized in Table 6-2, while more detailed results from each site appear at the end of the chapter in Tables 6-3 through 6-6 and Figures 6-2 through 6-6.⁵² The number of AW recoveries declined by 28% to 82% across these

⁴⁸ The data are described in reports from the Medical College of Wisconsin (Hargarten et al., 1996; 2000) and include guns used in the murders and other guns recovered at the crime scenes. Guns are recovered in approximately one-third of Milwaukee homicide cases.

⁴⁹ The data include guns submitted by federal, state, and local agencies throughout the state. Roughly half come from the Anchorage area. Guns submitted by police to the state lab are most typically guns that were used in major crimes against persons (e.g. murder, attempted murder, assault, robbery).

⁵⁰ We contacted at least 20 police departments and crime labs in the course of our data search, focusing much of our attention on police departments participating in ATF's Youth Crime Gun Interdiction Initiative (YCGII) (ATF, 1997; 1999). Departments participating in the YCGII submit data to ATF on all guns that they recover. Though the YCGII did not begin until 1996 (well after the implementation of the AW ban), we suspected that these departments would be among those most likely to have electronically-stored gun data potentially extending back in time to before the ban. Unfortunately, most of these departments either did not have their gun data in electronic format or could not provide data for other reasons (e.g., resource constraints). In the course of our first AW study (Roth and Koper, 1997), we contacted many other police departments that also did not have adequate data for the study.

⁵¹ All of the Milwaukee and Anchorage analyses were limited to guns involved in murders or other serious crimes. Despite evidence of a decline, AW recoveries linked to violence were too rare in Boston to conduct valid test statistics.

⁵² We omitted guns recovered in 1994 from both the pre and post-ban counts because the speculative price increases for AWs that occurred in 1994 (see previous section and Roth and Koper, 1997, Chapter 4) raise questions about the precise timing of the ban's impact on AW use during that year, thereby clouding the designation of the intervention point. This is particularly a concern for the Baltimore analysis due to a

locations and time periods, but the discussion below focuses on changes in AWs as a share of crime guns in order to control for general trends in gun crime and gun seizures. Prior to the ban, AWs ranged from about 1% of guns linked to violent crimes in St. Louis to nearly 6% of guns recovered in Milwaukee murder cases.⁵³

AWs dropped as share of crime guns in all jurisdictions after the ban. Reductions ranged from a low of 17% in Milwaukee (based on guns linked to homicides) to a high of 72% in Boston (based on all crime guns) but were generally between 32% and 40%.^{54, 55} A decline in the use of AWs relative to other guns was generally apparent whether examining all AW recoveries or just those linked to violent crimes.⁵⁶ An exception was in St. Louis, where

⁵³ These figures should be treated as approximations of the prevalence of AWs. On the one hand, the numbers may understate the prevalence of AWs to a small degree because they are based on only the domestic AW group defined earlier. Based on analysis of national ATF gun tracing data, we estimated previously that the domestic AW group accounts for 82% of AWs used in crime (Roth and Koper, 1997, Chapter 5). To further test the reliability of this assessment, we investigated the prevalence of all banned AW models among guns recovered in Baltimore using an ATF list of all guns defined as AWs under the 1994 Crime Act criteria (118 model and caliber combinations). We chose the Baltimore database because it provides a complete inventory of guns recovered by police in that city during the study period and, having been maintained by crime lab personnel, is particularly thorough with regard to make and model identifications. Though there was some ambiguity in classifying a small number of AK-type semiautomatic rifles (there are many civilian variations of the AK-47 rifle, some of which were legal under the 1994 legislation), our examination suggested that the domestic AW group accounted for approximately 90% of the AWs recovered in Baltimore. (In addition, including all AWs had virtually no effect on the prepost changes in AW use in Baltimore.) But as discussed previously, the counts could also overstate AW use to some degree because imprecision in the identification of gun models in some data sources may have resulted in some legalized firearms being counted as banned AWs.

⁵⁴ The AW counts for Miami also include Interdynamics KG9 and KG99 models. These models were produced during the early 1980s and were forerunners to the Intratec models (ATF restricted the KG9 during the early 1980s because it could be converted too easily to fully automatic fire). These weapons were very rare or non-existent in most of the local data sources, but they were more common in Miami, where Interdynamics was formerly based. Including these guns increased the AW count in Miami by about 9% but did not affect pre-post changes in AW recoveries.

⁵⁵ State AW legislation passed in Maryland and Massachusetts could have had some impact on AW trends in Baltimore and Boston, respectively. Maryland implemented an AP ban, similar in coverage to the federal AW ban, in June 1994 (Maryland has also required background checks for retail sales of a broader list of state-defined AWs since 1989), and Massachusetts implemented additional legislation on federallydefined AWs in late 1998. The timing and scope of these laws make them largely redundant with the federal ban, so they should not unduly complicate inferences from the analysis. However, Maryland forbids additional transfers of grandfathered APs, and Massachusetts has imposed additional requirements for possession and transfer of LCMs and guns accepting LCMs. Both states also have enhanced penalties for certain crimes involving APs, LCMs, and/or guns accepting LCMs. Hence, the ban on AWs was arguably strengthened in Baltimore and Boston, relative to the other jurisdictions under study. This does not appear to have affected trends in AW use in Baltimore, which were very similar to those found in the other study sites. However, use of AWs and combined use of AWs and post-ban AW substitutes declined more in Boston than in any other study site. Although the trends in Boston could reflect ongoing, post-2000 reductions in use of AWs and similar weapons (Boston was one of the only study sites from which we obtained post-2000 data), it is possible that the Massachusetts legislation was also a contributing factor.

⁵⁶ There may be some inconsistency across jurisdictions in the identification of guns associated with violent crimes. In Miami, for example, 28% of the guns had an offense code equal to "other/not listed," and this percentage was notably higher for the later years of the data series.

state AP ban that took effect a few months prior to the federal AW ban.

Locality and Time Period	AWs	AWs (Linked to Violence)	APs	ARs	AWs and Post-Ban Substitutes
Baltimore (all recoveries) pre=1992-1993, post=1995-2000	-34%*** (425)	-41%** (75)	-35% *** (383)	-24% (42)	-29%*** (444)
Miami-Dade (all recoveries) pre=1990-1993, post=1995-2000	-32%*** (733)	-39%*** (101)	-40%*** (611)	37%* (115)	-30%*** (746)
St. Louis (all recoveries) pre=1992-1993, post=1995-2003	-32%*** (306)	1% (28)	-34%*** (274)	10% (32)	-24%** (328)
Boston (all recoveries) pre=1991-1993, post=2000-2002	-72%*** (71)	N/A	N/A	N/A	-60%*** (76)
Milwaukee (recoveries in murder cases) pre=1991-1993, post=1995-1998	N/A	-17% (28)	N/A	N/A	2% (31)
Anchorage, AK (recoveries in serious crimes) pre=1987-1993, post=1995-2000	N/A	-40% (24)	N/A	N/A	-40% (24)

 Table 6-2.
 Pre-Post Changes in Assault Weapons As a Share of Recovered Crime

 Guns For Selected Localities and Time Periods:
 Summary Results (Total Number

 of Assault Weapons for Pre and Post Periods in Parentheses)
 a

a. Based on Intratec group, SWD group, AR-15 group, and Calico and Feather models. See the text for additional details about each sample and Tables 6-3 through 6-6 for more detailed results from each locality.

* Statistically significant change at chi-square p level < .1

** Statistically significant change at chi-square p level < .05

*** Statistically significant change at chi-square p level < .01

AWs declined as share of all guns but not of guns linked to violent crimes, though the latter test was based on rather small samples.

These reductions were not due to any obvious pre-ban trends (see Figures 6-2 through 6-6 at the end of the chapter). On the contrary, AW recoveries reached a peak in most of these jurisdictions during 1993 or 1994 (Boston, which is not shown in the graphs due to missing years, was an exception). We tested changes in AW prevalence using simple chi-square tests since there were no observable pre-existing time trends in the data. Due to the small number of AWs in some of these samples, these changes were not all statistically significant. Nonetheless, the uniformity of the results is highly suggestive, especially when one considers the consistency of these results with those found in the national ATF tracing analysis.

The changes in Tables 6-2 through 6-6 reflect the average decline in recoveries of AWs during the post-ban period in each locality. However, some of these figures may understate reductions to date. In several of the localities, the prevalence of AWs among crime guns was at, or close to, its lowest mark during the most recent year analyzed (see Figures 6-2 through 6-6 at the end of the chapter), suggesting that AW use continues to decline. In Miami, for example, AWs accounted for 1.7% of crime guns for the whole 1995 to 2000 period but had fallen to 1% by 2000. Further, the largest AW decline was recorded in Boston, one of two cities for which data extended beyond the year 2000 (however, this was not the case in St. Louis, the other locality with post-2000 data).

Breakouts of APs and ARs in Baltimore, Miami, and St. Louis show that the decline in AW recoveries was due largely to APs, which accounted for the majority of AWs in these and almost all of the other localities (the exception was Anchorage, where crimes with rifles were more common, as a share of gun crimes, than in the other sites). Pre-post changes in recoveries of the domestic AR group weapons, which accounted for less than 1% of crime guns in Baltimore, Miami, and St. Louis, were inconsistent. AR recoveries declined after the ban in Baltimore but increased in St. Louis and Miami. As discussed previously, however, the AR figures may partly reflect the substitution of postban, legalized versions of these rifles, thus overstating post-ban use of the banned configurations. Further, trends for these particular rifles may not be indicative of those for the full range of banned rifles, including the various foreign rifles banned by the 1994 law and the import restrictions of 1989 and 1998 (e.g., see the ATF gun tracing analysis of LCMM rifles).⁵⁷

⁵⁷ As discussed in the last chapter, our research design focused on common AWs that were likely to be most affected by the 1994 ban as opposed to earlier regulations (namely, the 1989 import ban) or other events (e.g., company closings or model discontinuations prior to 1994). However, an auxiliary analysis with the Baltimore data revealed a statistically meaningful drop in recoveries of all ARs covered by the 1994 legislation (not including the LCMM rifles) that was larger than that found for just the domestic group ARs discussed in the text. Similarly, an expanded AR analysis in Miami showed that total AR recoveries declined after the ban, in contrast to the increase found for the domestic group ARs. (Even after expanding the analysis, ARs still accounted for no more than 0.64% of crime guns before the ban in both locations. As with the domestic AR group, there are complexities in identifying banned versus non-banned versions of some of the other ARs, so these numbers are approximations.) Consequently, a more nuanced view of AR trends may be that AR use is declining overall, but this decline may be due largely to the 1989 import

Finally, the overall decline in AW use was only partially offset by substitution of the post-ban legalized models. Even if the post-ban models are counted as AWs, the share of crime guns that were AWs still fell 24% to 60% across most jurisdictions. The exception was Milwaukee where recoveries of a few post-ban models negated the drop in banned models in a small sample of guns recovered during murder investigations.⁵⁸

6.4. Summary

Consistent with predictions derived from the analysis of market indicators in Chapter 5, analyses of national ATF gun tracing data and local databases on guns recovered by police in several localities have been largely consistent in showing that criminal use of AWs, while accounting for no more than 6% of gun crimes even before the ban, declined after 1994, independently of trends in gun crime. In various places and times from the late 1990s through 2003, AWs typically fell by one-third or more as a share of guns used in crime.^{59, 60} Some of the most recent, post-2000 data suggest

⁶⁰ National surveys of state prisoners conducted by the federal Bureau of Justice Statistics show an increase from 1991 to 1997 in the percentage of prisoners who reported having used an AW (Beck et al., 1993; Harlow, 2001). The 1991 survey (discussed in Chapter 3) found that 2% of violent gun offenders had carried or used an AW in the offense for which they were sentenced (calculated from Beck et al. 1993, pp. 18,33). The comparable figure from the 1997 survey was nearly 7% (Harlow, 2001, pp.3, 7).

Although these figures appear contrary to the patterns shown by gun recovery data, there are ambiguities in the survey findings that warrant caution in such an interpretation. First, the definition of an AW (and most likely the respondents' interpretation of this term) was broader in the 1997 survey. For the 1991 survey, respondents were asked about prior ownership and use of a "…military-type weapon, such as an Uzi, AK-47, AR-15, or M-16" (Beck et al., 1993, p. 18), all of which are ARs or have AR variations. The 1997 survey project defined AWs to "…include the Uzi, TEC-9, and the MAC-10 for handguns, the AR-15 and AK-47 for rifles, and the 'Street Sweeper' for shotguns" (Harlow, 2001, p. 2). (Survey codebooks available from the Inter-University Consortium for Political and Social Research also show that the 1997 survey provided more detail and elaboration about AWs and their features than did the 1991 survey, including separate definitions of APs, ARs, and assault shotguns.)

A second consideration is that many of the respondents in the 1997 survey were probably reporting criminal activity prior to or just around the time of the ban. Violent offenders participating in the survey, for example, had been incarcerated nearly six years on average at the time they were interviewed (Bureau of Justice Statistics, 2000, p. 55). Consequently, the increase in reported AW use may reflect an upward trend in the use of AWs from the 1980s through the early to mid 1990s, as well as a growing recognition of these weapons (and a greater tendency to report owning or using them) stemming from publicity about the AW issue during the early 1990s.

Finally, we might view the 1997 estimate skeptically because it is somewhat higher than that from most other sources. Nevertheless, it is within the range of estimates discussed earlier and could reflect a

restrictions that predated the AW ban. It is not yet clear that there has been a decline in the most common ARs prohibited exclusively by the 1994 ban.

⁵⁸ This was not true when focusing on just those guns that were used in the incident as opposed to all guns recovered during the investigations. However, the samples of AWs identified as murder weapons were too small for valid statistical tests of pre-post changes.

⁵⁹ These findings are also supported by prior research in which we found that reported thefts of AWs declined 7% in absolute terms and 14% as a fraction of stolen guns in the early period following the ban (i.e., late 1994 through early 1996) (Koper and Roth, 2002a, p. 21). We conducted that analysis to account for the possibility that an increase in thefts of AWs might have offset the effect of rising AW prices on the availability of AWs to criminals. Because crimes with AWs appear to have declined after the ban, the theft analysis is not as central to the arguments in this paper. ⁶⁰ National surveys of state prisoners conducted by the federal Bureau of Justice Statistics show an

reductions as high as 70%.⁶¹ This trend has been driven primarily by a decline in the use of APs, which account for a majority of AWs used in crime. AR trends have been more varied and complicated by the substitution of post-ban guns that are very similar to some banned ARs. More generally, however, the substitution of post-ban AW-type models with fewer military features has only partially offset the decline in banned AWs.

These findings raise questions as to the whereabouts of surplus AWs, particularly APs, produced just prior to the ban. Presumably, many are in the hands of collectors and speculators holding them for their novelty and value.⁶² Even criminal possessors may be more sensitive to the value of their AWs and less likely to use them for risk of losing them to police.

Finally, it is worth noting the ban has not completely eliminated the use of AWs, and, despite large relative reductions, the share of gun crimes involving AWs is similar to that before the ban. Based on year 2000 or more recent data, the most common AWs continue to be used in up to 1.7% of gun crimes.

somewhat higher use of AWs among the subset of offenders who are most active and/or dangerous; recall that the highest estimate of AW use among the sources examined in this chapter came from a sample of guns recovered during murder investigations in Milwaukee (also see the discussion of offender surveys and AWs in Chapter 3).

⁶¹ Developing a national estimate of the number of AW crimes prevented by the ban is complicated by the range of estimates of AW use and changes therein derived from different data sources. Tentatively, nonetheless, it appears the ban prevents a few thousand crimes with AWs annually. For example, using 2% as the best estimate of the share of gun crimes involving AWs prior to the ban (see Chapter 3) and 40% as a reasonable estimate of the post-ban drop in this figure implies that almost 2,900 murders, robberies, and assaults with AWs were prevented in 2002 (this assumes that 1.2% of the roughly 358,000 gun murders, gun robberies, and gun assaults reported to police in 2002 [see the *Uniform Crime Reports*] involved AWs but that 2% would have involved AWs had the ban not been in effect). Even if this estimate is accurate, however, it does not mean the ban prevented 2,900 gun crimes in 2002; indeed, the preceding calculation assumes that offenders prevented from using AWs committed their crimes using other guns. Whether forcing such weapon substitution can reduce the number of persons wounded or killed in gun crimes is considered in more detail in Chapter 9.

⁶² The 1997 national survey of state prisoners discussed in footnote 60 found that nearly 49% of AW offenders obtained their gun from a "street" or illegal source, in contrast to 36% to 42% for other gun users (Harlow, 2001, p. 9). This could be another sign that AWs have become harder to acquire since the ban, but the data cannot be used to make an assessment over time.

	Pre-Ban Period	Post-Ban Period	Change
A. All Recoveries	Jan. 1992-Dec. 1993	Jan. 1995-Dec. 2000	
Total AWs	135	290	
Annual Mean	67.5	48.33	-28%
AW's as % of Guns	1.88%	1.25%	-34%**
APs	123	260	
Annual Mean	61.5	43.33	-30%
APs as % of Guns	1.71%	1.12%	-35%**
ARs	12	30	
Annual Mean	6	5	-17%
ARs as % of Guns	0.17%	0.13%	-24%
Total AWs and			
Substitutes	135	309	
Annual Mean	67.5	51.5	-24%
AWs/Subs as % of Guns	1.88%	1.33%	-29%**
<u>B. Recoveries Linked</u> <u>to Violent Crimes</u> ^b			
Total AWs	28	47	
Annual Mean	14	7.83	-44%
AWs as % of Violent Crime Guns	2.1%	1.24%	-41%*

Table 6-3. Trends in Police Recoveries of Domestic Assault Weapons in Baltimore, 1992-2000 ^a

a. Domestic assault weapons include Intratec group, SWD group, AR-15 group, and Calico and Feather models.

b. Murders, assaults, and robberies

* Chi-square p level < .05 (changes in percentages of guns that were AWs/APs/ARs/AW-subs were tested for statistical significance).

** Chi-square p level < .01 (changes in percentages of guns that were AWs/APs/ARs/AW-subs were tested for statistical significance).

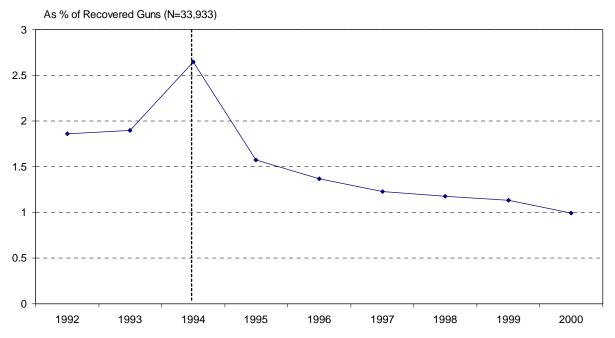


Figure 6-2. Police Recoveries of Assault Weapons in Baltimore, 1992-2000

Includes Intratec group, SWD group, AR-15 group, and selected Calico and Feather models.

Metro-Dade), 1990-2000			
	Pre-Ban Period	Post-Ban Period	Change
A. All Recoveries	Jan. 1990-Dec. 1993	Jan. 1995-Dec. 2000	
Total AWs	403	330	
Annual Mean	100.75	55	-45%
AW's as % of Guns	2.53%	1.71%	-32%***
APs	355	256	
Annual Mean	88.75	42.67	-52%
APs as % of Guns	2.23%	1.33%	-40%***
ARs	43	72	
Annual Mean	10.75	12	12%
ARs as % of Guns	0.27%	0.37%	37%*
Total AWs and			
Substitutes	403	343	
Annual Mean	100.75	57.17	-43%
AWs/Subs as % of Guns	2.53%	1.78%	-30%***
<u>B. Recoveries Linked</u> <u>to Violent Crimes</u> ^b			
Total AWs	69	32	
Annual Mean	17.25	5.33	-69%
AWs as % of Violent Crime Guns	2.28%	1.39%	-39%**

Table 6-4. Trends in Police Recoveries of Domestic Assault Weapons in Miami (Metro-Dade), 1990-2000 ^a

a. Domestic assault weapons include Intratec group, SWD group, AR-15 group, and Calico and Feather models.

b. Murders, assaults, and robberies

* Chi-square p level < .1 (changes in percentages of guns that were AWs/APs/ARs/AW-subs were tested for statistical significance)

** Chi-square p level < .05 (changes in percentages of guns that were AWs/APs/ARs/AW-subs were tested for statistical significance)

*** Chi-square p level <.01 (changes in percentages of guns that were AWs/APs/ARs/AW-subs were tested for statistical significance)

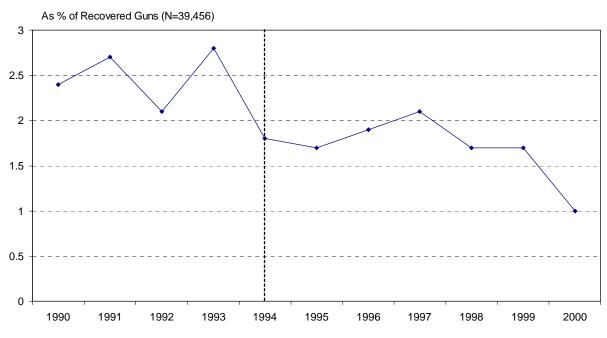


Figure 6-3. Police Recoveries of Assault Weapons in Miami (Metro-Dade), 1990-2000

Includes Intratec group, SWD group, AR-15 group, and selected Calico and Feather models.

94	Post-Ban Period Jan. 1995-Dec. 2003	<u>Change</u>
94		
47	212	
47	23.56	-50%
1.33%	0.91%	-32%**
87	187	
43.5	20.78	-52%
1.23%	0.81%	-34%**
7	25	
3.5	2.78	-21%
0.1%	0.11%	10%
94	234	
47	26	-45%
1.33%	1.01%	-24%*
8	20	
4	22	-45%
	<i>L</i> . <i>L</i>	
	0.1% 94 47 1.33%	0.1% 0.11% 94 234 47 26 1.33% 1.01% 8 20

Table 6-5. Trends in Police Recoveries of Domestic Assault Weapons in St. Louis, 1992-2003 ^a

a. Domestic assault weapons include Intratec group, SWD group, AR-15 group, and Calico and Feather models.

b. Murders, assaults, and robberies

* Chi-square p level < .05 (changes in percentages of guns that were AWs/APs/ARs/AW-subs were tested for statistical significance)

** Chi-square p level <.01 (changes in percentages of guns that were AWs/APs/ARs/AW-subs were tested for statistical significance)

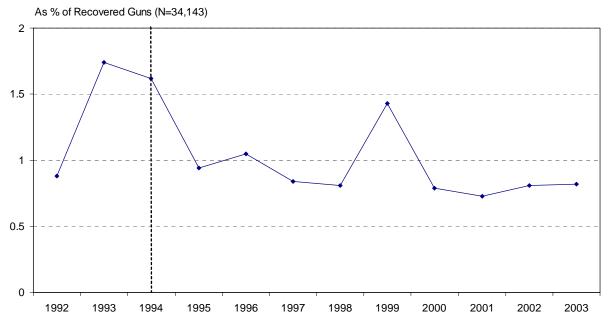


Figure 6-4. Police Recoveries of Assault Weapons in St. Louis, 1992-2003

Includes Intratec group, SWD group, AR-15 group, and selected Calico and Feather models.

	Pre-Ban Period	Post-Ban Period	<u>Change</u>
Boston	Jan. 1991-Dec. 1993	Jan. 2000-Dec. 2002	
(All Gun Traces)			
AWs	60	11	
Annual Mean	20	3.7	-82%
AWs as % of Guns	2.16%	0.6%	-72%*
AWs and Substitutes	60	16	
Annual Mean	20	5.3	-74%
AWs/Subs as % of Guns	2.16%	0.87%	-60%*
<u>Milwaukee</u>	Jan. 1991-Dec. 1993	Jan. 1995-Dec. 1998	
(Guns Recovered in Murder Cases)			
AWs	15	13	
Annual Mean	5	3.25	-35%
AWs as % of Guns	5.91%	4.91%	-17%
AWs and Substitutes	15	16	
Annual Mean	5	4	-20%
AWs/Subs as % of Guns	5.91%	6.04%	2%
<u>Anchorage</u>	Jan. 1987-Dec. 1993	Jan. 1995-Dec. 2000	
(Guns Tested for Evidence)			
AWs	16	8	
Annual Mean	2.29	1.33	-42%
AW's as % of Guns	3.57%	2.13%	-40%
AWs and Substitutes	N/A	N/A	

Table 6-6. Trends in Police Recoveries of Domestic Assault Weapons in Boston, Milwaukee, and Anchorage (Alaska)^a

a. Domestic assault weapons include Intratec group, SWD group, AR-15 group, and Calico and Feather models.

* Chi-square p level < .01 (changes in percentages of guns that were AWs/AW-subs were tested for statistical significance)

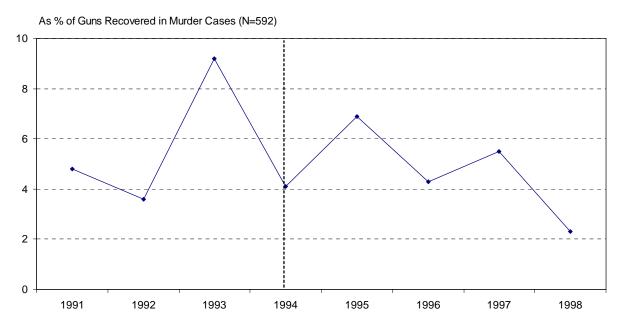
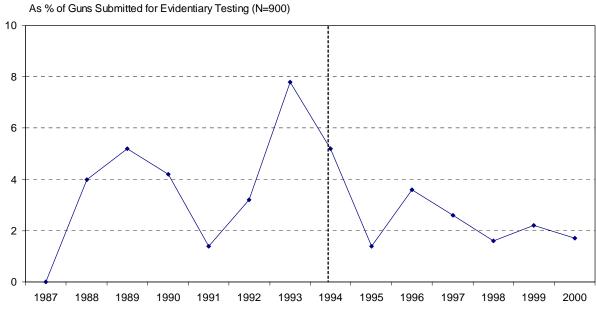


Figure 6-5. Assault Weapons Recovered in Milwaukee County Murder Cases, 1991-1998

Includes Intratec group, SWD group, AR-15 group, and selected Calico and Feather models.

Figure 6-6. Police Recoveries of Assault Weapons in Anchorage (Alaska), 1987-2000



Includes Intratec group, SWD group, AR-15 group, and selected Calico and Feather models.

7. MARKET INDICATORS FOR LARGE CAPACITY MAGAZINES: PRICES AND IMPORTATION

The previous chapters examined the AW-LCM ban's impact on the availability and criminal use of AWs. In this chapter and the next, we consider the impact of the ban's much broader prohibition on LCMs made for numerous banned and non-banned firearms. We begin by studying market indicators. Our earlier study of LCM prices for a few gun models revealed that prices rose substantially during 1994 and into 1995 (Roth and Koper, 1997, Chapter 4). Prices of some LCMs remained high into 1996, while others returned to pre-ban levels or oscillated more unpredictably. The price increases may have reduced LCM use at least temporarily in the short-term aftermath of the ban, but we could not confirm this in our prior investigation.

7.1. Price Trends for Large Capacity Magazines

For this study, we sought to approximate longer term trends in the prices at which users could purchase banned LCMs throughout the country. To that end, we analyzed quarterly data on the prices of LCMs advertised by eleven gun and magazine distributors in Shotgun News, a national gun industry publication, from April 1992 to December 1998.⁶³ Those prices are available to any gun dealer, and primary market retailers generally re-sell within 15% of the distributors' prices.⁶⁴ The distributors were chosen during the course of the first AW study (Roth and Koper, 1997) based on the frequency with which they advertised during the April 1992 to June 1996 period. For each quarterly period, project staff coded prices for one issue from a randomly selected month. We generally used the first issue of each selected month based on a preliminary, informal assessment suggesting that the selected distributors advertised more frequently in those issues. In a few instances, first-of-month issues were unavailable to us or provided too few observations, so we substituted other issues.⁶⁵ Also, we were unable to obtain Shotgun News issues for the last two quarters of 1996. However, we aggregated the data annually to study price trends, and the omission of those quarters did not appear to affect the results (this is explained further below).

We ascertained trends in LCM prices by conducting hedonic price analyses,

⁶³ The *Blue Book of Gun Values*, which served as the data source for the AW price analysis, does not contain ammunition magazine prices.

⁶⁴ According to gun market experts, retail prices track wholesale prices quite closely (Cook et al., 1995, p. 71). Retail prices to eligible purchasers generally exceed wholesale (or original-purchase) prices by 3% to 5% in the large chain stores, by about 15% in independent dealerships, and by about 10% at gun shows (where overhead costs are lower).

⁶⁵ The decision to focus on first-of-month issues was made prior to data collection for price analysis update. For the earlier study (Roth and Koper, 1997), project staff coded data for one or more randomly selected issues of every month of the April 1992 to June 1996 period. For this analysis, we utilized data from only the first-of-month issues selected at random during the prior study. If multiple first-of-month issues were available for a given quarter, we selected one at random or based on the number of recorded advertisements. If no first-of-month issue was available for a given quarter, we selected another issue at random from among those coded during the first study.

similar to those described in the AW price analysis (Chapter 5), in which we regressed inflation-adjusted LCM prices (logged) on several predictors: magazine capacity (logged), gun make (for which the LCM was made), year of the advertisement, and distributor. We cannot account fully for the meaning of significant distributor effects. They may represent unmeasured quality differentials in the merchandise of different distributors, or they may represent other differences in stock volume or selling or service practices between the distributors.⁶⁶ We included the distributor indicators when they proved to be significant predictors of advertised price. In addition, we focused on LCMs made for several of the most common LCM-compatible handguns and rifles, rather than try to model the differences in LCM prices between the several hundred miscellaneous makes and models of firearms that were captured in the data. Finally, for both the handgun and rifle models, we created and tested seasonal indicator variables to determine if their incorporation would affect the coefficient for 1996 (the year with winter/spring data only), but they proved to be statistically insignificant and are not shown in the results below.⁶⁷

7.1.1. Large Capacity Magazines for Handguns

The handgun LCM analysis tracks the prices of LCMs made for Intratec and Cobray (i.e., SWD) APs and non-banned semiautomatic pistols made by Smith and Wesson, Glock, Sturm Ruger, Sig-Sauer, Taurus, and Beretta (each of the manufacturers in the former group produces numerous models capable of accepting LCMs). In general, LCMs with greater magazine capacities commanded higher prices, and there were significant price differentials between LCMs made for different guns and sold by different distributors (see Table 7-1). Not surprisingly, LCMs made for Glock handguns were most expensive, followed by those made for Beretta and Sig-Sauer firearms.

Turning to the time trend indicators (see Table 7-1 and Figure 7-1), prices for these magazines increased nearly 50% from 1993 to 1994, and they rose another 56% in 1995. Prices declined somewhat, though not steadily, from 1996 to 1998. Nevertheless, prices in 1998 remained 22% higher than prices in 1994 and nearly 80% higher than those in 1993.

⁶⁶ For example, one possible difference between the distributors may have been the extent to which they sold magazines made of different materials (e.g., steel, aluminum, etc.) or generic magazines manufactured by companies other than the companies manufacturing the firearms for which the magazines were made. For example, there were indications in the data that 3% of the handgun LCMs and 10% of the AR-15 and Mini-14 rifle LCMs used in the analyses (described below) were generic magazines. We did not control for these characteristic, however, because such information was often unclear from the advertisements and was not recorded consistently by coders.

⁶⁷ Project staff coded all LCM advertisements by the selected distributors. Therefore, the data are inherently weighted. However, the weights are based on the frequency with which the different LCMs were advertised (i.e., the LCMs that were advertised most frequently have the greatest weight in the models) rather than by production volume.

		n LCMs .,277)	Rifle LCN	/Is (n=674)
	Estimate	T value	Estimate	T value
Constant	-1.79	-12.74***	-4.10	-19.12***
1992	0.10	-2.11**	-0.48	-4.20***
1993	-0.38	-6.00***	-0.55	-6.14***
1995	0.44	6.88***	-0.55 -0.25	-2.64***
1996	0.29	4 05***	-0.12	-0.93
1997	0.36	6.33***	-0.31	-3.68***
1997 1998 Rounds (logged)	0.20	3.51***	-0.44	-5.19***
Rounds (logged)	0.26	5.73***	0.84	15.08***
Cobray	-0.36	-4.15***		
Glock	0.41	8.15***		
Intratec	-0.40	-4.18***		
Ruger	-0.42 -0.08	-7.79***		
Smith&Wesson	-0.08	-1.71*		
Sig-Sauer	0	-0.09		
Taurus	-0.31	-6.10***		
AK-type			-0.25	-3.15***
Colt AR-15			0.14	1.68*
Ruger Mini-14 Distributor 1			-0.08	-0.92
	0.72	10.50	-0.35	-5.15***
Distributor 2	-0.15	-0.97	-0.83	-5.24***
Distributor 2 Distributor 3 Distributor 4	-0.16	-3.93***	0.19	2.69***
Distributor 4	-0.55	-5.72***	0.16	0.80
	-0.07	-1.79*	-0.18	-2.65***
Distributor 6	-0.53	-1.23	-0.12	-0.32
Distributor 7	-1.59			-0.91
Distributor 8			0.14	0.70
Distributor 9	-0.91	-12.52***	-0.48	-4.00***
F statistic	58.76		21.22	
(p value)	<.0001		<.0001	
Adj. R-square	0.51		0.38	

 Table 7-1. Regression of Handgun and Rifle Large Capacity Magazine Prices on Annual Time Indicators, 1992-1998, Controlling for Gun Makes/Models and Distributors

Year indicators are interpreted relative to 1994, and distributors are interpreted relative to distributor 10. Handgun makes are relative to Beretta and rifle models are relative to SKS.

* Statistically significant at p<=.10.

** Statistically significant at p<=.05.

*** Statistically significant at p<=.01.

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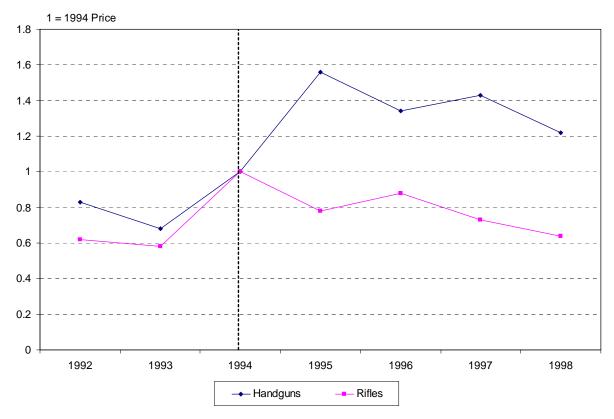


Figure 7-1. Annual Price Trends for Large Capacity Magazines, 1992-1998

Based on 1,277 sampled ads for LCMs fitting models of 8 handgun makers and 674 sampled ads for LCMs fitting 4 rifle model groups.

7.1.2. Large Capacity Magazines for Rifles

We approximated trends in the prices of LCMs for rifles by modeling the prices of LCMs manufactured for AR-15, Mini-14, SKS,⁶⁸ and AK-type rifle models (including various non-banned AK-type models). As in the handgun LCM model, larger LCMs drew higher prices, and there were several significant model and distributor effects. AR-15 magazines tended to have the highest prices, and magazines for AK-type models had the lowest prices (Table 7-1).

Like their handgun counterparts, prices for rifle LCMs increased over 40% from 1993 to 1994, as the ban was debated and implemented (see Table 7-1 and Figure 7-1). However, prices declined over 20% in 1995. Following a rebound in 1996, prices moved downward again during 1997 and 1998. Prices in 1998 were over one third lower than the peak prices of 1994 and were comparable to pre-ban prices in 1992 and 1993.

⁶⁸ The SKS is a very popular imported rifle (there are Russian and Chinese versions) that was not covered by either the 1989 AR import ban or the 1994 AW ban. However, importation of SKS rifles from China was discontinued in 1994 due to trade restrictions.

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7.2. Post-Ban Importation of Large Capacity Magazines

ATF does not collect (or at least does not publicize) statistics on production of LCMs. Therefore, we cannot clearly document pre-ban production trends. Nevertheless, it seems likely that gun and magazine manufacturers boosted their production of LCMs during the debate over the ban, just as AW makers increased production of AWs. Regardless, gun industry sources estimated that there were 25 million LCMs available as of 1995 (including aftermarket items for repairing magazines or converting them to LCMs) (Gun Tests, 1995, p. 30).

Moreover, the supply of LCMs continued to grow even after the ban due to importation of foreign LCMs that were manufactured prior to the ban (and thus grandfathered by the LCM legislation), according to ATF importation data.⁶⁹ As shown in Table 7-2, nearly 4.8 million LCMs were imported for commercial sale (as opposed to law enforcement uses) from 1994 through 2000, with the largest number (nearly 3.7 million) arriving in 1999.⁷⁰ During this period, furthermore, importers received permission to import a total of 47.2 million LCMs; consequently, an additional 42 million LCMs may have arrived after 2000 or still be on the way, based on just those approved through 2000.^{71, 72}

To put this in perspective, gun owners in the U.S. possessed 25 million firearms that were equipped with magazines holding 10 or more rounds as of 1994 (Cook and Ludwig, 1996, p. 17). Therefore, the 4.7 million LCMs imported in the U.S. from 1994 through 2000 could conceivably replenish 19% of the LCMs that were owned at the time of the ban. The 47.2 million approved during this period could supply nearly 2 additional LCMs for all guns that were so equipped as of 1994.

7.3. Summary and Interpretations

Prices of LCMs for handguns rose significantly around the time of the ban and, despite some decline from their peak levels in 1995, remained significantly higher than pre-ban prices through at least 1998. The increase in LCM prices for rifles proved to be more temporary, with prices returning to roughly pre-ban levels by 1998.⁷³

 $^{^{69}}$ To import LCMs into the country, importers must certify that the magazines were made prior to the ban. (The law requires companies to mark post-ban LCMs with serial numbers.) As a practical matter, however, it is hard for U.S. authorities to know for certain whether imported LCMs were produced prior to the ban.

⁷⁰ The data do not distinguish between handgun and rifle magazines or the specific models for which the LCMs were made. But note that roughly two-thirds of the LCMs imported from 1994 through 2000 had capacities between 11 and 19 rounds, a range that covers almost all handgun LCMs as well as many rifle LCMs. It seems most likely that the remaining LCMs (those with capacities of 20 or more rounds) were primarily for rifles.

⁷¹ The statistics in Table 7-2 do not include belt devices used for machine guns.

⁷² A caveat to the number of approved LCMs is that importers may overstate the number of LCMs they have available to give themselves leeway to import additional LCMs, should they become available.

⁷³ A caveat is that we did not examine prices of smaller magazines, so the price trends described here may not have been entirely unique to LCMs. Yet it seems likely that these trends reflect the unique impact of the ban on the market for LCMs.

Year	Imported	Approved
1994	67,063	77,666
1995	3,776	2,066,228
1996	280,425	2,795,173
1997	99,972	1,889,773
1998	337,172	20,814,574
1999	3,663,619	13,291,593
2000	346,416	6,272,876
Total	4,798,443	47,207,883

 Table 7-2. Large Capacity Magazines Imported into the United States or Approved

 For Importation for Commercial Sale, 1994-2000

Source: Firearms and Explosives Imports Branch, Bureau of Alcohol, Tobacco, Firearms, and Explosives. Counts do not include "links" (belt devices) or imports for law enforcement purposes.

The drop in rifle LCM prices between 1994 and 1998 may have due to the simultaneous importation of approximately 788,400 grandfathered LCMs, most of which appear to have been rifle magazines (based on the fact that nearly two-thirds had capacities over 19 rounds), as well as the availability of U.S. military surplus LCMs that fit rifles like the AR-15 and Mini-14. We can also speculate that demand for LCMs is not as great among rifle consumers, who are less likely to acquire their guns for defensive or criminal purposes.

The pre-ban supply of handgun LCMs may have been more constricted than the supply of rifle LCMs for at least a few years following the ban, based on prices from 1994 to 1998. Although there were an estimated 25 million LCMs available in the U.S. as of 1995, some major handgun manufacturers (including Ruger, Sig Sauer, and Glock) had or were close to running out of new LCMs by that time (Gun Tests, 1995, p. 30). Yet the frequency of advertisements for handgun LCMs during 1997 and 1998, as well as the drop in prices from their 1995 peak, suggests that the supply had not become particularly low. In 1998, for example, the selected distributors posted a combined total of 92 LCM ads per issue (some of which may have been for the same make, model, and capacity combinations) for just the handguns that we incorporated into our model.⁷⁴ Perhaps the

⁷⁴ Project staff found substantially more advertisements per issue for 1997 and 1998 than for earlier years. For the LCMs studied in the handgun analysis, staff recorded an average of 412 LCM advertisements per year (103 per issue) during 1997 and 1998. For 1992-1996, staff recorded an average of about 100 ads per year (25 per issue) for the same LCMs. A similar but smaller differential existed in the volume of ads for the LCMs used in the rifle analysis. The increase in LCM ads over time may reflect changes in supply and

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demand for enhanced firepower among handgun consumers, who are more likely to acquire guns for crime or defense against crime, was also a factor (and perhaps a large one) putting a premium on handgun LCMs.

Although we might hypothesize that high prices depressed use of handguns with LCMs for at least a few years after the ban, a qualification to this prediction is that LCM use may be less sensitive to prices than is use of AWs because LCMs are much less expensive than the firearms they complement and therefore account for a smaller fraction of users' income (e.g., see Friedman, 1962). To illustrate, TEC-9 APs typically cost \$260 at retail during 1992 and 1993, while LCMs for the TEC-9, ranging in capacity from 30 to 36 rounds, averaged \$16.50 in *Shotgun News* advertisements (and probably \$19 or less at retail) during the same period. So, for example, a doubling of both gun and LCM prices would likely have a much greater impact on purchases of TEC-9 pistols than purchases of LCMs for the TEC-9. Users willing and able to pay for a gun that accepts an LCM are most likely willing and able to pay for an LCM to use with the gun.

Moreover, the LCM supply was enhanced considerably by a surge in LCM imports that occurred after the period of our price analysis. During 1999 and 2000, an additional 4 million grandfathered LCMs were imported into the U.S., over two-thirds of which had capacities of 11-19 rounds, a range that covers almost all handgun LCMs (as well as many rifle LCMs). This may have driven prices down further after 1998.

In sum, market indicators yield conflicting signs on the availability of LCMs. It is perhaps too early to expect a reduction in crimes with LCMs, considering that tens of millions of grandfathered LCMs were available at the time of the ban, an additional 4.8 million – enough to replenish one-fifth of those owned by civilians – were imported from 1994 through 2000, and that the elasticity of demand for LCMs may be more limited than that of firearms. And if the additional 42 million foreign LCMs approved for importation become available, there may not be a reduction in crimes with LCMs anytime in the near future.

demand for LCMs during the study period, as well as product shifts by distributors and perhaps changes in ad formats (e.g., ads during the early period may have been more likely to list magazines by handgun model without listing the exact capacity of each magazine, in which case coders would have been more likely to miss some LCMs during the early period). Because the data collection effort for the early period was part of a larger effort that involved coding prices in *Shotgun News* for LCMs and numerous banned and non-banned firearms, it is also possible that coders were more likely to miss LCM ads during that period due to random factors like fatigue or time constraints.

8. CRIMINAL USE OF LARGE CAPACITY MAGAZINES AFTER THE BAN

Assessing trends in criminal use of LCMs is difficult. There is no national data source on crime guns equipped with LCMs (ATF national tracing data do not include information about magazines recovered with traced firearms), and, based on our contacts with numerous police departments over the course of this study and the first AW study, it seems that even those police departments that maintain electronic databases on recovered firearms do not typically record the capacity of the magazines with which the guns are equipped.^{75,76} Indeed, we were unable to acquire sufficient data to examine LCM use for the first AW study (Roth and Koper, 1997).

For the current study, we obtained four data sources with which to investigate trends in criminal use of LCMs. Three of the databases utilized in the AW analysis – those from Baltimore, Milwaukee, and Anchorage – contained information about the magazines recovered with the guns (see the descriptions of these databases in Chapter 6). Using updated versions of these databases, we examined all LCM recoveries in Baltimore from 1993 through 2003, recoveries of LCMs in Milwaukee murder cases from 1991 to 2001, and recoveries of LCMs linked to serious crimes in Anchorage (and other parts of Alaska) from 1992 through 2002.⁷⁷ In addition, we studied records of guns and magazines submitted to the Jefferson Regional Forensics Lab in Louisville, Kentucky from 1996 through 2000. This lab of the Kentucky State Police services law enforcement agencies throughout roughly half of Kentucky, but most guns submitted to the lab are from the Louisville area. Guns examined at the lab are most typically those associated with serious crimes such as murders, robberies, and assaults.

The LCM analyses and findings were not as uniform across locations as were those for AWs. Therefore, we discuss each site separately. As in the AW analysis, we emphasize changes in the percentage of guns equipped with LCMs to control for overall trends in gun crime and gun recoveries. Because gun crime was falling during the latter 1990s, we anticipated that the number of guns recovered with LCMs might decline independently of the ban's impact. (Hereafter, we refer to guns equipped with LCMs as LCM guns.)

⁷⁵ For the pre-ban period, one can usually infer magazine capacity based on the firearm model. For postban recoveries, this is more problematic because gun models capable of accepting LCMs may have been equipped with grandfathered LCMs or with post-ban magazines designed to fit the same gun but holding fewer rounds.

⁷⁶ As for the AW analysis in Chapter 6, we utilize police data to examine trends in criminal use of LCMs. The reader is referred to the general discussion of police gun seizure data in Chapter 6.

⁷⁷ Findings presented in our 2002 interim report (Koper and Roth, 2002b) indicated that LCM use had not declined as of the late 1990s. Therefore, we sought to update the LCM analyses where possible for this version of the report.

8.1. Baltimore

In Baltimore, about 14% of guns recovered by police were LCM guns in 1993. This figure remained relatively stable for a few years after the ban but had dropped notably by 2002 and 2003 (Figure 8-1). For the entire post-ban period (1995-2003), recoveries of LCM guns were down 8% relative to those of guns with smaller magazines (Table 8-1, panel A), a change of borderline statistical significance. Focusing on the most recent years, however, LCM gun recoveries were 24% lower in 2002 and 2003 than during the year prior to the ban, a difference that was clearly significant (Table 8-1, panel B).^{78,79,80} This change was attributable to a 36% drop in LCM handguns (Table 8-1, panel C). LCM rifles actually increased 36% as a share of crime guns, although they still accounted for no more than 3% in 2002 and 2003 (Table 8-1, panel D).⁸¹

Yet there was no decline in recoveries of LCM guns used in violent crimes (i.e., murders, shootings, robberies, and other assaults). After the ban, the percentage of violent crime guns with LCMs generally oscillated in a range consistent with the pre-ban level (14%) and hit peaks of roughly 16% to 17% in 1996 and 2003 (Figure 8-1).⁸² Whether comparing the pre-ban period to the entire post-ban period (1995-2003) or the most recent years (2002-2003), there was no meaningful decline in LCM recoveries linked to violent crimes (Table 8-2, panels A and B).⁸³ Neither violent uses of LCM

⁷⁸ Data on handgun magazines were also available for 1992. An auxiliary analysis of those data did not change the substantive inferences described in the text.

⁷⁹ The Maryland AP ban enacted in June 1994 also prohibited ammunition magazines holding over 20 rounds and did not permit additional sales or transfers of such magazines manufactured prior to the ban. This ban, as well as the Maryland and federal bans on AWs that account for many of the guns with magazines over 20 rounds, may have contributed to the downward trend in LCMs in Baltimore, but only 2% of the guns recovered in Baltimore from 1993 to 2000 were equipped with such magazines.

⁸⁰ All comparisons of 1993 to 2002-2003 in the Baltimore data are based on information from the months of January through November of each year. At the time we received these data, information was not yet available for December 2003, and preliminary analysis revealed that guns with LCMs were somewhat less likely to be recovered in December than in other months for years prior to 2003. Nevertheless, utilizing the December data for 1993 and 2002 did not change the substantive inferences. We did not remove December data from the comparisons of 1993 and the full post-ban period because those comparisons seemed less likely to be influenced by the absence of one month of data.

⁸¹ This increase may have been due largely to a general increase in rifle seizures. LCM rifles actually dropped as a percentage of all rifle recoveries from 1993 to 2002-2003, suggesting that recoveries of LCM rifles were increasing less than recoveries of other rifles.

⁸² For 1996, 45% of all records and 24% of those linked to violent crimes had missing data for magazine capacity (due to temporary changes in operational procedures in the Baltimore crime lab). For other years, missing data rates were no more than 6%. Based on those cases for which data were available, the share of guns with LCMs in 1996 was comparable to that in other years, particularly when examining all gun recoveries. At any rate, the analyses focusing on 1993, 2002, and 2003 reinforce the findings of those that include the 1996 data.

⁸³ The ammunition capacity code in the Baltimore data usually reflected the full capacity of the magazine and weapon, but sometimes reflected the capacity of the magazine only. (For instance, a semiautomatic with a 10-round magazine and the ability to accept one additional round in the chamber might have been coded as having a capacity of 10 or 11.) Informal assessment suggested that capacity was more likely to reflect the exact capacity of the magazine in the early years of the database and more likely to reflect the full capacity of the gun and magazine in later years. For the main runs presented in the text and tables, guns were counted as having LCMs if the coded capacity was greater than 11 rounds. This ensured that LCMs were not overestimated, but it potentially understated LCM prevalence, particularly for the earlier

handguns or LCM rifles had declined appreciably by 2002-2003 (Table 8-2, panels C and D). Hence, the general decline in LCM recoveries may reflect differences in the availability and use of LCMs among less serious offenders, changes in police practices,⁸⁴ or other factors.

Figure 8-1. Police Recoveries of Guns Equipped With Large Capacity Magazines in Baltimore, 1993-2003



years. However, coding the guns as LCM weapons based on a threshold of 10 (i.e., a coded capacity over 10 rounds) in 1993 and a threshold of 11 (i.e., a coded capacity over 11 rounds) for 2002-2003 did not change the inferences of the violent crime analysis. Further, this coding increased the pre-ban prevalence of LCMs by very little (about 4% in relative terms).

⁸⁴ During the late 1990s, for example, Baltimore police put greater emphasis on detecting illegal gun carrying (this statement is based on prior research and interviews the author has done in Baltimore as well as the discussion in Center to Prevent Handgun Violence, 1998). One can hypothesize that this effort reduced the fraction of recovered guns with LCMs because illegal gun carriers are probably more likely to carry smaller, more concealable handguns that are less likely to have LCMs.

	Pre-Ban Period	Post-Ban Period	<u>Change</u>
A. All LCM Guns	JanDec. 1993	Jan. 1995-Nov. 2003	
Total	473	3703	
Annual Mean	473	445.86 ^a	-6%
LCM Guns as % of All Guns	13.51%	12.38%	-8%*
B. All LCM Guns	JanNov. 1993	JanNov. 2002-2003	
Total	430	626	
Annual Mean	430	313	-27%
LCM Guns as % of All Guns	13.47%	10.3%	-24%***
C. LCM Handguns	JanNov. 1993	JanNov. 2002-2003	
Total	359	440	
Annual Mean	359	220	-39%
LCM Handguns as % of All Guns	11.25%	7.24%	-36%***
D. LCM Rifles	JanNov. 1993	JanNov. 2002-2003	
LCM Rifles	71	183	
Annual Mean	71	91.5	29%
LCM Rifles as % of All Guns	2.22%	3.01%	36%**

Table 8-1. Trends in All Police Recoveries of Firearms Equipped With Large Capacity Magazines, Baltimore, 1993-2003

a. Annual average calculated without 1996 and 2003 (to correct for missing months or missing magazine data).

* Chi-square p level < .10 (changes in percentages of guns equipped with LCMs were tested for statistical significance)

** Chi-square p level <.05 (changes in percentages of guns equipped with LCMs were tested for statistical significance)

** Chi-square p level < .01 (changes in percentages of guns equipped with LCMs were tested for statistical significance)

	Pre-Ban Period	Post-Ban Period	<u>Change ^a</u>
A. All LCM Guns	JanDec. 1993	Jan. 1995-Nov. 2003	
Total	87	711	
Annual Mean	87	81.86 ^b	-6%
LCM Guns as % of All Guns	14.01%	14.44%	3%
B. All LCM Guns	JanNov. 1993	JanNov. 2002-2003	
Total	79	104	
Annual Mean	79	52	-34%
LCM Guns as % of All Guns	13.96%	13.65%	-2%
C. LCM Handguns	JanNov. 1993	JanNov. 2002-2003	
Total	62	81	
Annual Mean	62	40.5	-35%
LCM Handguns as % of All Guns	10.95%	10.63%	-3%
D. LCM Rifles	JanNov. 1993	JanNov. 2002-2003	
LCM Rifles	17	23	
Annual Mean	17	11.5	-32%
LCM Rifles as % of All Guns	3%	3.02%	1%

Table 8-2. Trends in Police Recoveries of Firearms Equipped With Large Capacity Magazines in Violent Crime Cases, Baltimore, 1993-2003

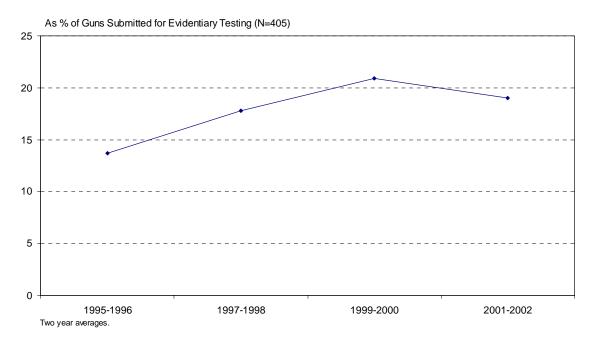
a. Changes in the percentages of guns with LCMs were statistically insignificant in chi-square tests. b. Annual average calculated without 1996 and 2003 (to correct for missing months or missing magazine data).

8.2. Anchorage

In the Alaska database, magazine capacity was recorded only for guns recovered during the post-ban years, 1995 through 2002. However, we estimated pre-ban use of LCM handguns by identifying handgun models inspected during 1992 and 1993 that were manufactured with LCMs prior to the ban.⁸⁵ This permitted an assessment of pre-post changes in the use of LCM handguns.

As shown in Figure 8-2 (also see Table 8-3, panel A), LCM guns rose from 14.5% of crime guns in 1995-1996 to 24% in 2000-2001 (we present two-year averages because the sample are relatively small, particularly for the most recent years) and averaged about 20% for the entire post-ban period. LCM handguns drove much of this trend, but LCM rifles also increased from about 3% of crime guns in 1995-96 to 11% in 2000-2001.

Figure 8-2. Police Recoveries of Guns Equipped With Large Capacity Magazines in Anchorage (Alaska), 1995-2002



⁸⁵ To make these determinations, we consulted gun catalogs such as the *Blue Book of Gun Values* and *Guns Illustrated*.

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	Pre-Ban Period	Post-Ban Period	<u>Change ^b</u>
A. All LCM Guns	N/A	Jan. 1995-Dec. 2002	
Total		80	
Annual Mean		10	N/A
LCM Guns as % of All Guns		19.75%	N/A
<u>B. LCM Handguns</u>	Jan. 1992-Dec. 1993	Jan. 1995-Dec. 2002	
Total	17	57	
Annual Mean	8.5	7.13	-16%
LCM Handguns as % All Handguns	26.15%	22.35%	-15%
C. LCM Handguns	Jan. 1992-Dec. 1993	Jan. 2001-Dec. 2002	
Total	17	10	
Annual Mean	8.5	5	-41%
LCM Handguns as % of All Handguns	26.15%	19.23%	-26%

Table 8-3. Trends in Police Recoveries of Firearms Equipped With Large CapacityMagazines in Violent Crime Cases, Anchorage (Alaska), 1992-2002 a

a. Based on guns submitted to State Police for evidentiary testing.

b. Changes in the percentages of guns equipped with LCMs were statistically insignificant in chi-square tests.

Investigation of pre-post changes for handguns revealed an inconsistent pattern (Figure 8-3). LCM handguns dropped initially after the ban, declining from 26% of handguns in 1992-1993 to 18% in 1995-1996. However, they rebounded after 1996, reaching a peak of 30% of handguns in 1999-2000 before declining to 19% in 2001-2002.

For the entire post-ban period, the share of handguns with LCMs was about 15% lower than in the pre-ban period (Table 8-3, panel B). By the two most recent post-ban years (2001-2002), LCM use had dropped 26% from the pre-ban years (Table 8-3, panel C). These changes were not statistically significant, but the samples of LCM handguns were rather small for rigorous statistical testing. Even so, it seems premature to conclude

that there has been a lasting reduction in LCM use in Alaska. LCM use in 2001-2002 was somewhat higher than that immediately following the ban in 1995-1996, after which there was a substantial rebound. Considering the inconsistency of post-ban patterns, further follow-up seems warranted before making definitive conclusions about LCM use in Alaska.

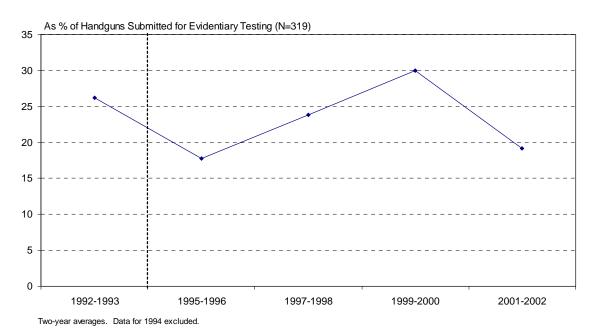


Figure 8-3. Police Recoveries of Handguns Equipped With Large Capacity Magazines in Anchorage (Alaska), 1992-2002

8.3. Milwaukee

LCM guns accounted for 21% of guns recovered in Milwaukee murder investigations from 1991 to 1993 (Table 8-4, panel A). Following the ban, this figure rose until reaching a plateau of over 36% in 1997 and 1998 (Figure 8-4). On average, the share of guns with LCMs grew 55% from 1991-1993 to 1995-1998, a trend that was driven by LCM handguns (Table 8-4, panels A and B).⁸⁶ LCM rifles held steady at between 4% and 5% of the guns (Table 8-4, panel C).

We also analyzed a preliminary database on 48 guns used in murders during 2000 and 2001 (unlike the 1991-1998 database, this database did not include information on other guns recovered during the murder investigations). About 11% of these guns were LCM guns, as compared to 19% of guns used in murders from 1991 to 1993 (analyses not shown). However, nearly a quarter of the 2000-2001 records were missing information on magazine capacity.⁸⁷ Examination of the types and models of guns with

⁸⁶ LCM guns also increased as share of guns that were used in the murders (the full sample results discussed in the text include all guns recovered during the investigations).

Magazine capacity was missing for less than 4% of the records in earlier years.

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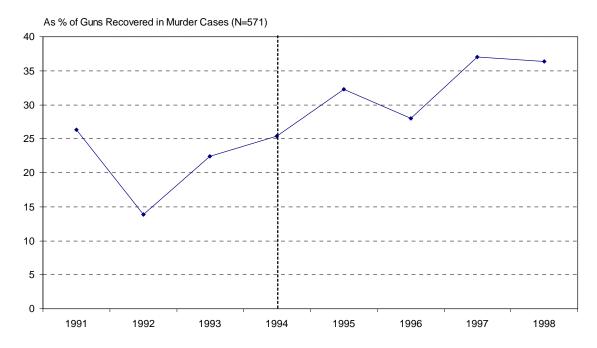
unidentified magazines suggested that as many as 17% of guns used in murders during 2000 and 2001 may have been LCM guns (based on all those that either had LCMs, were models sold with LCMs prior to the ban, or were unidentified semiautomatics). While this still suggests a drop in LCM use from the peak levels of the late 1990s (26% of guns used in murders from 1995 to 1998 had LCMs), it is not clear that LCM use has declined significantly below pre-ban levels.

	Pre-Ban Period	Post-Ban Period	<u>Change</u>
A. All LCM Guns	Jan. 1991-Dec. 1993	Jan. 1995-Dec. 1998	
Total	51	83	
Annual Mean	17	20.75	22%
LCM Guns as % of All Guns	20.9%	32.42%	55%*
B. LCM Handguns	Jan. 1991-Dec. 1993	Jan. 1995-Dec. 1998	
Total	40	71	
Annual Mean	13.33	17.75	33%
LCM Handguns as % of All Guns	16.39%	27.73%	69%*
C. LCM Rifles	Jan. 1991-Dec. 1993	Jan. 1995-Dec. 1998	
Total	11	12	
Annual Mean	3.67	3	-18%
LCM Rifles as % of All Guns	4.51%	4.69%	4%

Table 8-4. Trends in Police Recoveries of Firearms Equipped With Large Capacity
Magazines in Murder Cases, Milwaukee County, 1991-1998

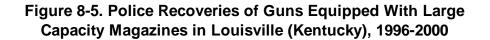
* Chi-square p level < .01 (changes in percentages of guns equipped with LCMs were tested for statistical significance)

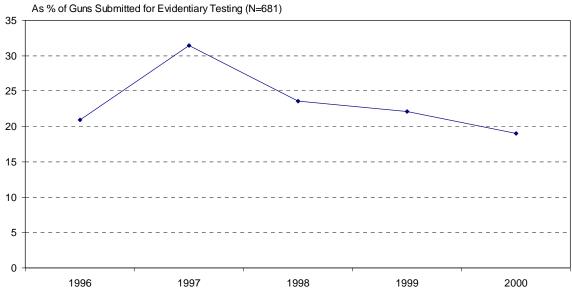
Figure 8-4. Recoveries of Guns Equipped With Large Capacity Magazines in Milwaukee County Murder Cases, 1991-1998



8.4. Louisville

The Louisville LCM data are all post-ban (1996-2000), so we cannot make prepost comparisons. Nonetheless, the share of crime guns with LCMs in Louisville (24%) was within the range of that observed in the other cities during this period. And similar to post-ban trends in the other sites, LCM recoveries peaked in 1997 before leveling off and remaining steady through the year 2000 (Figure 8-5). LCM rifles dropped 21% as a share of crime guns between 1996 and 2000 (analyses not shown), but there were few in the database, and they never accounted for more than 6.2% of guns in any year.





Year 2000 data are not for the full year.

8.5. Summary

Despite a doubling of handgun LCM prices between 1993 and 1995 and a 40% increase in rifle LCM prices from 1993 to 1994, criminal use of LCMs was rising or steady through at least the latter 1990s, based on police recovery data from four jurisdictions studied in this chapter. These findings are also consistent with an earlier study finding no decline in seizures of LCM guns from juveniles in Washington, DC in the year after the ban (Koper, 2001).⁸⁸ Post-2000 data, though more limited and inconsistent, suggest that LCM use may be dropping from peak levels of the late 1990s but provide no definitive evidence of a drop below pre-ban levels.⁸⁹ These trends have been driven primarily by LCM handguns, which are used in crime roughly three times as

⁸⁸ From 1991 to 1993, 16.4% of guns recovered from juveniles in Washington, DC had LCMs (14.2% had LCMs in 1993). In 1995, this percentage increased to 17.1%. We did not present these findings in this chapter because the data were limited to guns recovered from juveniles, the post-ban data series was very short, and the gun markets supplying DC and Baltimore are likely to have much overlap (Maryland is a leading supplier of guns to DC – see ATF, 1997; 1999).

⁸⁹ We reran selected key analyses with the Baltimore, Milwaukee, and Louisville data after excluding .22 caliber guns, some of which could have been equipped with attached tubular magazines that are exempted from the LCM ban, and obtained results consistent with those reported in the text. It was possible to identify these exempted magazines in the Anchorage data. When they were removed from Anchorage's LCM count, the general pattern in use of banned LCMs was similar to that presented in the main 1995-2002 analysis: guns with banned LCMs rose, reaching a peak of 21% of crime guns in 1999-2000, before declining slightly to 19% in 2001-2002.

often as LCM rifles. Nonetheless, there has been no consistent reduction in the use of LCM rifles either.

The observed patterns are likely due to several factors: a hangover from pre-ban growth in the production and marketing of LCM guns (Cook and Ludwig, 1997, pp. 5-6; Wintemute, 1996);⁹⁰ the low cost of LCMs relative to the firearms they complement, which seems to make LCM use less sensitive to prices than is firearm use;⁹¹ the utility that gun users, particularly handgun users, attach to LCMs; a plentiful supply of grandfathered LCMs, likely enhanced by a pre-ban surge in production (though this has not been documented) and the importation of millions of foreign LCMs since the ban;⁹² thefts of LCM firearms (see Roth and Koper, 1997, Chapter 4); or some combination of these factors.⁹³ However, it is worth noting that our analysis did not reveal an upswing in use of LCM guns following the surge of LCM importation in 1999 (see the previous chapter). It remains to be seen whether recent imports will have a demonstrable effect on patterns of LCM use.

Finally, we must be cautious in generalizing these results to the nation because they are based on a small number of non-randomly selected jurisdictions. Nonetheless, the consistent failure to find clear evidence of a pre-post drop in LCM use across these geographically diverse locations strengthens the inference that the findings are indicative of a national pattern.

⁹⁰ To illustrate this trend, 38% of handguns acquired by gun owners during 1993 and 1994 were equipped with magazines holding 10 or more rounds, whereas only 14% of handguns acquired before 1993 were so equipped (Cook and Ludwig, 1997, pp. 5-6).

⁹¹ Although elevated post-ban prices did not suppress use of LCMs, a more subtle point is that LCM use rose in most of these locations between 1995 and 1998, as LCM prices were falling from their peak levels of 1994-1995. Therefore, LCM use may have some sensitivity to price trends.

⁹² However, we do not have the necessary data to determine if LCMs used in crime after the ban were acquired before or after the ban.

⁹³ In light of these considerations, it is conceivable that the ban slowed the rate of growth in LCM use, accelerated it temporarily (due to a pre-ban production boom), or had no effect. We do not have the data necessary to examine this issue rigorously. Moreover, the issue might be regarded as somewhat superfluous; the more critical point would seem to be that nearly a decade after the ban, LCM use has still not declined demonstrably below pre-ban levels.

9. THE CONSEQUENCES OF CRIMES WITH ASSAULT WEAPONS AND LARGE CAPACITY MAGAZINES

One of the primary considerations motivating passage of the ban on AWs and LCMs was a concern over the perceived dangerousness of these guns and magazines. In principal, semiautomatic weapons with LCMs enable offenders to fire high numbers of shots rapidly, thereby potentially increasing both the number of person wounded per gunfire incident (including both intended targets and innocent bystanders) and the number of gunshot victims suffering multiple wounds, both of which would increase deaths and injuries from gun violence. Ban advocates also argued that the banned AWs possessed additional features conducive to criminal applications.

The findings of the previous chapters suggest that it is premature to make definitive assessments of the ban's impact on gun violence. Although criminal use of AWs has declined since the ban, this reduction was offset through at least the late 1990s by steady or rising use of other guns equipped with LCMs. As argued previously, the LCM ban has greater potential for reducing gun deaths and injuries than does the AW ban. Guns with LCMs – of which AWs are only a subset – were used in up to 25% of gun crimes before the ban, whereas AWs were used in no more than 8% (Chapter 3). Furthermore, an LCM is arguably the most important feature of an AW. Hence, use of guns with LCMs is probably more consequential than use of guns with other military-style features, such as flash hiders, folding rifle stocks, threaded barrels for attaching a silencers, and so on.⁹⁴

This is not to say that reducing use of AWs will have no effect on gun crime; a decline in the use of AWs does imply fewer crimes with guns having particularly large magazines (20 or more rounds) and other military-style features that could facilitate some crimes. However, it seems that any such effects would be outweighed, or at least

⁹⁴ While it is conceivable that changing features of AWs other than their magazines might prevent some gunshot victimizations, available data provide little if any empirical basis for judging the likely size of such effects. Speculatively, some of the most beneficial weapon redesigns may be the removal of folding stocks and pistol grips from rifles. It is plausible that some offenders who cannot obtain rifles with folding stocks (which make the guns more concealable) might switch to handguns, which are more concealable but generally cause less severe wounds (e.g. see DiMaio, 1985). However, such substitution patterns cannot be predicted with certainty. Police gun databases rarely have information sufficiently detailed to make assessments of changes over time in the use of weapons with specific features like folding stocks. Based on informal assessments, there was no consistent pattern in post-ban use of rifles (as a share of crime guns) in the local databases examined in the prior chapters (also see the specific comments on LCM rifles in the previous chapters).

Pistol grips enhance the ability of shooters to maintain control of a rifle during rapid, "spray and pray" firing (e.g., see Violence Policy Center, 2003). (Heat shrouds and forward handgrips on APs serve the same function.) While this feature may prove useful in military contexts (e.g., firefights among groups at 100 meters or less – see data of the U.S. Army's Operations Research Office as cited in Violence Policy Center, 2003), it is unknown whether civilian attacks with semiautomatic rifles having pistol grips claim more victims per attack than do those with other semiautomatic rifles. At any rate, most post-ban AR-type rifles still have pistol grips. Further, the ban does not count a stock thumbhole grip, which serves the same function as a pistol grip (e.g., see the illustration of LCMM rifles in Chapter 2), as an AR feature.

obscured, by the wider effects of LCM use, which themselves are likely to be small at best, as we argue below.⁹⁵

Because offenders can substitute non-banned guns and small magazines for banned AWs and LCMs, there is not a clear rationale for expecting the ban to reduce assaults and robberies with guns.⁹⁶ But by forcing AW and LCM offenders to substitute non-AWs with small magazines, the ban might reduce the number of shots fired per gun attack, thereby reducing both victims shot per gunfire incident and gunshot victims sustaining multiple wounds. In the following sections, we consider the evidence linking high-capacity semiautomatics and AWs to gun violence and briefly examine recent trends in lethal and injurious gun violence.

9.1. The Spread of Semiautomatic Weaponry and Trends in Lethal and Injurious Gun Violence Prior to the Ban

Nationally, semiautomatic handguns grew from 28% of handgun production in 1973 to 80% in 1993 (Zawitz, 1995, p. 3). Most of this growth occurred from the late 1980s onward, during which time the gun industry also increased marketing and production of semiautomatics with LCMs (Wintemute, 1996). Likewise, semiautomatics grew as a percentage of crime guns (Koper, 1995; 1997), implying an increase in the average firing rate and ammunition capacity of guns used in crime.⁹⁷

⁹⁵ On a related note, a few studies suggest that state-level AW bans have not reduced crime (Koper and Roth, 2001a; Lott, 2003). This could be construed as evidence that the federal AW ban will not reduce gunshot victimizations without reducing LCM use because the state bans tested in those studies, as written at the time, either lacked LCM bans or had LCM provisions that were less restrictive than that of the federal ban. (New Jersey's 1990 AW ban prohibited magazines holding more than 15 rounds. AP bans passed by Maryland and Hawaii prohibited magazines holding more than 20 rounds and pistol magazines holding more than 10 rounds, respectively, but these provisions did not take effect until just a few months prior to the federal ban.) However, it is hard to draw definitive conclusions from these studies for a number of reasons, perhaps the most salient of which are the following: there is little evidence on how state AW bans affect the availability and use of AWs (the impact of these laws is likely undermined to some degree by the influx of AWs from other states, a problem that was probably more pronounced prior to the federal ban when the state laws were most relevant); studies have not always examined the effects of these laws on gun homicides and shootings, the crimes that are arguably most likely to be affected by AW bans (see discussion in the main text); and the state AW bans that were passed prior to the federal ban (those in California, New Jersey, Hawaii, Connecticut, and Maryland) were in effect for only three months to five years (two years or less in most cases) before the imposition of the federal ban, after which they became largely redundant with the federal legislation and their effects more difficult to predict and estimate.

⁹⁶ One might hypothesize that the firepower provided by AWs and other semiautomatics with LCMs emboldens some offenders to engage in aggressive behaviors that prompt more shooting incidents. On the other hand, these weapons might also prevent some acts of violence by intimidating adversaries, thus discouraging attacks or resistance. We suspect that firepower does influence perceptions, considering that many police departments have upgraded their weaponry in recent years – often adopting semiautomatics with LCMs – because their officers felt outgunned by offenders. However, hypotheses about gun types and offender behavior are very speculative, and, pending additional research on such issues, it seems prudent to focus on indicators with stronger theoretical and empirical foundations.

⁹⁷ Revolvers, the most common type of non-semiautomatic handgun, typically hold only 5 or 6 rounds (and sometimes up to 9). Semiautomatic pistols, in contrast, hold ammunition in detachable magazines that, prior to the ban, typically held 5 to 17 bullets and sometimes upwards of 30 (Murtz et al., 1994).

The impact of this trend is debatable. Although the gun homicide rate rose considerably during the late 1980s and early 1990s (Bureau of Justice Statistics, 1994, p. 13), the percentage of violent gun crimes resulting in death was declining (see Figure 9-1 and the related discussion in section 9.3). Similarly, the percentage of victims killed or wounded in handgun discharge incidents declined from 27% during the 1979-1987 period to 25% for the 1987-1992 period (calculated from Rand, 1990, p. 5; 1994, p. 2) as semiautomatics were becoming more common crime weapons.⁹⁸ On the other hand, an increasing percentage of gunshot victims died from 1992 to 1995 according to hospital data (Cherry et al., 1998), a trend that could have been caused in part by a higher number of gunshot victims with multiple wounds (also see McGonigal et al., 1993). Most notably, the case fatality rate for assaultive gunshot cases involving 15 to 24-year-old males rose from 15.9% in late 1993 to 17.5% in early 1995 (p. 56).

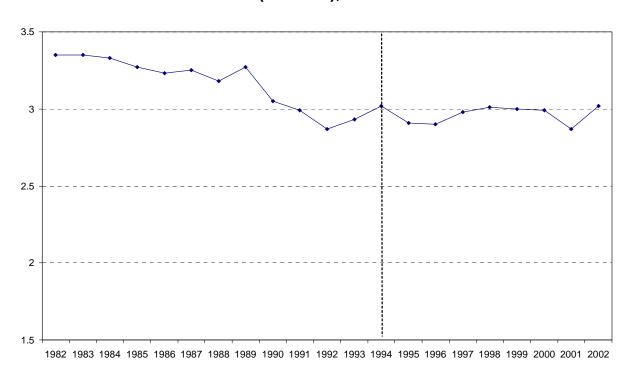


Figure 9-1. Percentage of Violent Gun Crimes Resulting in Death (National), 1982-2002

Based on gun homicides, gun robberies, and gun assaults reported in the Uniform Crime Reports and Supplemental Homicide Reports.

⁹⁸ A related point is that there was a general upward trend in the average number of shots fired by offenders in gunfights with New York City police from the late 1980s through 1992 (calculated from Goehl, 1993, p. 51). However, the average was no higher during this time than during many years of the early 1980s and 1970s.

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Some researchers have inferred links between the growing use of semiautomatics in crime and the rise of both gun homicides and bystander shootings in a number of cities during the late 1980s and early 1990s (Block and Block, 1993; McGonigal et al., 1993; Sherman et al., 1989; Webster et al., 1992). A study in Washington, DC, for example, reported increases in wounds per gunshot victim and gunshot patient mortality during the 1980s that coincided with a reported increase in the percentage of crime guns that were semiautomatics (Webster et al., 1992).

Nevertheless, changes in offender behavior, coupled with other changes in crime guns (e.g., growing use of large caliber handguns – see Caruso et al., 1999; Koper, 1995; 1997; Wintemute, 1996), may have been key factors driving such trends. Washington, DC, for example, was experiencing an exploding crack epidemic at the time of the aforementioned study, and this may have raised the percentage of gun attacks in which offenders had a clear intention to injure or kill their victims. Moreover, studies that attempted to make more explicit links between the use of semiautomatic firearms and trends in lethal gun violence via time series analysis failed to produce convincing evidence of such links (Koper, 1995; 1997). However, none of the preceding research related specific trends in the use of AWs or LCMs to trends in lethal gun violence.

9.2. Shots Fired in Gun Attacks and the Effects of Weaponry on Attack Outcomes

The evidence most directly relevant to the potential of the AW-LCM ban to reduce gun deaths and injuries comes from studies examining shots fired in gun attacks and/or the outcomes of attacks involving different types of guns. Unfortunately, such evidence is very sparse.

As a general point, the faster firing rate and larger ammunition capacities of semiautomatics, especially those equipped with LCMs, have the potential to affect the outcomes of many gun attacks because gun offenders are not particularly good shooters. Offenders wounded their victims in no more than 29% of gunfire incidents according to national, pre-ban estimates (computed from Rand, 1994, p. 2; also see estimates presented later in this chapter). Similarly, a study of handgun assaults in one city revealed a 31% hit rate per shot, based on the sum totals of all shots fired and wounds inflicted (Reedy and Koper, 2003, p. 154). Other studies have yielded hit rates per shot ranging from 8% in gunfights with police (Goehl, 1993, p. 8) to 50% in mass murders (Kleck, 1997, p. 144). Even police officers, who are presumably certified and regularly re-certified as proficient marksman and who are almost certainly better shooters than are average gun offenders, hit their targets with only 22% to 39% of their shots (Kleck, 1991, p. 163; Goehl, 1993). Therefore, the ability to deliver more shots rapidly should raise the likelihood that offenders hit their targets, not to mention innocent bystanders.

⁹⁹ However, some argue that this capability is offset to some degree by the effects of recoil on shooter aim, the limited number of shots fired in most criminal attacks (see below), and the fact that criminals using non-semiautomatics or semiautomatics with small magazines usually have the time and ability to deliver multiple shots if desired (Kleck, 1991, pp. 78-79).

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A few studies have compared attacks with semiautomatics, sometimes specifically those with LCMs (including AWs), to other gun assaults in terms of shots fired, persons hit, and wounds inflicted (see Tables 9-1 and 9-2). The most comprehensive of these studies examined police reports of attacks with semiautomatic pistols and revolvers in Jersey City, New Jersey from 1992 through 1996 (Reedy and Koper, 2003), finding that use of pistols resulted in more shots fired and higher numbers of gunshot victims (Table 9-1), though not more gunshot wounds per victim (Table 9-2).¹⁰⁰ Results implied there would have been 9.4% fewer gunshot victims overall had semiautomatics not been used in any of the attacks. Similarly, studies of gun murders in Philadelphia (see McGonigal et al., 1993 in Table 9-1) and a number of smaller cities in Pennsylvania, Ohio, and Iowa (see Richmond et al., 2003 in Table 9-2) found that attacks with semiautomatics resulted in more shots fired and gunshot wounds per victim. An exception is that the differential in shots fired between pistol and revolver cases in Philadelphia during 1990 did not exist for cases that occurred in 1985, when semiautomatics and revolvers had been fired an average of 1.6 and 1.9 times, respectively. It is not clear whether the increase in shots fired for pistol cases from 1985 to 1990 was due to changes in offender behavior, changes in the design or quality of pistols (especially an increase in the use of models with LCMs - see Wintemute, 1996), the larger sample for 1990, or other factors.

¹⁰⁰ But unlike other studies that have examined wounds per victim (see Table 9-2), this study relied on police reports of wounds inflicted rather than medical reports, which are likely to be more accurate.

Magazine Data Source Measure Outcome					
Measure	Outcome				
Shots Fired	Avg. = $3.2 - 3.7$ (n=165 pistol cases) *				
	Avg. = $2.3 - 2.6$ (n=71 revolver cases) *				
Shots Fired	Avg. = 1.6 (n=21 pistol cases, 1985) Avg. = 1.9 (n=57 revolver cases, 1985)				
	Avg. = 2.7 (n=95 pistol cases, 1990)				
	Avg. = 2.1 (n=108 revolver cases, 1990)				
Victims Hit	Avg. = 1.15 (n=95 pistol cases) *				
	Avg. = 1.0 (n=40 revolver cases) *				
Victims Hit	Avg. = 29 (n=6 AW/LCM cases)				
	Avg. = 13 (n=9 non-AW/LCM cases)				
% of Attacks With Victims	19.5% (n=72 AW or machine gun cases)				
Hit	22.3% (n=419 non-AW, semiautomatic				
	cases)				
	23.3% (n=608 non-AW, non- semiautomatic cases)				
	Shots Fired Victims Hit Victims Hit % of Attacks With Victims				

 Table 9-1. Shots Fired and Victims Hit in Gunfire Attacks By Type of Gun and Magazine

a. Reedy and Koper (2003)

b. McGonigal et al. (1993)

c. Figures calculated by Koper and Roth (2001a) based on data presented by Kleck (1997, p. 144)

d. Calculated from Harlow (2001, p. 11). (Sample sizes are based on unpublished information provided by the author of the survey report.)

* Pistol/revolver differences statistically significant at p<.05 (only Reedy and Koper [2003] and Harlow [2001] tested for statistically significant differences). The shots fired ranges in Reedy and Koper are based on minimum and maximum estimates.

Data Source	Measure	Outcome
Gun attacks with semiautomatic pistols and revolvers, Jersey City, 1992-1996 ^a	Gunshot Wounds	Avg. = 1.4 (n=107 pistol victims) Avg. = 1.5 (n=40 revolver victims)
Gun homicides with semiautomatic pistols and revolvers, Iowa City (IA), Youngstown (OH), and Bethlehem (PA), 1994-1998 ^b	Gunshot Wounds	Avg. = 4.5 total (n=212 pistol victims)* Avg. = 2.9 entry Avg. = 2.0 total (n=63 revolver victims)* Avg. = 1.5 entry
Gun homicides with assault weapons (AWs), guns having large capacity magazines (LCMs), and other firearms, Milwaukee, 1992-1995 ^c	Gunshot Wounds	Avg. = 3.23 (n=30 LCM victims) ** Avg. = 3.14 (n=7 AW victims) Avg. = 2.08 (n=102 non-AW/LCM victims)**

 Table 9-2. Gunshot Wounds Per Victim By Type of Gun and Magazine

a. Reedy and Koper (2003)

b. Richmond et al. (2003)

c. Roth and Koper (1997, Chapter 6)

* Pistol/revolver differences statistically significant at p<.01.

** The basic comparison between LCM victims and non-AW/LCM victims was moderately significant (p<.10) with a one-tailed test. Regression results (with a slightly modified sample) revealed a difference significant at p=.05 (two-tailed test). Note that the non-LCM group included a few cases involving non-banned LCMs (.22 caliber attached tubular devices).

Also, a national survey of state prisoners found that, contrary to expectations, offenders who reported firing on victims with AWs and other semiautomatics were no more likely to report having killed or injured victims than were other gun offenders who reported firing on victims (Table 9-1). However, the measurement of guns used and attack outcomes were arguably less precise in this study, which was based on offender self-reports, than in other studies utilizing police and medical reports.¹⁰¹

Attacks with AWs or other guns with LCMs may be particularly lethal and injurious, based on very limited evidence. In mass shooting incidents (defined as those in which at least 6 persons were killed or at least 12 were wounded) that occurred during the decade preceding the ban, offenders using AWs and other semiautomatics with LCMs (sometimes in addition to other guns) claimed an average of 29 victims in comparison to an average of 13 victims for other cases (Table 9-1). (But also see the study discussed in the preceding paragraph in regards to victims hit in AW cases.)

Further, a study of Milwaukee homicide victims from 1992 through 1995 revealed that those killed with AWs were shot 3.14 times on average, while those killed with any

¹⁰¹ See the discussion of self-reports and AW use in Chapter 3.

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gun having an LCM were shot 3.23 times on average (Table 9-2). In contrast, victims shot with guns having small magazines had only 2.1 wounds on average. If such a wound differential can be generalized to other gun attacks – if, that is, both fatal and non-fatal LCM gunshot victims are generally hit one or more extra times – then LCM use could have a considerable effect on the number of gunshot victims who die. To illustrate, the fatality rate among gunshot victims in Jersey City during the 1990s was 63% higher for those shot twice than for those shot once (26% to 16%) (Koper and Roth, 2001a; 2001b). Likewise, fatality rates are 61% higher for patients with multiple chest wounds than for patients with a single chest wound (49% to 30.5%), based on a Washington, DC study (Webster et al., 1992, p. 696).

Similar conclusions can also be inferred indirectly from the types of crimes involving LCM guns. To illustrate, handguns associated with gunshot victimizations in Baltimore (see the description of the Baltimore gun and magazine data in the preceding chapter) are 20% to 50% more likely to have LCMs than are handguns associated with other violent crimes, controlling for weapon caliber (Table 9-3). This difference may be due to higher numbers of shots and hits in crimes committed with LCMs, although it is also possible that offenders using LCMs are more likely to fire on victims. But controlling for gunfire, guns used in shootings are 17% to 26% more likely to have LCMs than guns used in gunfire cases resulting in no wounded victims (perhaps reflecting higher numbers of shots fired and victims hit in LCM cases), and guns linked to murders are 8% to 17% more likely to have LCMs than guns linked to non-fatal gunshot victimizations (perhaps indicating higher numbers of shots fired and wounds per victim in LCM cases).¹⁰² These differences are not all statistically significant, but the pattern is consistent. And as discussed in Chapter 3, AWs account for a larger share of guns used in mass murders and murders of police, crimes for which weapons with greater firepower would seem particularly useful.

¹⁰² Cases with and without gunfire and gunshot victims were approximated based on offense codes contained in the gun seizure data (some gunfire cases not resulting in wounded victims may not have been identified as such, and it is possible that some homicides were not committed with the guns recovered during the investigations). In order to control for caliber effects, we focused on 9mm and .38 caliber handguns. Over 80% of the LCM handguns linked to violent crimes were 9mm handguns. Since all (or virtually all) 9mm handguns are semiautomatics, we also selected .38 caliber guns, which are close to 9mm in size and consist almost entirely of revolvers and derringers.

The disproportionate involvement of LCM handguns in injury and death cases is greatest in the comparisons including both 9mm and .38 caliber handguns. This may reflect a greater differential in average ammunition capacity between LCM handguns and revolvers/derringers than between LCM handguns and other semiautomatics. The differential in fatal and non-fatal gunshot victims may also be due to caliber effects; 9mm is generally a more powerful caliber than .38 based on measures like kinetic energy or relative stopping power (e.g., see DiMaio, 1985, p. 140; Warner 1995, p. 223; Wintemute, 1996, p. 1751).

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<u>Handgun Sample</u>	<u>% With</u> LCM	<u>% Difference</u> (#2 Relative to #1)	
A. Handguns Used in Violent Crimes With and Without Gunshot Injury			
 9mm and .38: violence, no gunshot victims 9mm and .38: violence with gunshot victims 	23.21% 34.87%	50%*	
 9mm: violence, no gunshot victims 9mm: violence with gunshot victims 	52.92% 63.24%	20%*	
B. Handguns Used in Gunfire Cases With and Without Gunshot Injury			
 9mm and .38: gunfire, no gunshot victims 9mm and .38: gunfire with gunshot victims 	27.66% 34.87%	26%	
 9mm: gunfire, no gunshot victims 9mm: gunfire with gunshot victims 	54.17% 63.24%	17%	
C. Handguns Used in Fatal Versus Non- Fatal Gunshot Victimizations			
 9mm and .38: non-fatal gunshot victims 9mm and .38: homicides 	32.58% 38.18%	17%	
 9mm: non-fatal gunshot victims 9mm: homicides * Statistically significant difference at p<01 (abi square) 	61.14% 66.04%	8%	

Table 9-3. Probabilities That Handguns Associated With Murders, Non-FatalShootings, and Other Violent Crimes Were Equipped With Large CapacityMagazines in Baltimore, 1993-2000

* Statistically significant difference at p<.01 (chi-square).

The findings of the preceding studies are subject to numerous caveats. There were few if any attempts to control for characteristics of the actors or situations that might have influenced weapon choices and/or attack outcomes.¹⁰³ Weapons data were typically missing for substantial percentages of cases. Further, many of the comparisons in the tables were not tested for statistical significance (see the notes to Tables 9-1 and 9-2).¹⁰⁴

Tentatively, nonetheless, the evidence suggests more often than not that attacks with semiautomatics, particularly those equipped with LCMs, result in more shots fired, leading to both more injuries and injuries of greater severity. Perhaps the faster firing rate and larger ammunition capacities afforded by these weapons prompt some offenders to fire more frequently (i.e., encouraging what some police and military persons refer to as a "spray and pray" mentality). But this still begs the question of whether a 10-round limit on magazine capacity will affect the outcomes of enough gun attacks to measurably reduce gun injuries and deaths.

¹⁰³ In terms of offender characteristics, recall from Chapter 3 that AP buyers are more likely than other gun buyers to have criminal histories and commit subsequent crimes. This does not seem to apply, however, to the broader class of semiautomatic users: handgun buyers with and without criminal histories tend to buy pistols in virtually the same proportions (Wintemute et al., 1998b), and youthful gun offenders using pistols and revolvers have very comparable criminal histories (Sheley and Wright, 1993b, p. 381). Further, semiautomatic users, including many of those using AWs, show no greater propensity to shoot at victims than do other gun offenders (Harlow, 2001, p. 11; Reedy and Koper, 2003). Other potential confounders to the comparisons in Tables 9-1 and 9-2 might include shooter age and skill, the nature of the circumstances (e.g., whether the shooting was an execution-style shooting), the health of the victim(s), the type of location (e.g., indoor or outdoor location), the distance between the shooter and intended victim(s), the presence of multiple persons who could have been shot intentionally or accidentally (as bystanders), and (in the mass shooting incidents) the use of multiple firearms.

¹⁰⁴ Tables 9-1 and 9-2 present the strongest evidence from the available studies. However, there are additional findings from these studies and others that, while weaker, are relevant. Based on gun model information available for a subset of cases in the Jersey City study, there were 12 gunfire cases involving guns manufactured with LCMs before the ban (7 of which resulted in wounded victims) and 94 gunfire cases involving revolvers or semiautomatic models without LCMs. Comparisons of these cases produced results similar to those of the main analysis: shot fired estimates ranged from 2.83 to 3.25 for the LCM cases and 2.22 to 2.6 for the non-LCM cases; 1.14 victims were wounded on average in the LCM gunshot cases and 1.06 in the non-LCM gunshot cases; and LCM gunshot victims had 1.14 wound on average, which, contrary to expectations, was less than the 1.47 average for other gunshot victims.

The compilation of mass shooting incidents cited in Table 9-1 had tentative shots fired estimates for 3 of the AW-LCM cases and 4 of the other cases. The AW-LCM cases averaged 93 shots per incident, a figure two and a half times greater than the 36.5 shot average for the other cases.

Finally, another study of firearm mass murders found that the average number of victims killed (tallies did not include others wounded) was 6 in AW cases and 4.5 in other cases (Roth and Koper, 1997, Appendix A). Only 2 of the 52 cases studied clearly involved AWs (or very similar guns). However, the make and model of the firearm were available for only eight cases, so additional incidents may have involved LCMs; in fact, at least 35% of the cases involved unidentified semiautomatics. (For those cases in which at least the gun type and firing action were known, semiautomatics outnumbered non-semiautomatics by 6 to 1, perhaps suggesting that semiautomatics are used disproportionately in mass murders.)

9.2.1. Will a 10-Round Magazine Limit Reduce Gunshot Victimizations?

Specific data on shots fired in gun attacks are quite fragmentary and often inferred indirectly, but they suggest that relatively few attacks involve more than 10 shots fired.¹⁰⁵ Based on national data compiled by the FBI, for example, there were only about 19 gun murder incidents a year involving four or more victims from 1976 through 1995 (for a total of 375) (Fox and Levin, 1998, p. 435) and only about one a year involving six or more victims from 1976 through 1992 (for a total of 17) (Kleck, 1997, p. 126). Similarly, gun murder victims are shot two to three times on average according to a number of sources (see Table 9-2 and Koper and Roth, 2001a), and a study at a Washington, DC trauma center reported that only 8% of all gunshot victims treated from 1988 through 1990 had five or more wounds (Webster et al., 1992, p. 696).

However, counts of victims hit or wounds inflicted provide only a lower bound estimate of the number of shots fired in an attack, which could be considerably higher in light of the low hit rates in gunfire incidents (see above).¹⁰⁶ The few available studies on shots fired show that assailants fire less than four shots on average (see sources in Table 9-1 and Goehl, 1993), a number well within the 10-round magazine limit imposed by the AW-LCM ban, but these studies have not usually presented the full distribution of shots fired for all cases, so it is usually unclear how many cases, if any, involved more than 10 shots.

An exception is the aforementioned study of handgun murders and assaults in Jersey City (Reedy and Koper, 2003). Focusing on cases for which at least the type of handgun (semiautomatic, revolver, derringer) could be determined, 2.5% of the gunfire cases involved more than 10 shots.¹⁰⁷ These incidents – all of which involved pistols – had a 100% injury rate and accounted for 4.7% of all gunshot victims in the sample (see Figure 9-2). Offenders fired a total of 83 shots in these cases, wounding 7 victims, only 1 of whom was wounded more than once. Overall, therefore, attackers fired over 8 shots

¹⁰⁵ Although the focus of the discussion is on attacks with more than 10 shots fired, a gun user with a postban 10-round magazine can attain a firing capacity of 11 shots with many semiautomatics by loading one bullet into the chamber before loading the magazine.

¹⁰⁶ As a dramatic example, consider the heavily publicized case of Amadou Diallo, who was shot to death by four New York City police officers just a few years ago. The officers in this case fired upon Diallo 41 times but hit him with only 19 shots (a 46% hit rate), despite his being confined in a vestibule. Two of the officers reportedly fired until they had emptied their 16-round magazines, a reaction that may not be uncommon in such high-stress situations. In official statistics, this case will appear as having only one victim.

¹⁰⁷ The shots fired estimates were based on reported gunshot injuries, physical evidence (for example, shell casings found at the scene), and the accounts of witnesses and actors. The 2.5% figure is based on minimum estimates of shots fired. Using maximum estimates, 3% of the gunfire incidents involved more than 10 shots (Reedy and Koper, 2003, p. 154).

A caveat to these figures is that the federal LCM ban was in effect for much of the study period (which spanned January 1992 to November 1996), and a New Jersey ban on magazines with more than 15 rounds predated the study period. It is thus conceivable that these laws reduced attacks with LCM guns and attacks with more than 10 shots fired, though it seems unlikely that the federal ban had any such effect (see the analyses of LCM use presented in the previous chapter). Approximately 1% of the gunfire incidents involved more than 15 shots.

for every wound inflicted, suggesting that perhaps fewer persons would have been wounded had the offenders not been able to fire as often.¹⁰⁸

Figure 9-2. Attacks With More Than 10 Shots Fired Jersey City Handgun Attacks, 1992-1996
2.5% - 3% of gunfire incidents involved 11+ shots

3.6% - 4.2% of semiauto pistol attacks

100% injury rate

- Produced 4.7% of all gunshot wound victims
- 8.3 shots per gunshot wound

Caution is warranted in generalizing from these results because they are based on a very small number of incidents (6) from one sample in one city. Further, it is not known if the offenders in these cases had LCMs (gun model and magazine information was very limited); they may have emptied small magazines, reloaded, and continued firing. But subject to these caveats, the findings suggest that the ability to deliver more than 10 shots without reloading may be instrumental in a small but non-trivial percentage of gunshot victimizations.

On the other hand, the Jersey City study also implies that eliminating AWs and LCMs might only reduce gunshot victimizations by up to 5%. And even this estimate is probably overly optimistic because the LCM ban cannot be expected to prevent all incidents with more than 10 shots. Consequently, any effects from the ban (should it be extended) are likely to be smaller and perhaps quite difficult to detect with standard statistical methods (see Koper and Roth, 2001a), especially in the near future, if recent patterns of LCM use continue.

9.3. Post-Ban Trends in Lethal and Injurious Gun Violence

Having established some basis for believing the AW-LCM ban could have at least a small effect on lethal and injurious gun violence, is there any evidence of such an effect to date? Gun homicides plummeted from approximately 16,300 in 1994 to 10,100 in 1999, a reduction of about 38% (see the Federal Bureau of Investigation's *Uniform Crime*

Based on data reported by Reedy and Koper (2003). Injury statistics based on the 2.5% of cases involving 11+ shots by minimum estimate.

¹⁰⁸ These figures are based on a supplemental analysis not contained in the published study. We thank Darin Reedy for this analysis.

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Reports). Likewise, non-fatal, assaultive gunshot injuries treated in hospitals nationwide declined one-third, from about 68,400 to under 46,400, between 1994 and 1998 (Gotsch et al., 2001, pp. 23-24). Experts believe numerous factors contributed to the recent drop in these and other crimes, including changing drug markets, a strong economy, better policing, and higher incarceration rates, among others (Blumstein and Wallman, 2000). Attributing the decline in gun murders and shootings to the AW-LCM ban is problematic, however, considering that crimes with LCMs appear to have been steady or rising since the ban. For this reason, we do not undertake a rigorous investigation of the ban's effects on gun violence.¹⁰⁹

But a more casual assessment shows that gun crimes since the ban have been no less likely to cause death or injury than those before the ban, contrary to what we might expect if crimes with AWs and LCMs had both declined. For instance, the percentage of violent gun crimes resulting in death has been very stable since 1990 according to national statistics on crimes reported to police (see Figure 9-1 in section 9.1).¹¹⁰ In fact, the percentage of gun crimes resulting in death during 2001 and 2002 (2.94%) was slightly higher than that during 1992 and 1993 (2.9%).

Similarly, neither medical nor criminological data sources have shown any postban reduction in the percentage of crime-related gunshot victims who die. If anything, this percentage has been higher since the ban, a pattern that could be linked in part to more multiple wound victimizations stemming from elevated levels of LCM use. According to medical examiners' reports and hospitalization estimates, about 20% of gunshot victims died nationwide in 1993 (Gotsch et al., 2001). This figure rose to 23% in 1996, before declining to 21% in 1998 (Figure 9-3).¹¹¹ Estimates derived from the Uniform Crime Reports and the Bureau of Justice Statistics' annual National Crime Victimization Survey follow a similar pattern from 1992 to 1999 (although the ratio of fatal to non-fatal cases is much higher in these data than that in the medical data) and also show a considerable increase in the percentage of gunshot victims who died in 2000 and 2001 (Figure 9-3).¹¹² Of course, changes in offender behavior or other changes in crime

¹⁰⁹ In our prior study (Koper and Roth 2001a; Roth and Koper, 1997, Chapter 6), we estimated that gun murders were about 7% lower than expected in 1995 (the first year after the ban), adjusting for pre-existing trends. However, the very limited post-ban data available for that study precluded a definitive judgment as to whether this drop was statistically meaningful (see especially Koper and Roth, 2001a). Furthermore, that analysis was based on the assumption that crimes with both AWs and LCMs had dropped in the short-term aftermath of the ban, an assumption called into question by the findings of this study. It is now more difficult to credit the ban with any of the drop in gun murders in 1995 or anytime since. We did not update the gun murder analysis because interpreting the results would be unavoidably ambiguous. Such an investigation will be more productive after demonstrating that the ban has reduced crimes with both AWs and LCMs.

¹¹⁰ The decline in this figure during the 1980s was likely due in part to changes in police reporting of aggravated assaults in recent decades (Blumstein, 2000). The ratio of gun murders to gun robberies rose during the 1980s, then declined and remained relatively flat during the 1990s.

¹¹¹ Combining homicide data from 1999 with non-fatal gunshot estimates for 2000 suggests that about 20% of gunshot victimizations resulted in death during 1999 and 2000 (Simon et al., 2002).

¹¹² The SHR/NCVS estimates should be interpreted cautiously because the NCVS appears to undercount non-fatal gunshot wound cases by as much as two-thirds relative to police data, most likely because it fails to represent adequately the types of people most likely to be victims of serious crime (i.e., young urban males who engage in deviant lifestyles) (Cook, 1985). Indeed, the rate of death among gunshot victims

weaponry (such as an increase in shootings with large caliber handguns) may have influenced these trends. Yet is worth noting that multiple wound shootings were elevated over pre-ban levels during 1995 and 1996 in four of five localities examined during our first AW study, though most of the differences were not statistically significant (Table 9-4, panels B through E).

Another potential indicator of ban effects is the percentage of gunfire incidents resulting in fatal or non-fatal gunshot victimizations. If attacks with AWs and LCMs result in more shots fired and victims hit than attacks with other guns and magazines, we might expect a decline in crimes with AWs and LCMs to reduce the share of gunfire incidents resulting in victims wounded or killed. Measured nationally with UCR and NCVS data, this indicator was relatively stable at around 30% from 1992 to 1997, before rising to about 40% from 1998 through 2000 (Figure 9-4).¹¹³ Along similar lines, multiple victim gun homicides remained at relatively high levels through at least 1998, based on the national average of victims killed per gun murder incident (Table 9-4, panel A).¹¹⁴

appears much higher in the SHR/NCVS series than in data compiled from medical examiners and hospitals (see the CDC series in Figure 9-3). But if these biases are relatively consistent over time, the data may still provide useful insights into trends over time. ¹¹³ The NCVS estimates are based on a compilation of 1992-2002 data recently produced by the Inter-

¹¹³ The NCVS estimates are based on a compilation of 1992-2002 data recently produced by the Inter-University Consortium for Political and Social Research (ICPSR study 3691). In 2002, only 9% of nonfatal gunfire incidents resulted in gunshot victimizations. This implies a hit rate for 2002 that was below pre-ban levels, even after incorporating gun homicide cases into the estimate. However, the 2002 NCVS estimate deviates quite substantially from earlier years, for which the average hit rate in non-fatal gunfire incidents was 24% (and the estimate for 2001 was 20%). Therefore, we did not include the 2002 data in our analysis. We used two-year averages in Figures 9-3 and 9-4 because the annual NCVS estimates are based on very small samples of gunfire incidents. The 2002 sample was especially small, so it seems prudent to wait for more data to become available before drawing conclusions about hit rates since 2001. ¹¹⁴ We thank David Huffer for this analysis.

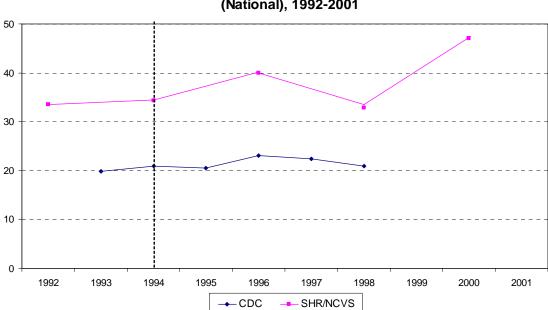


Figure 9-3. Percentage of Gunshot Victimizations Resulting in Death (National), 1992-2001

SHR/NCVS series based on two-year averages from the Supplemental Homicide Reports and National Crime Victimization Survey. CDC series based on homicide and hospitalization data from the Centers for Disease Control (reported by Gotsch et al. 2001).

Measure and Location	Pre-Ban Period	Post-Ban Period	Change
A. Victims Per Gun Homicide Incident (National)	Jan. 1986-Sept. 1994 1.05 (N=106,668)	Oct. 1994-Dec. 1998 1.06 (N=47,511)	1%**
B. Wounds per Gun Homicide Victim: Milwaukee County	Jan. 1992-Aug. 1994 2.28 (N=282)	Sept. 1994-Dec. 1995 2.52 (N=136)	11%
C. Wounds Per Gun Homicide Victim: Seattle (King County)	Jan. 1992-Aug. 1994 2.08 (N=184)	Sept. 1994-Jun. 1996 2.46 (N=91)	18%
D. Wounds Per Gunshot Victim: Jersey City (NJ)	Jan. 1992-Aug. 94 1.42 (N=125)	Sept. 1994-Jun. 1996 1.39 (N=137)	-2%
E. % of Gun Homicide Victims With Multiple Wounds: San Diego County	Jan. 1992-Aug. 1994 41% (N=445)	Sept. 1994-Jun. 1996 43% (N=223)	5%
F. % of Non-Fatal Gunshot Victims With Multiple Wounds: Boston	Jan. 1992-Aug. 1994 18% (N=584)	Sept. 1994-Dec. 1995 24% (N=244)	33%*

Table 9-4. Short-Term, Post-Ban Changes in the Lethality and Injuriousness of Gun Violence: National and Local Indicators, 1994-1998 ^a

a. National victims per incident figures based on unpublished update of analysis reported in Roth and Koper (1997, Chapter 5). Gunshot wound data are taken from Roth and Koper (1997, Chapter 6) and Koper and Roth (2001a). Wound data are based on medical examiners' reports (Milwaukee, Seattle, San Diego), hospitalization data (Boston), and police reports (Jersey City).

* Chi-square p level < .1.

** T-test p level < .01.

If anything, therefore, gun attacks appear to have been more lethal and injurious since the ban. Perhaps elevated LCM use has contributed to this pattern. But if this is true, then the reverse would also be true - a reduction in crimes with LCMs, should the ban be extended, would reduce injuries and deaths from gun violence.

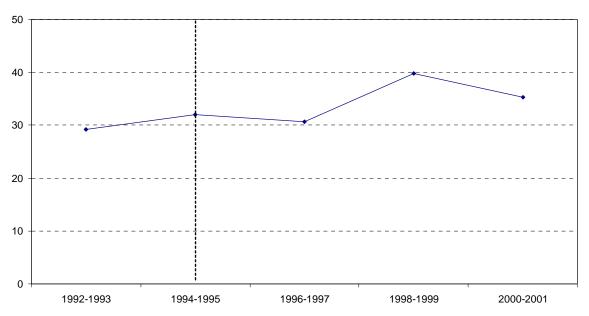


Figure 9-4. Percentage of Gunfire Cases Resulting in Gunshot Victimizations (National), 1992-2001

Based on two-year averages from the Supplemental Homicide Reports and National Crime Victimization Survey.

9.4. Summary

Although the ban has been successful in reducing crimes with AWs, any benefits from this reduction are likely to have been outweighed by steady or rising use of nonbanned semiautomatics with LCMs, which are used in crime much more frequently than AWs. Therefore, we cannot clearly credit the ban with any of the nation's recent drop in gun violence. And, indeed, there has been no discernible reduction in the lethality and injuriousness of gun violence, based on indicators like the percentage of gun crimes resulting in death or the share of gunfire incidents resulting in injury, as we might have expected had the ban reduced crimes with both AWs and LCMs.

However, the grandfathering provision of the AW-LCM ban guaranteed that the effects of this law would occur only gradually over time. Those effects are still unfolding and may not be fully felt for several years into the future, particularly if foreign, pre-ban LCMs continue to be imported into the U.S. in large numbers. It is thus premature to make definitive assessments of the ban's impact on gun violence.

Having said this, the ban's impact on gun violence is likely to be small at best, and perhaps too small for reliable measurement. AWs were used in no more than 8% of gun crimes even before the ban. Guns with LCMs are used in up to a quarter of gun crimes, but it is not clear how often the outcomes of gun attacks depend on the ability to fire more than 10 shots (the current limit on magazine capacity) without reloading.

Nonetheless, reducing crimes with AWs and especially LCMs could have nontrivial effects on gunshot victimizations. As a general matter, hit rates tend to be low in gunfire incidents, so having more shots to fire rapidly can increase the likelihood that offenders hit their targets, and perhaps bystanders as well. While not entirely consistent, the few available studies contrasting attacks with different types of guns and magazines generally suggest that attacks with semiautomatics – including AWs and other semiautomatics with LCMs – result in more shots fired, persons wounded, and wounds per victim than do other gun attacks. Further, a study of handgun attacks in one city found that about 3% of gunfire incidents involved more than 10 shots fired, and those cases accounted for nearly 5% of gunshot victims. However, the evidence on these matters is too limited (both in volume and quality) to make firm projections of the ban's impact, should it be reauthorized.

10. LOOKING TO THE FUTURE: RESEARCH RECOMMENDATIONS AND SPECULATION ABOUT THE CONSEQUENCES OF REAUTHORIZING, MODIFYING, OR LIFTING THE ASSAULT WEAPONS BAN

In this chapter, we discuss future lines of inquiry that would be informative whether or not the AW-LCM ban is renewed in September 2004. We then offer some brief thoughts about the possible consequences of reauthorizing the ban, modifying it, or allowing it to expire.

10.1. Research Recommendations and Data Requirements

10.1.1. An Agenda for Assault Weapons Research and Recommendations for Data Collection by Law Enforcement

The effects of the AW-LCM ban have yet to be fully realized; therefore, we recommend continued study of trends in the availability and criminal use of AWs and LCMs. Even if the ban is lifted, longer-term study of crimes with AWs and LCMs will inform future assessment of the consequences of these policy shifts and improve understanding of the responses of gun markets to gun legislation more generally.¹¹⁵

Developing better data on crimes with LCMs is especially important. To this end, we urge police departments and their affiliated crime labs to record information about magazines recovered with crime guns. Further, we recommend that ATF integrate ammunition magazine data into its national gun tracing system and encourage reporting of magazine data by police departments that trace firearms.

As better data on LCM use become available, more research is warranted on the impacts of AW and LCM trends (which may go up or down depending on the ban's fate) on gun murders and shootings, as well as levels of death and injury per gun crime. Indicators of the latter, such as victims per gunfire incident and wounds per gunshot victim, are useful complementary outcome measures because they reflect the mechanisms through which use of AWs and LCMs is hypothesized to affect gun deaths and injuries.¹¹⁶ Other potentially promising lines of inquiry might relate AW and LCM use to mass murders and murders of police, crimes that are very rare but appear more likely to involve AWs (and perhaps LCMs) and to disproportionately affect public perceptions.¹¹⁷

¹¹⁵ Establishing time series data on primary and secondary market prices and production or importation of various guns and magazines of policy interest could provide benefits for policy researchers. Like similar statistical series maintained for illegal drugs, such price and production series would be valuable instruments for monitoring effects of policy changes and other influences on markets for various weapons.

¹¹⁶ However, more research is needed on the full range of factors that cause variation in these indicators over time and between places.

¹¹⁷ Studying these crimes poses a number of challenges, including modeling of rare events, establishing the reliability and validity of methods for measuring the frequency and characteristics of mass murders (such as through media searchers; see Duwe, 2000, Roth and Koper, 1997, Appendix A), and controlling for factors like the use of bullet-proof vests by police.

Finally, statistical studies relating AW and LCM use to trends in gun violence should include statistical power analysis to ensure that estimated models have sufficient ability to detect small effects, an issue that has been problematic in some of our prior time series research on the ban (Koper and Roth, 2001a) and is applicable more generally to the study of modest, incremental policy changes.

Research on aggregate trends should be complemented by more incident-based studies that contrast the dynamics and outcomes of attacks with different types of guns and magazines, while controlling for relevant characteristics of the actors and situations. Such studies would refine predictions of the change in gun deaths and injuries that would follow reductions in attacks with AWs and LCMs. For instance, how many homicides and injuries involving AWs and LCMs could be prevented if offenders were forced to substitute other guns and magazines? In what percentage of gun attacks does the ability to fire more than ten rounds without reloading affect the number of wounded victims or determine the difference between a fatal and non-fatal attack? Do other AW features (such as flash hiders and pistol grips on rifles) have demonstrable effects on the outcomes of gun attacks? Studies of gun attacks could draw upon police incident reports, forensic examinations of recovered guns and magazines, and medical and law enforcement data on wounded victims.

10.1.2. Studying the Implementation and Market Impacts of Gun Control

More broadly, this study reiterates the importance of examining the implementation of gun policies and the workings of gun markets, considerations that have been largely absent from prior research on gun control. Typical methods of evaluating gun policies involve statistical comparisons of total or gun crime rates between places and/or time periods with and without different gun control provisions. Without complimentary implementation and market measures, such studies have a "black box" quality and may lead to misleading conclusions. For example, a time series study of gun murder rates before and after the AW-LCM ban might find that the ban has not reduced gun murders. Yet the interpretation of such a finding would be ambiguous, absent market or implementation measures. Reducing attacks with AWs and LCMs may in fact have no more than a trivial impact on gun deaths and injuries, but any such impact cannot be realized or adequately assessed until the availability and use of the banned guns and magazines decline appreciably. Additionally, it may take many years for the effects of modest, incremental policy changes to be fully felt, a reality that both researchers and policy makers should heed. Similar implementation concerns apply to the evaluation of various gun control policies, ranging from gun bans to enhanced sentences for gun offenders.

Our studies of the AW ban have shown that the reaction of manufacturers, dealers, and consumers to gun control policies can have substantial effects on demand and supply for affected weapons both before and after a law's implementation. It is important to study these factors because they affect the timing and form of a law's impact on the availability of weapons to criminals and, by extension, the law's impact on gun violence.

10.2. Potential Consequences of Reauthorizing, Modifying, or Lifting the Assault Weapons Ban

10.2.1. Potential Consequences of Reauthorizing the Ban As Is

Should it be renewed, the ban might reduce gunshot victimizations. This effect is likely to be small at best and possibly too small for reliable measurement. A 5% reduction in gunshot victimizations is perhaps a reasonable upper bound estimate of the ban's potential impact (based on the only available estimate of gunshot victimizations resulting from attacks in which more than 10 shots were fired), but the actual impact is likely to be smaller and may not be fully realized for many years into the future, particularly if pre-ban LCMs continue to be imported into the U.S. from abroad. Just as the restrictions imposed by the ban are modest – they are essentially limits on weapon accessories like LCMs, flash hiders, threaded barrels, and the like – so too are the potential benefits.¹¹⁸ In time, the ban may be seen as an effective prevention measure that stopped further spread of weaponry considered to be particularly dangerous (in a manner similar to federal restrictions on fully automatic weapons). But that conclusion will be contingent on further research validating the dangers of AWs and LCMs.

10.2.2. Potential Consequences of Modifying the Ban

We have not examined the specifics of legislative proposals to modify the AW ban. However, we offer a few general comments about the possible consequences of such efforts, particularly as they relate to expanding the range of the ban as some have advocated (Halstead, 2003, pp. 11-12).

¹¹⁸ But note that although the ban's impact on gunshot victimizations would be small in percentage terms and unlikely to have much effect on the public's fear of crime, it could conceivably prevent hundreds of gunshot victimizations annually and produce notable cost savings in medical care alone. To help place this in perspective, there were about 10,200 gun homicides and 48,600 non-fatal, assault-related shootings in 2000 (see the FBI's Uniform Crime Reports for the gun homicide estimate and Simon et al. [2002] for the estimate of non-fatal shootings). Reducing these crimes by 1% would have thus prevented 588 gunshot victimizations in 2000 (we assume the ban did not actually produce such benefits because the reduction in AW use as of 2000 was outweighed by steady or rising levels of LCM use). This may seem insubstantial compared to the 342,000 murders, assaults, and robberies committed with guns in 2000 (see the Uniform Crime Reports). Yet, gunshot victimizations are particularly costly crimes. Setting aside the less tangible costs of lost lives and human suffering, the lifetime medical costs of assault-related gunshot injuries (fatal and non-fatal) were estimated to be about \$18,600 per injury in 1994 (Cook et al., 1999). Therefore, the lifetime costs of 588 gun homicides and shootings would be nearly \$11 million in 1994 dollars (the net medical costs could be lower for reasons discussed by Cook and Ludwig [2000] but, on the other hand, this estimate does not consider other governmental and private costs that Cook and Ludwig attribute to gun violence). This implies that small reductions in gunshot victimizations sustained over many years could produce considerable long-term savings for society. We do not wish to push this point too far, however, considering the uncertainty regarding the ban's potential impact.

Gun markets react strongly merely to debates over gun legislation. Indeed, debate over the AW ban's original passage triggered spikes upwards of 50% in gun distributors' advertised AW prices (Roth and Koper, 1997, Chapter 4). In turn, this prompted a surge in AW production in 1994 (Chapter 5). Therefore, it seems likely that discussion of broadening the AW ban to additional firearms would raise prices and production of the weapons under discussion. (Such market reactions may already be underway in response to existing proposals to expand the ban, but we have not investigated this issue.) Heightened production levels could saturate the market for the weapons in question, depressing prices and delaying desired reductions in crimes with the weapons, as appears to have happened with banned ARs.

Mandating further design changes in the outward features of semiautomatic weapons (e.g., banning weapons having any military-style features) may not produce benefits beyond those of the current ban. As noted throughout this report, the most important feature of military-style weapons may be their ability to accept LCMs, and this feature has been addressed by the LCM ban and the LCMM rifle ban. Whether changing other features of military-style firearms will produce measurable benefits is unknown.

Finally, curbing importation of pre-ban LCMs should help reduce crimes with LCMs and possibly gunshot victimizations. Crimes with LCMs may not decline substantially for quite some time if millions of LCMs continue to be imported into the U.S.

10.2.3. Potential Consequences of Lifting the Ban

If the ban is lifted, it is likely that gun and magazine manufacturers will reintroduce AW models and LCMs, perhaps in substantial numbers.¹¹⁹ In addition, AWs grandfathered under the 1994 law may lose value and novelty, prompting some of their lawful owners to sell them in secondary markets, where they may reach criminal users. Any resulting increase in crimes with AWs and LCMs might increase gunshot victimizations, though this effect could be difficult to discern statistically.

It is also possible, and perhaps probable, that new AWs and LCMs will eventually be used to commit mass murder. Mass murders garner much media attention, particularly when they involve AWs (Duwe, 2000). The notoriety likely to accompany mass murders if committed with AWs and LCMs, especially after these guns and magazines have been deregulated, could have a considerable negative impact on public perceptions, an effect that would almost certainly be intensified if such crimes were committed by terrorists operating in the U.S.

¹¹⁹ Note, however, that foreign semiautomatic rifles with military features, including the LCMM rifles and several rifles prohibited by the 1994 ban, would still be restricted by executive orders passed in 1989 and 1998. Those orders stem from the sporting purposes test of the Gun Control Act of 1968.

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AN ECONOMIC ANALYSIS OF GUNS, CRIME, AND GUN CONTROL

JOHN F. McDonald

Departments of Economics and Finance University of Illinois at Chicago Chicago, Illinois 60607

ABSTRACT

A model is posited in which guns are demanded for recreation, self-protection, or criminal purposes, and in which crime is supplied. Crime rates influence guns demanded for self-protection, and guns demanded by criminals depend upon guns held by law-abiding citizens. Comparative static analysis was used to investigate the effects of crime and gun control policies, including laws that permit citizens to carry concealed handguns for self-protection. © 1999 Elsevier Science Ltd. All rights reserved.

INTRODUCTION

The news that criminals are becoming increasingly well armed, coupled with the television images of storekeepers defending their property with firearms in hand, has motivated economists and other policy analysts to increase their efforts to understand the market for deadly weapons and the related criminal activity. The purpose of this article is to formulate an economic model of guns, crime, and gun control measure. A great deal of empirical research has been conducted on firearms, violence, and gun control (e.g., Kates, 1984; Kleck, 1984, 1991, 1995; Kleck and Patterson, 1993; Lott and Mustard, 1997; Wright, Rossi, and Daly, 1983), but this is one of the first attempts at formal modeling. The goals of this modeling effort are to set out a simple set of equations that captures the primary features of the policy debate, and then use them to examine the likely effects of changes in crime and gun control policy on crime rates and gun ownership. The model is expressed using the conventional mathematics of economics.

The Centers for Disease Control and Prevention report that there were 35,957 deaths in the United States in 1995 by firearms, which was an increase of 13.8 percent over the total of 31,606 for 1985 as reported by Kleck (1991). Some 51.5 percent of the deaths in 1995 were suicides, and 44 percent were homicides. Accidental deaths were 3.4 percent of the total, and the remaining 1.1 percent were of unknown causes. Of the 19,645 homicides in total, 67.8 percent were committed with firearms. The Bureau of Alcohol, Tobacco, and Firearms (ATF) estimated that there were 228 million guns in civilian hands in the United States in 1995, or 877 per 1,000 population (including children). In other words, it is estimated that there is more than one gun per adult in private hands in the United States. With so many guns in private hands, perhaps it is remarkable that there are not more shootings. As it is, in 1995 there were fifteen deaths per 100,000 guns. The U.S. death rate by firearms was 13.7 per 100,000 persons in 1995, compared to 1.47 in Germany and .07 in Japan.

One motivating factor for this study was the empirical study by Lott and Mustard (1997) of the effects of state laws giving citizens the right to carry concealed handguns. The expansion of the right of citizens to carry concealed guns is notable. Lott and Mustard (1997:4) pointed out that, in 1986, nine states had "... laws requiring authorities to issue, without discretion, concealedweapons permits to qualified applicants." Another fourteen states had laws permitting local discretion with regard to the issuing of such permits. By 1996, the number states with right-tocarry laws had increased by twenty-two (from nine to thirty-one). Only two of these twentytwo states (Louisiana and South Carolina) previously had a law permitting local discretion. It is obvious that many legislators around the nation think that right-to-carry laws will deter crime.

Lott and Mustard (1997) performed the most extensive empirical tests to date of the effects of laws regulating gun ownership on crime rates. Their main findings were that the right of qualified citizens to carry concealed weapons reduced violent crimes (murder, rape, aggravated assault, and robbery), increased nonviolent property crimes (larceny and auto theft), and had no effect on accidental deaths. These findings were based on county-level annual data for the entire nation from 1977 to 1992. In addition, data from counties in Pennsylvania showed that the increase in the number of right-to-carry pistol permits (after the passage of the law in 1988) was associated with lower rates of murder, rape, and aggravated assault. No statistically significant effects on other crime rates were found. Similar tests using permit data for Oregon and Arizona produced inconclusive results. Lott and Mustard (1997) also found that the arrest rate for a particular type of crime was strongly negatively related to that crime rate. The effects hypothesized by Lott and Mustard (1997) were incorporated into the model developed in this study.

The plan of the study was: (1) to discuss the demand for guns for recreational use, self-protection, and criminal intent; and (2) the connections between guns and premeditated and unpremeditated crimes, accidents, and suicides. The model consists of five equations: three gun demand equations and two "crime" equations. Comparative static analysis of the basic model is then used to examine the effects of crime and gun control policies on gun demand and crime.

DEMAND FOR GUNS

The market under consideration is the market for "guns"—implements of deadly force that do not require that the user be in close proximity to the intended victim. Guns are very effective at forcing victim compliance when a crime is being committed, but guns are also used for recreational and self-protection purposes. Balkin and McDonald (1984) and Polsby and Brennen (1995) provide a more extensive and elementary discussion of the demand for guns for these three uses.

People who demand guns for recreational purposes can be assumed to maximize a utility function which includes the pertinent form of recreation as one of the goods. Recreation is "produced" by combining guns and other purchased inputs with recreational time. Maximization of the utility function subject to income and time constraints produces a demand function (Equation 1):

$$G_r = G_r(Y, P, L_r, T), \qquad (1)$$

where G_r is guns for recreational purposes, Y is income, P is the price of guns, L_r is a variable that measures the restrictiveness of the laws regarding possession of guns for recreational purposes, and T is the time budget for nonwork activities. Assume that P and L_r have negative effects on G_r .

Guns are also an input into the production of

self-protection. The empirical research reviewed by Kleck (1991:ch. 4) and Lott and Mustard (1997) indicates strongly that many individuals purchase guns for self-protection, and that criminals have reported being thwarted on occasion by guns owned by potential victims. Self-protection can be produced by guns and other purchased inputs such as locks and other weapons, and by the use of time for avoiding risky situations or investing in self-defense courses. The formal analysis is essentially the same as in the case of recreational demand, except that the demand for self-protection is a function of crime. The demand for guns for self-protection can be expressed as in Equation 2:

$$G_{s} = G_{s}(Y, P, L_{s}, C, T), \qquad (2)$$

where G_s is guns for self-protection, L_s is a measure of the restrictiveness of the law governing the possession of guns for self-protection, and C is a crime rate (or vector of crime rates). In particular, passage of a right-to-carry law as discussed above is a reduction in the restrictiveness of the gun laws. Assume that P and L_s have negative effects and C has a positive effect on G_s .

A critical issue in the modeling of guns and crime is whether the demand for guns for selfprotection is also a function of guns possessed by criminals. Empirical evidence supports the hypothesis that crime rates influence the demand for guns (especially handguns) for selfprotection (Kleck, 1991:ch. 4; Wright, Rossi, and Daly, 1983:ch. 5). It is not known if there is a study that has determined whether, at given crime rates, the greater use of guns by criminals is an independent factor in the demand for guns for self-protection. Casual arguments can be made on both sides of the issue. It may be that potential victims have no desire to engage in gunplay with criminals, and so the use of guns by criminals (at given crime rates) has little or no effect on guns demanded for self-protection. On the other hand, potential victims may feel that, if more criminals are using guns, crime deterrence depends more heavily on owning a gun. The implications of such a domestic "arms race" will be examined, using a standard notion of an arms race-where nations engaged in an arms race are stimulated by the weapons possessed by the other side, even if those weapons are never used.

The criminal segment of demand consists of those persons who would use guns in the commission of crimes such as robbery, burglary, and premeditated murder. Such persons earn some or all of their livelihoods through crime. Assume that the criminal produces income by combining time spent in the planning and perpetration of crimes with purchased inputs such as guns and other tools of the trade, and for simplicity, also assume that criminals are neutral to risk. The offender has the utility function (Equation 3):

$$U = U[E(Y), L], \qquad (3)$$

where E(Y) is the expected value of income and L is leisure time. The offender maximizes utility subject to a time constraint. The expected value of income per time period is represented in Equation 4:

$$E(Y) = (1 - J - S)Y_c + J(Y_c - F), \qquad (4)$$

where *J* is the probability of apprehension and punishment, *S* is the probability of encountering an intended victim with a gun, *F* is the value of punishment suffered for commission of a crime, and Y_c is criminal "net" income (gross income from crime minus expenses, which include money spent on guns). The term (1 - J - S) is the probability that the criminal will be successful in the commission of the crime and will escape apprehension. Equation 4 includes the assumption that the criminal gains no income when meeting a potential victim who is armed with a gun. This simple theory of criminal behavior leads to the demand function for guns (Equation 5):

$$G_c = G_c(P, F_g, S, J, F, T),$$
 (5)

where G_c is guns for criminal purposes, and F_g is the penalty for using a gun in the commission of a crime. Assume that P, F_g , J, and F all have negative effects and that S has a positive effect on G_c .

The probability of encountering an armed intended victim, *S*, (Equation 6) is a function of guns held by the citizenry and of the restrictiveness of the laws governing the possession of guns for self-protection, or:

$$S = S(G_r, G_s, L_s).$$
(6)

This equation implies that—holding the number of guns possessed by citizens constant—reducing the restrictiveness of the gun laws (reducing L_s) will increase directly the probability that a criminal will encounter an armed intended victim. This specification is consistent with the passage of a right-to-carry law which will increase the likelihood that a citizen who owns a gun will be carrying it. As indicated prior, it is also assumed that a reduction in L_s will increase G_s because guns owned for self-protection are now more "productive" in providing self-protection. For future reference, the partial derivatives of Equation 6 with respect to G_r , G_s , and L_s are S_r , S_s , and S_L , respectively.

A reading of Kleck (1991) and Wright, Rossi, and Daly (1983) reveals that evidently there are no studies, of the demand for guns by criminals, that would shed light on the question of whether S influences G_c . Guns are very effective at forcing compliance by an unarmed victim, but encountering an armed potential victim is another matter. The proposition embodied in the model in Equation 4 is that the criminal cannot force the compliance of an armed victim. The proposition that S has a positive effect on G_c is based on the notion that an unarmed criminal does not wish to encounter an armed potential victim. An armed criminal confronting an armed potential victim creates a standoff in which the crime is not completed.

GUNS AND CRIME

It is assumed that there are two crimes of interest: intentional premeditated crimes committed by offenders (C_1) ; and unpremeditated crimes of violence, accidents, and suicides, which can be committed by anyone with a gun (C_2) . Crimes of type C_1 are supplied according to the conventional Becker (1968) supply-ofcrime function (Equation 7):

$$C_1 = C_1[P, F_g, F, J, S(G_r, G_s, L_s)].$$
(7)

where C_1 is a negative function of F and J as in Becker's model, and C_1 is also a negative function of P (price of guns) and F_g (expected penalty for illegal possession of a gun) because they increase the cost, G_c , an input into the production of crime. Note also that C_1 is influenced negatively by G_r and G_s and positively by L_s because of their effects on S, the probability of encountering an armed intended victim.

The empirical studies of gun availability and crime reviewed by Kleck (1991) and Wright, Rossi, and Daly (1983) generally show that variations in gun availability are not related to variations in crime rates. These studies did not make a distinction between guns available to criminals and guns owned by potential victims. Equation 7 suggests that guns available to criminals and guns owned by potential victims may indeed have offsetting effects on crime rates. Lott and Mustard (1997:55) presented evidence on this point by showing that, in the case of counties in Pennsylvania, increases in guns owned for self-protection were associated with lower violent crime rates.

Crimes and accidents of type C_2 are determined simply by Equation 8:

$$C_2 = C_2(G_r, G_s, G_c).$$
(8)

All guns potentially could be used in unpremeditated crimes, cause accidents, or be used for suicide, though the magnitude of the effects represented in Equation 8 are much in dispute. For example, Kleck (1991) argued that suicide victims are serious about their intentions and would use other means in the absence of an available gun. Others doubt this assertion. Kleck (1991:ch. 7) reported that there were 1,959 fatal gun accidents in the United States in 1980, including 316 children under the age of fifteen. Kleck (1991) has also estimated the total stock of guns in civilian hands in 1980 to be 167.7 million (51.7 percent handguns), so the accidental death rate for 1980 is estimated at 1.17 per 100,000 guns per year. The figures for 1985 (1995) are 1,649 (1,225) accidental deaths and 190.5 (228) million guns, or a rate of .87 (.54) deaths per 100,000 guns, indicating that accidental deaths have declined. Lott and Mustard (1997:63) found that the adoption of a right-to-carry law was not associated with a higher rate of accidental deaths from handguns during 1982–91.

COMPARATIVE STATIC ANALYSIS OF THE BASIC MODEL

The basic model presented consists of five equations: the three demand functions (Equations 1, 2, and 5) and the two supply-of-crime functions (Equations 7 and 8). In the basic version of the model, the demand for guns for self-protection is assumed to be a function of crime rates but not a function of guns held by criminals. The endogenous variables are G_r , G_s , G_c , C_1 , and C_2 . Exogenous variables are interest are P, L_s , F_g , F, and J. P, the price of guns, is taken to be exogenous—guns are elastically supplied at P. Given values of the exogenous variables, equilibrium values for gun ownership and the crime rates are assumed to exist.

The effects of various crime and gun control policies can be investigated by performing comparative static analysis of the model. Each of the five equations is totally differentiated. For example, the total differential of Equation 2 is (Equation 9):

$$dG_{s} = G_{sp}dP + G_{sL}dL_{s} + G_{s1}dC_{1}, \qquad (9)$$

where G_{sp} is the partial derivative of G_s with respect to P (the price of guns), G_{sL} is the partial derivative of G_s with respect to L_s (the restrictiveness of laws related to gun ownership for self-protection), and G_{s1} is the partial derivative of G_s with respect to the crime rate C_1 .

Total differentiation of the five-equation model produces the following system of equations written in matrix form (Equation 10):

$$\begin{bmatrix}
1 & 0 & 0 & 0 & 0 \\
0 & 1 & 0 & -G_{s1} & 0 \\
-G_{cs}S_r & -G_{cs}S_s & 1 & 0 & 0 \\
-C_{1s}S_r & -C_{1s}S_s & 0 & 1 & 0 \\
-C_{2r} & -C_{2s} & -C_{2c} & 0 & 1
\end{bmatrix}
\begin{bmatrix}
G_{rp}dP \\
G_{sp}dP + G_{sL}dL_s \\
G_{cp}dP + G_{cf}dF_g + G_{cs}S_LdL_s \\
+G_{cJ}dJ + G_{cF}dF \\
C_{1p}dP + C_{1f}dF_g + C_{1J}dJ \\
+C_{1F}dF + C_{1s}S_LdL_s \\
0
\end{bmatrix}.$$
(10)

The second subscript denotes partial derivatives with respect to the variables as follows: r for G_r , s for G_s , c for G_c , 1 for C_1 , p for P, L for L_s , f for F_g , J for J, and F for F.

Cramer's rule can be used to solve for the effects of the exogenous variables on the five endogenous variables. In each case, the denominator of the comparative statics result is equal to the determinant D of the matrix on the left-hand side of the system of equations (Equation 11), or:

$$\mathsf{D} = 1 - \mathsf{C}_{1s} S_s G_{s1} > 0.$$
(11)

The sign of G_{s1} is positive because the partial derivative is the effect of an increase in crime on guns for self-protection. S_s is positive, and C_{1s} is negative because this partial derivative is the effect of an increase in the probability of meeting an armed intended victim on the crime rate, so D > 0. It is highly unlikely that an increase in crime C_1 ultimately results in a decrease in C_1 through the effect on guns held for self-protection, so $C_{1s}S_sG_{s1}$ is less than one in absolute magnitude and D is greater than one and less than two. Additional empirical tests are needed here.

Because D is greater than one, the direct effects of policies are reduced. For example (Equation 12),

$$(dG_c/dJ = (1/D)G_{cJ}[1 - G_{s1}C_{1s}S_s + G_{cs}S_sG_{s1}C_{1J}] < 0).$$
(12)

Increasing *J*, the probability of apprehension and punishment, reduces the demand for guns by criminals directly (G_{cJ}) and indirectly through the effect of *J* on guns owned for self-protection. These effects are somewhat muted because D > 1.

The proposition tested by Lott and Mustard (1997) is that the effect of reducing L_s (the restrictiveness of laws governing ownership of guns for self-protection) is to reduce crime, C_1 . The equilibrium solution (Equation 13) is that:

$$dC_1/dL_s = (1/D)[C_{1s}(S_L + S_sG_{sL})] > 0;$$
(13)

so that reducing L_s unambiguously reduces the crime rate C_1 . The numerator of the right-hand side of Equation 13 shows that a change in L_s has two effects: one operates directly through the change in *S* (the probability of encountering an intended victim who is armed) brought about by the change in the law; and the other operates through a change in the number of guns owned for self-protection. Note once again that the effect of reducing L_s is somewhat muted by the fact that D > 1. The reduction in crime itself will somewhat reduce the demand for guns owned for self-protection.

Table 1 is a summary of the comparative statics results. Crime control policies are represented by J, the probability of apprehension and punishment, and F, the value of punishment. Increases in J and F have no effect on G_r , unambiguously reduce G_c and G_s and, hence, reduce C_2 . Their effects on C_1 are also negative. For example, see Equation 14.

$$dC_1/dJ = (1/D)C_{1J} < 0.$$
(14)

Note once again that the direct effect of increasing the probability of apprehension and punishment on crime, C_{1J} , is muted by the 1/Dterm because a reduction in crime leads to a reduction in guns owned for self-protection. Crime control policies still work to reduce crime, but this effect is scaled down in a world in which private citizens own guns for protection against crime.

Gun control policies are represented by P, L_s , and F_g , the price of guns, the restrictiveness of gun laws regarding ownership for self-protec-

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COMPARATIVE STATICS RESULTS: MODEL OF GUNS AND CRIME

	De	Dependent Variables				
Independent Variables	G _r	G_s	G_{c}	C_1	<i>C</i> ₂	
F (penalty for crime)	0	_	_	_	_	
J (probability of conviction)	0	_	_	_	_	
P (price of guns) L_s (restrictiveness of gun law	-	_*	_*	?	_*	
for self-protection) F_g (penalty for use of gun	0	?	?	+	?	
in crime)	0	-	-	_	_	

*Sign of effect is most likely negative.

tion, and the expected penalty for use of a gun in the commission of a crime. An increase in Pmay be brought about by levying a tax on guns or by making the production or sale of guns illegal. In the latter case, guns would still be available, but the market price would increase to compensate the producers and sellers for their risk of being caught violating the law. Increases in P unambiguously reduce G_r , most likely reduce G_c and G_s and, hence, most likely reduce C_2 . An element of ambiguity arises. The direct negative effects of P on G_c , G_s , and G_r , increase C_1 and hence increase G_s and G_c . It appears unlikely that this last indirect effect outweighs all of the more direct effects of P on G_c . A similar ambiguity arises in the result for dG_s/dP . The effect of P on C_1 , however, is ambiguous, and depends upon the relative sizes of the effects on G_r , G_s , and G_c . An increase in P could primarily affect the demand for guns for self-protection, and therefore lead to an increase in crime.

While the effect of reducing L_s is to reduce crime rate C_1 unambiguously, the effects on gun ownership are ambiguous. Guns owned for selfprotection tend to fall because the crime rate is lower, but permitting the carrying of a concealed gun tends to increase gun ownership. Guns owned by criminals may increase or decrease because the effect on guns owned for self-protection is ambiguous. It is possible, therefore, that the effect of right-to-carry gun laws will increase overall gun ownership as they reduce crime.

Finally, the increase in F_g unambiguously reduces C_1 . This last result suggests that gun con-

trol penalties applied only to gun use in the commission of a crime would be more effective at reducing premeditated crime, C_1 , than a general gun-control policy of increasing *P*. Increasing *F*_g reduces *G*_s and *G*_c and, hence, reduces *C*₂.

COMPARATIVE STATIC ANALYSIS OF THE "ARMS RACE" MODEL

It has been suggested that the demand for guns for self-protection might also be a function of guns held by criminals. In this case the demand for guns for self-protection becomes (Equation 15):

$$G_s = G_s(Y, P, L_s, C, G_c, T).$$
 (15)

This version of the model produces an arms race effect that does not exist in the basic version of the model described earlier.

As in the prior model, the effects of crime and gun control policies can be investigated by performing comparative static analysis of the model, which now consists of Equations 1, 5, 7, 8, and 15. Total differentiation of the five-equation model produces the following set of equations (Equation 16) in matrix form:

$$\begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & -G_{sc} & -G_{s1} & 0 \\ -G_{cr}S_r & -G_{cs}S_s & 1 & 0 & 0 \\ -C_{1r}S_r & -C_{1s}S_s & 0 & 1 & 0 \\ -C_{2r} & -C_{2r} & -C_{2c} & 0 & 1 \end{bmatrix} \begin{bmatrix} dG_r \\ dG_s \\ dG_c \\ dC_1 \\ dC_2 \end{bmatrix}$$
$$= \begin{bmatrix} G_{rp}dPg \\ G_{sp}dP + G_{sL}dL_s \\ G_{cp}dP + G_{cf}dF_g + G_{cs}S_LdL_s \\ + G_{cJ}dJ + G_{cF}dF \\ + G_{cJ}dJ + G_{cF}dF \\ C_{1p}dP + C_{1f}dF_g + C_{1J}dJ \\ + C_{1F}dF + C_{1s}S_LdL_s \\ 0 \end{bmatrix}.$$
(16)

The notation is the same as before. The only difference between this system of equations and the corresponding system for the basic model is the presence of the $-G_{sc}$ term in the matrix on the left-hand side.

Cramer's rule can again be used to solve for the effects of the exogenous variables on the five endogenous variables. In each case the denominator of the comparative statics result is equal to the determinant D of the matrix on the left-hand side of the system of equations (Equation 17), or:

$$D = 1 - (G_{sc}G_{cs}S_s + C_{1s}S_sG_{s1}).$$
(17)

Both G_{sc} and G_{cs} are presumed to be positive, but most likely the term $G_{sc}G_{cs}S_s$ is less than one. More guns in the hands of the public leads to more guns held by criminals (and vice versa), but this arms race is probably not explosive. As discussed before, the $C_{1s}S_sG_{s1}$ term is negative and likely to be less than one in absolute value. The determinant *D*, therefore, has a smaller positive value in the arms race model than in the aforementioned model.

For the model to exhibit conventional results, it is necessary that D be positive. This shall be assumed—the arms race is not explosive. Furthermore, if D is positive and less than one, there obtains what might be called a crime and gun control "multiplier effect." For example (Equation 18):

$$dG_c/dJ = (1/D)[G_{cJ}(1 - G_{s1}C_{1s}S_s) + G_{cs}S_sG_{s1}C_{1J}] < 0.$$
(18)

Increasing *J*, the probability of apprehension and punishment, reduces the demand for guns by criminals directly (G_{cJ}) and indirectly through the effect of *J* on guns owned for selfprotection. Further, if 0 < D < 1, these effects generate a multiplier effect. The arms race operates in reverse because both criminals and citizens who own guns for self-protection are reducing their ownership of guns, and these effects feed back on each other.

In this model the effect of reducing the restrictiveness of laws governing the carrying of concealed handguns on crime, turns out to be larger than in the model mentioned before. The equilibrium solution (Equation 19) looks the same:

$$dC_1/dL_s = 1/D[C_{1s}(S_L + S_s G_{sL})], \qquad (19)$$

but recall that D is now a smaller number than before because of the arms race feature. The strong empirical results obtained by Lott and Mustard (1997) for the effects of L_s on C_1 suggest that the arms race feature might exist. Further empirical tests are needed here as well.

Crime control policies are represented by J, the probability of apprehension and punishment, and by F, the value of punishment. Increases in J and F have no effect on G_r , unambiguously reduce G_c and G_s and, hence, reduce C_2 . Their effects on C_1 are ambiguous. For example (Equation 20):

$$\frac{dC_1/dJ = (1/D)[C_{1J}(1 - G_{cs}S_sG_{sc}) + C_{1s}S_sG_{sc}G_{cJ}]}{+ C_{1s}S_sG_{sc}G_{cJ}].$$
(20)

An increase in J has a direct negative effect on C_1 (the first term inside the brackets), but it also reduces G_c , which leads to a reduction in G_s and an increase in C_1 . This last result is in contrast to the results in the basic model, where the effects of crime control policies on crime are unambiguously negative.

The effects of gun control policies in this arms race model are qualitatively identical to those of the basic model. Increases in P unambiguously reduce G_r ; most likely reduce G_c and G_s ; and hence, most likely reduce C_2 . The element of ambiguity in the effects on G_c and G_s once again arise because of the reduction in G_r , which can increase C_1 —and therefore increase G_s and G_c . Increases in P have ambiguous effects on C_1 for the same reasons as in the basic model. Gun control measures make crimes more costly to commit, but the reductions in guns held by the law-abiding citizens tend to increase crime.

In summary, the arms race model has the same qualitative results as the basic model except in two cases. The effects of crime control policies on crime (C_1) are ambiguous. The arms race model, however, also includes the possibility that there is a gun control multiplier effect.

CONCLUSION

Two economic models of guns and crime have been formulated that include interactions between criminals and law-abiding citizens. In the first model, law-abiding citizens demand guns partly in response to crime, and criminals demand guns partly in response to guns owned by potential victims. The second model adds the assumption that law-abiding citizens demand guns partly in response to guns owned by criminals. The models have some unusual implications. In the first model, increases in the usual crime control measures may reduce crime less than one would expect because of the indirect negative effect on guns owned by the law-abiding public. Gun control policies most likely reduce the demand for guns, but the effect on premeditated crime is ambiguous because of the negative effect on guns owned for self-protection and recreation. The model also implies that a reduction in the restrictiveness of laws governing the ownership of concealed guns for selfprotection will reduce crime. In the second model, the effect on crime of increases in the usual crime control measures might be muted even more or reversed by the reduction in guns owned by the law-abiding public. The second model, however, also includes the possibility that gun control measures will multiply-reductions in guns held by the criminals lead to further reductions in guns held by law-abiding citizens (and vice versa).

Additional research of the sort presented in this article may be undertaken. The model can be expanded by considering various types of guns and additional types of weapons, and by disaggregating crime into its various components (e.g., robbery, murder, burglary, etc.). Lott and Mustard (1997) found that the adoption of right-to-carry laws led criminals to substitute nonviolent crimes such as larceny and auto theft for violent crimes. Most importantly, more empirical research is needed to test for the existence and to estimate the magnitudes of the various parameters of the model. Much of the debate about statistical tests in the existing empirical literature centers around the endogeneity or exogeneity of various variables. The model presented in this study clarifies these matters.

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Location: CONSTITUTIONAL LAW; WEAPONS - GUN CONTROL; **Scope:** Court Cases;



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ASSAULT WEAPONS BAN AND TAKINGS CLAUSE

By: James Orlando, Associate Analyst

This report addresses how the Fifth Amendment Takings Clause could affect a ban on assault weapons that did not contain a "grandfather" clause (a provision allowing continued ownership of banned weapons by those who legally possess them when the ban takes effect). Please note that the Office of Legislative Research is not authorized to provide legal opinions and this report should not be construed as such.

SUMMARY

The "Takings Clause" of the Fifth Amendment to the federal constitution prohibits taking private property "for public use, without just compensation." This prohibition applies to the states through the 14th Amendment. While the Takings Clause is often discussed in the context of land and real estate, it also applies to personal property. The clause applies to actual confiscations of property as well as to regulatory takings (e.g., laws that deprive a property owner of all beneficial use of the property).

Takings Clause cases can address a variety of issues, such as (1) whether a government action sufficiently infringed upon a property interest to constitute a compensable taking; (2) whether the taking was for public use; and (3) if compensation is required, how to value the property.

We did not find any Connecticut state or federal cases addressing whether a state law banning assault weapons, without grandfathering in current owners, would be considered a taking requiring just compensation. We found cases from other states and other federal circuits concerning Takings Clause challenges to restrictions on the possession, sale, or importation of assault weapons or similar weapons, with or without the grandfathering of current owners.

In all of the cases, the courts decided against the plaintiffs on their takings claims. But it is difficult to answer in general terms how a court would decide a challenge to an assault weapons ban. None of these rulings is binding on Connecticut and the laws at issue in each of these cases varied in several respects that are important to a taking analysis. For example, some of the laws

contained a grandfather clause; some contained only temporary bans; and some placed restrictions on the sale of assault weapons but did not ban their sale.

We summarize such cases below, dividing them into two groups depending on who challenged the laws: (1) gun owners or (2) gun dealers, importers, or inventors.

As further noted below, a few of these court opinions included an analysis of the Second Amendment that does not comport with the U.S. Supreme Court's later decisions in *D.C. v. Heller*, 554 U.S. 570 (2008) and *McDonald v. Chicago*, 130 S.Ct. 3020 (2010). Generally, these earlier opinions discussed the Second Amendment issue separately from the Takings Clause issue, and it is unclear whether their Second Amendment analyses informed their takings analyses.

TAKINGS CLAUSE CHALLENGES TO RESTRICTIONS ON ASSAULT WEAPONS AND SIMILAR RESTRICTIONS

Below, we summarize several court cases addressing Takings Clause challenges to assault weapons bans or similar restrictions. Please note that this list is not exhaustive. The summaries focus on the courts' discussion of the takings issue and do not include all other issues raised in the cases.

Challenges by Gun Owners

Silveira v. Lockyer. In a 2002 case, the plaintiffs challenged amendments to the California Assault Weapons Control Act (AWCA) that strengthened restrictions on the possession, use, and transfer of assault weapons.

After the federal district court dismissed the claims, the plaintiffs appealed. The court of appeals upheld most of the law (it invalidated an exception that applied to retired police officers) (*Silveira v. Lockyer*, 312 F.3d 1052 (9th Cir. 2002)).

Among other things, the court of appeals held that the AWCA was not a compensable taking of assault weapons. The AWCA generally banned the possession of assault weapons, but contained a grandfather clause, which allowed previous owners to retain the weapons, provided the owners registered them with the state.

Most of the opinion focused on the court's reading of the Second Amendment. Specifically, the court held that the Second Amendment did not provide an individual right to own or possess firearms, and the plaintiffs therefore lacked standing to bring a Second Amendment challenge to the AWCA. This holding is no longer valid following the U.S. Supreme Court's later decisions in *Heller* and *McDonald*.

The court briefly addressed the plaintiffs' Takings Clause challenge to the AWCA. The court found that the AWCA did not violate the Takings Clause, as "it is well-established . . . that a government may enact regulations pursuant to its broad powers to promote the general welfare that diminish the value of private property, yet do not constitute a taking requiring compensation, so long as a reasonable use of the regulated property exists" (citations omitted). According to the court, due to the grandfather clause, previous owners could "use the weapons in a number of reasonable ways so long as they register them with the state." Due to the substantial safety risks of assault weapons, "any incidental decrease in their value caused by the effect of that act does not constitute a compensable taking" (312 F.3d at 1092).

Citizens for a Safer Community v. City of Rochester. In a 1994 case, a group of citizens

brought a challenge in New York state court to a Rochester ordinance which restricted the possession of automatic and semiautomatic rifles and shotguns, among other weapons (*Citizens for a Safer Community v. City of Rochester*, 164 Misc.2d 822, 627 N.Y.S.2d 193 (N.Y. Sup.1994)). The plaintiffs challenged the ordinance on several grounds, including that it constituted an unconstitutional taking.

The court upheld the ordinance in part and overturned it in part. The court determined that the ordinance was not a ban but a reasonable regulation as to the place and circumstances where the weapons could be possessed. It determined that the ordinance's regulation of semi-automatic rifles and shotguns meeting certain criteria was a lawful exercise of the city's police power. It found certain other parts of the ordinance were unconstitutional on various grounds.

The court concluded that the ordinance's limitation on an owner's right to sell his or her guns did not constitute a Fifth Amendment taking, because the ordinance did not (1) prevent the sale of guns within the city, (2) limit licensed gun dealers, or (3) limit city residents from disposing of their guns outside of the city. Rather, the ordinance required that any gun sale in the city could only occur through a licensed gun dealer. The court concluded the ordinance thus did not "result in the taking of any property for public purpose or otherwise" (164 Misc.2d at 834).

It is important to note that in other sections of the opinion, the court analyzed the Second Amendment in a manner that is contrary to the U.S. Supreme Court's later decisions in *Heller* and *McDonald*.

Fesjian v. Jefferson. In a 1979 case, gun owners in the District of Columbia challenged a refusal by police to register certain firearms. That refusal was based on a D.C. statute which banned the registration of new handguns and machine guns, but contained a grandfather clause. The plaintiffs claimed several constitutional violations, including a Takings Clause violation. The D.C. Court of Appeals denied all of the plaintiffs' claims (*Fesjian v. Jefferson*, 399 A.2d 861 (D.C. 1979)).

The plaintiffs argued that the government had to compensate them for the guns denied registration, as the statute's methods for disposal of their guns would not provide them fair market value (e.g., a quick sale outside of the district or surrendering the guns to the police). The court disagreed. It noted that, even assuming that the statue authorized a taking, such a taking was an exercise of legislative police power to prevent perceived public harm, rather than an exercise of eminent domain for public use. Accordingly, the government did not have to provide just compensation.

Challenges by Gun Dealers, Importers, and Others

Akins v. U.S. In a 2008 case, an inventor sued the federal government in the Court of Federal Claims after the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) overturned its earlier ruling and

classified the invention as a machine gun (which prohibited it from being sold, with limited exceptions). ATF required the inventor and manufacturer to remove recoil springs from the device and surrender the springs to ATF, rendering the devices non-functional.

The plaintiff sought just compensation for the alleged taking because the (1) surrender of the springs was a physical taking and (2) classification of the device as a machine gun was a regulatory taking (*Akins v. U.S.*, 82 Fed. Cl. 619 (2008)).

The court granted the government's motion to dismiss. The court held that there was no compensable taking, because the property was not taken for "public use." Rather, it was taken pursuant to the police power conferred on ATF by Congress in the law banning the sale of machine guns. The court also held that the plaintiff's regulatory takings claim was invalid because his expectancy interest in selling the device free from federal regulation was not a property interest under the Fifth Amendment.

Mitchell Arms, Inc. v. U.S. In a 1992 case, an arms importer brought a takings challenge in the U.S. Claims Court in the wake of ATF's decision to (1) revoke import permits for semiautomatic, assault-type rifles and (2) reconsider the suitability of importing certain other weapons. The plaintiff argued that when an importer relies upon an import license to make investment decisions, the license becomes a property interest and thus cannot be revoked without just compensation.

After revoking the permits, ATF allowed the importer to reconfigure the weapons, and the importer was able to sell approximately half of its import quantity in reconfigured form. The court rejected the argument that the loss of the opportunity to sell the weapons in their original configuration was a compensable taking, as the court found the importer did not have a property interest within the meaning of the Fifth Amendment (*Mitchell Arms, Inc. v. U.S.*, 26 Cl. Ct. 1 (1992)).

The court noted that the licenses did not convey to the importer the "rights of unrestricted use, enjoyment, and disposal characteristic of private property" (26 Cl. Ct. at 4). The licenses were not transferable and did not convey an exclusive right of use. There was also no guarantee that they could be renewed or that they would not be revoked.

The court noted that "the Government's power to determine in the first instance the circumstances under which a license may be issued necessarily implies the power to also determine the circumstances appropriate to its revocation" (*Id.* at 5).

The court also rejected the argument that the importer's investment in reliance on the license changed the analysis. The court noted that "government as we know it would soon cease to exist if such exclusively governmental functions as the control over foreign commerce could not be accomplished without the payment of compensation to those business interests that have chosen to operate within this highly regulated area" (*Id.*).

The importer also alleged that a three-month moratorium on issuing import licenses for certain other weapons resulted in lost profits, requiring just compensation. The court held that as the importer did not have an enforceable right to a license, there was no taking.

Gun South, Inc. v. Brady. Another case involved a decision by the U.S. treasury secretary to temporarily suspend the importation of semiautomatic assault rifles for 90 days (*Gun South, Inc. v. Brady,* 877 F.2d 858 (11th Cir. 1989)). A firearms dealer sued to enjoin the government from interfering with the delivery of firearms imported under permits issued before the temporary suspension. A federal district court granted the injunction without addressing the dealer's constitutional claims. A federal court of appeals overturned the injunction.

Among other issues, the firearms dealer argued that the temporary suspension constituted a taking of property without just compensation. The appellate court agreed with the government that the proper venue to pursue that claim was the claims court. But the court also noted that "[e]ven if we had jurisdiction to consider this claim, we note that the temporary suspension does not constitute a taking." The court noted that (1) the government acted "in a purely regulatory capacity and does not profit from its actions," (2) there was only a temporary suspension on

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importation rather than a permanent or total deprivation of property, and (3) although the firearms dealer "may have had a reasonable investment-backed expectation, [the dealer] does not demonstrate that the suspension will unreasonably impair the value of the rifles" (877 F.2d at 869).

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Policy Analysis

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The Costs and Consequences of Gun Control

By David B. Kopel

EXECUTIVE SUMMARY

n politicizing mass murders, gun control advocates, such as President Obama, insist that more laws against firearms can enhance public safety. Over and over again, there are calls for common sense gun controls, such as a system of universal background checks, a ban on high-capacity magazines, and a ban on assault weapons. And yet such proposals are not likely to stop a deranged person bent on murder.

Although universal background checks may sound appealing, the private sale of guns between strangers is a small percentage of overall gun sales. Worse, the background check bills are written so broadly that they would turn most gun owners into criminals for innocent acts—such as letting one's sister borrow a gun for an afternoon of target shooting.

Magazine bans are acts of futility because the extant supply is enormous. Today, magazines of up to 20 rounds for handguns, and 30 rounds for rifles, are factory standard, not high-capacity, for many of the most commonly owned firearms. These magazines are popular with law-abiding Americans for the same reason they are so popular with law enforcement: because they are often the best choice for lawful defense of one's self and others.

Gun-control advocates have been pushing for a ban

on assault weapons for more than 25 years. This proposal is essentially a political gimmick that confuses people. That is because the term is an arbitrarily defined epithet. A federal ban was in place between 1994 and 2004, but Congress declined to renew it after studies showed it had no crime-reducing impact.

President Obama points to the mass confiscation of firearms in Great Britain and Australia as models for the United States. Such confiscation would be impossible, as a practical matter, in the United States, and if it were attempted, the consequences would be catastrophic.

Policymakers can take steps to make treatment available for persons with serious mental illness, and, when necessary, to incapacitate such persons if they are proven to be at grave risk of perpetrating violent crime. Better care, treatment, and stronger laws for civil commitment (consistent with constitutional safeguards) could prevent some horrific crimes.

Finally, before adding new gun regulations to the legal code, policymakers should remember that several mass murders in the U.S. were prevented because citizens used firearms against the culprit before the police arrived on the scene. After the Charleston shooting, some guncontrol advocates demanded that Congress vote on a bill to expand background checks.

INTRODUCTION

Following news reports of the horrific murders on June 17, 2015, at the Emanuel African Methodist Episcopal Church in South Carolina, President Obama said Congress was partly to blame because it had not approved his guncontrol proposals. "Once again," Obama said, "innocent people were killed in part because someone who wanted to inflict harm had no trouble getting their hands on a gun." Obama added, "It is in our power to do something about it. I say that recognizing the politics in this town foreclose a lot of avenues right now. But it would be wrong for us not to acknowledge [the politics]. At some point it's going to be important for the American people to come to grips with it."2

It is unfortunate that Obama chose to disparage those who disagree with him for their supposed fixation on grubby "politics" and indifference to murder victims. Whether Obama realizes it or not, there are good reasons to be skeptical of gun-control policies. This paper will scrutinize the three most common guncontrol ideas that have been put forward in recent years: universal background checks, a ban on high-capacity magazines, and a ban on assault weapons. These proposals are misguided and will not prevent the crimes that typically prompt officials to make pleas for more gun control. Policymakers can take some steps to incapacitate certain mentally ill persons who are potentially violent. Yet, it would be wrong not to acknowledge that gun laws often cannot stop a person bent on murder. Policymakers should not pretend otherwise.

UNIVERSAL BACKGROUND CHECKS

Under current law, persons who are in the business of selling firearms must perform a criminal background check prior to any sale. After the Charleston shooting, some gun-control advocates want to expand the background check system further—so that it would cover occasional private sales as well. In July 2015, community leaders from Charleston appeared at a press conference on Capitol Hill with Dan Gross, president of the Brady Campaign to Prevent Gun Violence. They demanded that Congress vote on a bill to expand background checks.³ And in a speech to the U.S. Conference of Mayors, presidential aspirant Hillary Clinton said it made no sense that Congress had failed to pass common-sense gun control, such as universal background checks.⁴

Dylann Roof, the racist who attacked the churchgoers in Charleston, had previously been arrested, and he had admitted to law enforcement officers that he was a user of methamphetamine. That was sufficient, under the federal Gun Control Act of 1968, to prohibit him from owning guns, because the statute bans gun ownership by illegal drug users. However, as the FBI later admitted, the bureau failed to properly enter into its database the prohibiting information that had been provided by local law enforcement.5 This incident points to a key limitation to the background-check concept: bureaucratic errors. In 2013, the FBI conducted more than 21 million background checks for firearm purchases.⁶ Given the massive scale of the system, there are always going to be errors as those records get misplaced or neglected.

Three other shootings in 2015 that garnered media attention show the limitations of background checks. Muhammad Youssef Abdulazeez attacked two military installations in Chattanooga, Tennessee on July 16. Like the Boston marathon bombers, Abdulazeez was a radicalized jihadi. He apparently radicalized after visiting his Palestinian relatives in Jordan. Abdulazeez was a U.S. citizen and purchased firearms lawfully after passing background checks. Professor James Alan Fox of Northeastern University, who studies mass shootings, explains that "mass killers are determined, deliberate and dead-set on murder. They plan methodically to execute their victims, finding the means no matter what laws or other impediments the state attempts to place in their way. To them, the will to kill cannot be denied."7

On July 23, John Russell Houser murdered several people in a movie theater in Lafayette,

Louisiana. Houser was severely mentally ill; in 2008, a Georgia judge issued an order to apprehend him so that he could be held for five days for a mental health evaluation. The mental hospital records have not been released, but the hospital apparently did not petition for a longer involuntary commitment.⁸ Had Houser been involuntarily committed, he would have become a prohibited person under the 1968 Gun Control Act.⁹ But he was not, and so he passed a background check and purchased a handgun from a gun store in February 2014.¹⁰ Houser shot 11 people, killing two, and then committed suicide when police arrived.¹¹ A background-check system cannot stop people like Houser, who are dangerous, yet have fallen through the cracks in the system and have no disqualifying record.

Christopher Harper-Mercer, who murdered nine people at Umpqua Community College in Roseburg, Oregon, on October 1, 2015, was not affected by one of the most severe background check statutes in the United States. The Oregon background-check law applies to almost all private firearm sales, not just commercial sales.¹² Despite this universal background check regime, all of the firearms recovered from the killer were legally purchased, either by him or his mother.¹³ Harper-Mercer appears to have been seriously mentally ill, but neither he nor his mother were in any way impeded by background check laws.

Gun-control advocates often claim that 40 percent of annual firearms sales take place today without background checks. The Washington Post "fact-checker" has debunked that claim, giving it "Three Pinocchios."¹⁴ The Post noted that the survey data used for the study on which the 40 percent claim is based are more than two decades old, which means they were collected prior to the National Instant Criminal Background Check System becoming operational in 1998. The survey only polled 251 people, and, upon asking whether their gun transfer involved a federally licensed dealerthat is, a federal firearms licensee (FFL)-gave respondents the choice of saying "probably" or "probably not" in addition to "yes" and "no."

From that survey, the report concluded that 35.7 percent of acquisitions did not involve a background check. But "acquisitions" is a much broader category than "purchases," which is the term used by advocates for gun control. Gifts and inheritances between family members or among close friends are acquisitions, but not purchases. When the Post asked researchers to correct for that distinction, the percentage of firearms purchased without a background check fell to between 14 and 22 percent. The Post subsequently conducted its own survey of Maryland residents, and found that 21 percent of respondents reported not having gone through a background check to purchase a firearm in the previous decade.

Even that 21 percent, which entails transactions between private, noncommercial sellers, is regulated by the federal law against giving a firearm to someone the transferor knows, or reasonably should know, is among the nine categories of prohibited persons under federal law (e.g., mentally impaired; convicted felons).¹⁵ The assertion that nearly half of the gun sales in America are unregulated is simply false. Federal law governs as many gun sales and transfers as is practically enforceable already.

As a 2013 National Institute of Justice memo from Greg Ridgeway, acting director of the National Institute of Justice, acknowledged, a system requiring background checks for gun sales by non-FFLs is utterly unenforceable without a system of universal gun registration.¹⁶ For FFLs, enforcement of recordkeeping is routine. They are required to keep records of every gun which enters or leaves their inventory.¹⁷ As regulated businesses, the vast majority of them will comply with whatever procedures are required for gun sales. Even the small minority of FFLs who might wish to evade the law have little practical opportunity to do so. Federal firearms licensees are subject to annual warrantless inspections for records review and to unlimited warrantless inspections in conjunction with a bona fide criminal investigation or when tracing a gun involved in a criminal investigation.¹⁸ The wholesalers and **66** backgroundcheck system cannot stop people that have no disqualifying record. **66** As the National Institute of Justice recognized, the only way to enforce the backgroundcheck law would be to require the retroactive registration ofall currently owned firearms in the United States. 99

manufacturers who supply the FFLs with guns must keep similar records, so a FFL who tried to keep a gun off the books would know that the very same gun would be in the wholesaler's records, with precise information about when the gun was shipped to the retailer.¹⁹

In contrast, if a rancher sells his own gun to a neighbor, there is no practical way to force the rancher and the neighbor to drive an hour into town, and then attempt to find a FFL who will run a background check for them, even though they are not customers of the FFL. Once the rancher has sold the gun to the neighbor, there is no practical way to prove that the neighbor acquired the gun after the date when the private sales background check came into effect. As the National Institute of Justice recognized, the only way to enforce the backgroundcheck law would be to require the retroactive registration of all currently owned firearms in the United States. Such a policy did not work in Canada, and anyone who thinks that Americans would be more willing to register their guns than Canadians is badly mistaken.²⁰

In *Printz v. United States* (1997), Justice Clarence Thomas suggested that a mandatory federal check on "purely intrastate sale or possession of firearms" might violate the Second Amendment.²¹ That view is supported by the Supreme Court's 2008 ruling in *District of Columbia v. Heller*. In *Heller*, the Court provided a list of "long-standing laws" that were "presumptively lawful" gun controls.²² The inclusion of each item on the list, as an exception to the right to keep and bear arms, provides guidance about the scope of the right itself.

For example, the Court affirmed "prohibitions on the possession of firearms by felons and the mentally ill." Felons and the mentally ill are exceptions to the general rule that individual Americans have a right to possess arms. The exception only makes sense if the general rule stands. After all, if no one has a right to possess arms, then there is no need for a special rule that felons and the mentally ill may be barred from possessing arms.

The second exception to the right to keep and bear arms concerns "laws forbidding the carrying of firearms in sensitive places such as schools and government buildings." This exception proves another rule: Americans have a general right to carry firearms. If the Second Amendment only applied to the keeping of arms at home, and not to the bearing of arms in public places, then there would be no need to specify an exception for carrying arms in "sensitive places."

The third *Heller* exception concerns "laws imposing conditions and qualifications on the commercial sale of arms." Again, the exception proves the rule. The Second Amendment allows "conditions and qualifications" on the commercial sale of arms. The Second Amendment does not presumptively allow Congress to impose "conditions and qualifications" on noncommercial transactions. At least *Heller* seems to suggest so.

Federal law has long defined what constitutes commercial sale of arms. A person is required to obtain a federal firearms license (and become subject to many conditions and qualifications when selling arms) if the person is engaged in the business of selling firearms. That means:

a person who devotes time, attention, and labor to dealing in firearms as a regular course of trade or business with the principal objective of livelihood and profit through the repetitive purchase and resale of firearms, but such term shall not include a person who makes occasional sales, exchanges, or purchases of firearms for the enhancement of a personal collection or for a hobby, or who sells all or part of his personal collection of firearms.²³

A person who is "engaged in the business, but who does not have an FFL, is guilty of a felony every time he sells a firearm.²⁴ Currently, the federal National Instant Criminal Background Check System law generally matches the constitutional standard set forth in *Heller*. It applies to all sales by persons who are engaged in the business (FFLs) and does not apply to

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transfers by persons who are not engaged in the business.²⁵

After the 2012 Sandy Hook murders, Obama ordered the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) to inform FFLs about how they can perform a background check for private persons who would like such a check.²⁶ On a voluntary basis, that order was legitimate, but it would be constitutionally dubious to mandate it.

As a practical matter, criminals who are selling guns to each other (which is illegal and subject to severe mandatory sentencing) are not going to comply with a background-check mandate.²⁷ It would be irrelevant to them. Ordinary law-abiding citizens who sell guns to each other might be willing to take the gun to a firearm store for a voluntary check, provided that the check is not subject to a special fee, that there is no registration, and that the check is convenient and expeditious. The new ATF regulations for private-party sales comply with two of those three conditions; however, the regulations do require that dealers keep permanent records on the buyer and one of the make, model, and serial number of the gun, just as if the dealer were selling a firearm out of his own inventory. The dealer-based system of registration, created by the Gun Control Act of 1968, avoids the dangers of a central registry of guns, but it does have risks: a government that wanted to confiscate guns could simply harvest the dealer sales records.

Proposals concerning universal background checks have fairly strong support in public opinion polls, but those polls are premised on the idea that the check would be applied to the actual sale of firearms. To the contrary, in proposed legislation, the requirement for government authorization (via a background check and paperwork identical to buying a gun) would apply to far more than gun sales. The proposals apply to all firearms "transfers."²⁸ A "transfer" might be showing a new gun to a friend and letting him handle the gun for a few minutes.

For example, Senate bill S.649 (2013), introduced by Sen. Harry Reid (D-NV), goes far beyond controlling the actual sale of firearms. Consider a case in which a woman buys a common revolver at age 25, and keeps it her entire life. She never sells the gun. But over her lifetime, she may engage in dozens of firearms transfers:

- The woman loans the gun to her sister, who takes it on a camping trip for the weekend.
- While the woman is out of town on a business trip for two weeks, she gives the gun to her brother.
- If the woman lives on a farm, she allows all of her relatives on the farm to take the gun into the fields for pest and predator control.
- If the woman is in the Army Reserve, and she is called up for an overseas deployment, she gives the gun to her brotherin-law for temporary safe-keeping. When she goes out of town on vacation every year, she also temporarily gives her gun to her brother-in-law.
- One time, when a neighbor is being threatened by an abusive ex-boyfriend who is a stalker, the woman lets the neighbor borrow the gun for several days, until the neighbor can buy her own gun.
- If the woman becomes a firearms safety instructor, she may teach classes at office parks, school buildings, or gun stores. Following the standard curriculum of gun safety classes, such as those required by the National Rifle Association, the woman will bring some unloaded guns to a classroom, and under her supervision, students will learn the first steps in handling the gun, including how to load and unload the gun (using inert dummy ammunition). During the class, the firearms will be transferred dozens of times, as students practice how to hand a gun to someone safely.

Under S. 649, every one of the above activities would be a felony, punished the same as if the woman had knowingly sold the firearm As a practical matter, criminals who are selling guns to each other are not going to comply with a backgroundcheck mandate. • One can share a gun while out hunting in the field, but back at the hunting camp, it would be illegal to clean someone else's gun.

to a convicted violent felon. Here is the pertinent provision: "It shall be unlawful for any person who is not licensed under this chapter to transfer a firearm to any other person who is not licensed under this chapter."²⁹

This is not "gun control" in the constitutionally legitimate sense—reasonable laws that protect public safety without interfering with the responsible ownership and use of firearms. To the contrary, such grotesquely overbroad laws have the effect of turning almost every gun owner into a felon by outlawing the ordinary, innocent, and safety-enhancing ways in which firearms in the United States are "transferred" millions of times every year.

While S. 649 has a few exceptions to the ban on transfers, not one of them apply to the situations described above:

- One can make a "bona-fide gift" (but not a three-hour loan) to certain close family members, not including aunts, uncles, nieces, nephews, in-laws, or civil union partners.
- One can let someone else borrow a gun for up to seven days, but only within the curtilage of one's house. Not on the open space one owns, and even a spouse cannot borrow a gun for eight days.
- One can leave a firearm to another in a written will. But on one's deathbed, it would be unlawful to leave a gun to one's best friend.
- One can share a gun at a shooting range (but only if the shooting range is owned by a corporation, not on public lands, and not at a shooting range on one's own property).
- One can share a gun at a shooting match, but only if the match is operated by a non-profit corporation or the government—not a match organized by the National Rifle Association, and not a match organized by a firearms manufacturer.
- One can share a gun while out hunting in the field, but back at the hunting camp, it would be illegal to clean someone else's gun.³⁰

Even if there was no Second Amendment, the arbitrary rules of the various exemptions would make Senator Reid's bill of very dubious constitutionality. As interpreted by the courts, due process requires that all laws have a legitimate purpose and at least a rational connection to that purpose.³¹

HIGH-CAPACITY MAGAZINES

Another gun-control initiative that has been recently revived is the idea to ban highcapacity magazines. The Los Angeles City Council, for example, passed an ordinance that would prohibit city residents from possessing handgun or rifle magazines that hold more than 10 rounds of ammunition.³² The New York state legislature enacted a similar ban in 2013.³³ Such bans are unconstitutional and undermine public safety.

A magazine is the part of the firearm where the ammunition is stored. Sometimes the magazine is part of the firearm itself, as in tube magazines underneath barrels. This is the norm for shotguns. For many rifles, and almost all handguns that use magazines, the magazine is detachable. A detachable magazine is a rectangular or curved box, made of metal or plastic. At the bottom of the box is a spring, which pushes a new round of ammunition into the firing chamber after the empty shell from the previous round has been ejected.³⁴ The caliber of the gun does not determine what size magazine can be used. Any gun that uses a detachable magazine can accommodate a detachable magazine of any size. So, for example, a gun with a detachable magazine holding 10 rounds can also accommodate a magazine that holds 20 rounds.

The 1994 federal ban on assault weapons included a ban on large magazines. As indicated by the bill's title (the Public Safety and Recreational Firearms Use Protection Act), that ban was predicated on the idea that recreational firearm use is legitimate, but other firearms use is not.³⁵ Yet for target-shooting competitions, there are many events that use magazines holding more than 10 rounds. For

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hunting, about half the states limit the magazine size that a hunter may carry in the field, but half do not. In some scenarios, such as deer hunting, a hunter will rarely get off more than two shots at a particular animal. In other situations, particularly pest control, the use of 11to 30-round magazines is typical because the hunter will be firing multiple shots. Such pests include the hunting of packs of feral hogs and wild animals, such as prairie dogs and coyotes.

More generally, the rifle that might be used to shoot only one or two rounds at a deer might be needed for self-defense against a bear or against a criminal attack. In 2012, Arizona repealed its limitations on magazine capacity for hunters precisely because of the possible need for self-defense against unexpected encounters with cartel gangs in the southern part of the state.³⁶ In that region, it is well known that drug traffickers and human traffickers use the same wild and lonely lands that hunters do.

For the firearms that are most often chosen for self-defense, the claim that any magazine holding more than 10 (or 7) rounds is "high capacity" or "large" is incorrect. The term "high-capacity magazine" might have a legitimate meaning when it refers to a magazine that extends far beyond that intended for the gun's optimal operation. For example, although a semiautomatic handgun can accept a 40-round magazine, such a magazine typically extends far beneath the gun grip, and it is therefore impractical to use with a concealedcarry permit. For most handguns, a 40-round magazine could be called "high-capacity."

The persons who have the most need for actual high-capacity magazines are those who would have great difficulty changing a magazine—such as elderly persons or persons with disabilities. For an able-bodied person, changing a magazine only takes a few seconds. Typically a gun's magazine-release button is near the trigger. To change a magazine, the person holding the gun presses the magazine-release button with a thumb or finger. The magazine instantly drops to the floor. While one hand was pushing the magazine-release button, the other hand can grab a fresh magazine (which might be carried in a special holster on a belt) and bring it toward the gun. The moment the old magazine drops out, a fresh one is inserted.³⁷

Although one can quickly change magazines, persons being attacked by criminals will typically prefer not to spend even a few seconds for a magazine change. The stress of being attacked usually impedes fine motor skills, making it much more difficult to insert the magazine.³⁸ That is why many semiautomatic handguns come factory-standard with a magazine of 11 to 20 rounds. Thus, a ban on magazines with a capacity of more than 10 rounds means a ban on some of the most common and most useful magazines purchased for purposes of recreational target practice and self-defense.

Why might someone need a factory-standard 17-round magazine for a common 9mm handgun? As noted, standard-capacity magazines can be very useful for self-defense. This is especially true if a defender faces multiple attackers, an attacker is wearing heavy clothing or body armor, an attacker who is turbocharged by methamphetamine or cocaine, or an attacker who poses an active threat from behind cover. In stressful circumstances, police as well as civilians often miss when firing a handgun even at close range, so having the extra rounds can be crucial.

It is important to consider the advantages a criminal has over his intended victims. The criminal has the element of surprise, whereas the victim is the one surprised. The criminal can decide at leisure what weaponry he will bring; whereas the victim must respond with what's at hand at the moment of attack. A criminal can bring several guns, or lots of magazines; whereas the victim will usually have on hand, at most, a single defensive gun with only as much ammunition as is in that gun. Thus, legislation confining law-abiding victims to magazines of 10 or fewer magnifies the criminal's advantage over his intended victim.

One fact that proves the usefulness of standard-capacity magazines is that most police officers use them. An officer typically carries a semiautomatic handgun on a belt holster as **66** The persons who have the most need for actual high-capacity magazines are those who would have great difficulty changing a magazine such as elderly persons or persons with disabilities.

If gangsters can obtain all the cocaine they want, despite a century of prohibition, they will be able to obtain 15-round magazines.

his primary sidearm. The magazine capacity is usually in the 11 to 20 range. Likewise, the long gun carried in police patrol cars is quite often an AR-15 rifle with a 30-round magazine.³⁹

Violent confrontations are unpredictable; for example, if a person is fighting against one or two perpetrators, he may not know if there is an additional, hidden attacker. Thus, defensive gun users need to keep a reserve of ammunition. So even though armed defenders do not usually fire more than 10 shots, reducing reserve capacity (e.g., from a standard 17-round magazine to a 10-round substitute) will reduce the number of defensive shots. Fewer shots fired at the attacker reduces the risk of injury to the attacker, and thereby raises the risk of injury to the victim.

Would a Magazine Ban Be Beneficial?

The National Institute of Justice study found that the 1994–2004 federal ban on the manufacture of large magazines had no discernible benefit because the existing supply of such magazines was so vast.⁴⁰

The types of criminals most likely to get into shootouts with the police or with other criminals are precisely those who are very aware of what is available on the black market. Although gun prohibitionists often link assault weapons to gang violence associated with the illegal drug trade, they miss the irony of their argument.⁴¹ They are, in effect, claiming that the very gangs operating the black market in drugs will somehow be restricted from acquiring high-capacity magazines by legislation limiting the manufacture and sale of such magazines. The claim-at least as it pertains to career criminals-is ludicrous. If gangsters can obtain all the cocaine they want, despite a century of prohibition, they will be able to obtain 15-round magazines.

What about the typical perpetrators of random mass attacks—mentally ill young men? They, too, could acquire magazines by theft, or on the black market. Given that 36 percent of American high school seniors illegally acquire and consume marijuana, it is clear that plenty of people who are not gangsters or career criminals use the black market.⁴² Besides that, the truly high-capacity magazines, such as a 100-round drum, are very prone to malfunction. For example, during the 2012 mass murder at the movie theater in Aurora, Colorado, the murderer's 100-round magazine jammed, allowing people to escape.⁴³ Hundred-round magazines are novelty items and are not standard for self-defense by civilians or police.

Advocates of a ban on standard-capacity magazines assert that while the attacker is changing the magazine, an intended victim might be able to subdue him—yet they cannot point to a single instance where this actually happened. They cite a trilogy of events that happened in Tucson, Arizona (2011), Aurora, Colorado (2012), and Newtown, Connecticut (2013). In fact, all of those events involved gun jams, not magazine changes. At Newtown, the criminal changed magazines seven times and no one escaped, but when his rifle jammed, people did escape. Clearing a gun jam takes much longer than changing a magazine. Fixing a gun jam involves all the steps of a magazine change (remove the empty magazine and insert a new one) plus all the intermediate steps of doing whatever is necessary to fix the jam. Similarly, in the Luby's cafeteria murders (24 dead), the perpetrator replaced magazines multiple times. In the Virginia Tech murders (32 dead), the perpetrator changed magazines 17 times.44

Advocates of banning magazines larger than 10 rounds call them "high capacity." Again, this is incorrect. The standard manufacturersupplied magazines for many handguns have capacities up to 20 rounds; for rifles, standard magazine capacity is up to 30. This has been true for decades. Indeed, magazines holding more than 10 rounds constitute 47 percent of all magazines sold in the United States in the last quarter century.⁴⁵ There are tens of millions of such magazines. A law that was really about high-capacity magazines would cover the after-market magazines of 75 or 100 rounds, which have minuscule market share, and which are not standard for any firearm. As of 2011, there were approximately 332 million firearms in the United States not in military hands.⁴⁶ With the rough estimate that onethird of guns are handguns, most gun owners owning at least two magazines per gun, and 47 percent of magazines holding more than 10 rounds, the number of large magazines in the United States is at least in the tens of millions. When one also takes into account rifle magazines, the number of American magazines holding more than 10 rounds could be more than 100 million. That in itself is sufficient, according to the Supreme Court's *Heller* precedent, to make the ban unconstitutional.

ASSAULT WEAPONS

Gun-control advocates have been calling for a ban on "assault weapons" for more than 25 years, especially in the aftermath of a notorious crime, regardless of the facts. For example, the Charleston criminal used an ordinary handgun. Yet South Carolina state senator Marlon Kimpson immediately proposed a statewide ban on assault weapons.⁴⁷ Democratic presidential hopeful Martin O'Malley told his supporters that the Charleston crime was proof of a "national crisis" and that tougher gun laws were needed at the federal level, including a new ban on assault weapons.⁴⁸

Before examining the details of a ban, it should be noted at the outset that the term "assault weapons" is a political gimmick designed to foster confusion. The so-called "assault weapons" are *not* machine guns. They do *not* fire automatically. They fire only one bullet each time the trigger is pressed, just like every other ordinary firearm. They are *not* more powerful than other firearms. To the contrary, their ammunition is typically intermediate in power, less powerful than ammunition that is made for big-game hunting.

The Difference between Automatic and Semiautomatic

For an automatic firearm, commonly called a machine gun, if the shooter presses the trigger and holds it, the gun will fire continuously, automatically, until the ammunition runs out.⁴⁹ Ever since the National Firearms Act of 1934, automatics have been heavily regulated by federal law. Anyone who wishes to acquire one must pay a \$200 federal transfer tax, must be fingerprinted and photographed, and must complete a months-long registration process with the ATF. In addition, the transferee must be granted written permission by local law enforcement. Once registered, the gun may not be taken out of state without advance written permission from the ATF.⁵⁰ Since 1986, the manufacture of new automatics for sale to persons other than government agents has been forbidden by federal law.⁵¹ Automatics in the United States have never been common; today the least expensive ones cost nearly ten thousand dollars.52

The automatic firearm was invented in 1884 by Hiram Maxim. The early Maxim guns were heavy and bulky and required a two-man crew to operate.⁵³ In 1943, a new type of automatic was invented, the "assault rifle." The assault rifle is light enough for a soldier to carry for long periods of time. Soon, the assault rifle became a very common infantry weapon. Some examples include the U.S. Army M-16, the Soviet AK-47, and the Swiss militia SIG SG 550. The AK-47 can be found throughout the Third World, but there are only a few hundred in the United States, mostly belonging to fire-arms museums and wealthy collectors.

The definition of "assault rifle" is supplied by the Defense Intelligence Agency: "short, compact, selective-fire weapons that fire a cartridge intermediate in power between a submachine gun and rifle cartridges."54 If you use the term "assault rifle," persons who are knowledgeable about firearms will know precisely what kinds of guns you are referring to. The definition of assault rifle has never changed because the definition describes particular objects in the real world-just like the definitions of "table" or "umbrella." In contrast, the definition of "assault weapon" has never been stable. The phrase is an epithet. It has been applied to double-barreled shotguns, to single-shot guns (guns whose ammunition capacity is only a single round), and to many **6** Gun-control advocates have been calling for a ban on 'assault weapons' for more than 25 years.

66 The first assaultweapon ban was in California in 1989. It was created by legislative staffers who thumbed through a picture book of guns and decided which guns looked bad. **99**

other ordinary handguns, shotguns, and rifles.

The first assault-weapon ban was in California in 1989. It was created by legislative staffers who thumbed through a picture book of guns and decided which guns looked bad.⁵⁵ The result was an incoherent law which, among other things, outlawed certain firearms that do not exist since the staffers just copied the typographical errors from the book or associated a model by one manufacturer with another manufacturer whose name happened to appear on the same page.⁵⁶

Over the last quarter century, the definition kept shifting. The only consistency in what is dubbed an assault weapon seems to be how much gun prohibitionists believe they can outlaw given the political circumstances of the moment. One recent version is Sen. Dianne Feinstein's (D-CA) bill introduced after the Sandy Hook murders; it bans more than 120 types of guns by name, and hundreds more by generic definitions.⁵⁷ Another is the pair of bills defeated in the January 2013 lameduck session of the Illinois legislature, which would have outlawed most handguns by dubbing them assault weapons.⁵⁸ In Colorado, the legislature rejected a bill in 2013 that would have classified as assault weapons guns such as an old-fashioned double-barreled shotgun, or single shot rifles and shotguns, which can only hold one round of ammunition.59

While the definitions of what to ban keep changing, a few things remain consistent: the definitions do *not* cover automatic firearms, such as genuine assault rifles. The definitions do *not* ban guns based on how fast they fire or how powerful they are. Instead, the definitions are based on the name of a gun, or on whether a firearm has certain accessories or components, such as a bayonet lug, or a grip in the "wrong" place. Most, but not all, of the guns which have been labeled assault weapons are semiautomatics. Many people who are unfamiliar with firearms think that a gun that is semiautomatic must be essentially the same as an automatic. That is incorrect.

Semiautomatic firearms were invented in the 1890s and have been common in the

United States ever since. Today, 82 percent of new American handguns are semiautomatics. A large share of rifles and shotguns are also semiautomatics.⁶⁰ Among the most popular semiautomatic firearms are the Colt 1911 pistol (named for the year it was invented, and still considered one of the best self-defense handguns); the Ruger 10/22 rifle (which fires the lowpowered .22 Long Rifle cartridge, popular for small-game hunting or for target shooting at distances less than a hundred yards); the Remington 1100 shotgun (very popular for bird hunting and home defense); and the AR-15 rifle (popular for hunting game no larger than deer, for target shooting, and for home defense). All of these guns were invented in the mid-1960s or earlier. All of them have, at various times, been characterized as assault weapons.

Unlike an automatic firearm, a semiautomatic fires only one round of ammunition when the trigger is pressed. (A "round" is one unit of ammunition. For a rifle or handgun, a round has one bullet. For a shotgun, a single round contains multiple pellets of shot.) In some other countries, a semiautomatic is usually called a "self-loading" gun. This accurately describes what makes the gun "semi"-automatic. When the gun is fired, the projectile travels from the firing chamber, down the barrel, and out the muzzle. Left behind in the firing chamber is the now-empty case or shell that contained the bullet (or shot) and the gunpowder. In a semiautomatic, some of the energy from firing is used to eject the empty shell and load a fresh round of ammunition into the firing chamber. The gun is then ready to shoot again-when the user is ready to press the trigger.

In some other types of firearms, the user must perform some action in order to eject the empty shell and load the next round. This could be moving a bolt back and forth (boltaction rifles); moving a lever down and then up (lever-action rifles); or pulling and then pushing a pump or slide (pump-action and slideaction rifles and shotguns). A revolver (the second-most popular type of handgun) does not require the user to take any additional action in order to fire the next round.⁶¹

The semiautomatic has two principle advantages over lever-action, bolt-action, slideaction, and pump-action guns. First, many hunters prefer it because the semiautomatic mechanism allows a faster second shot. The difference may be less than a second, but for a hunter, that can make all the difference. Second, the semiautomatic's use of gunpowder energy to eject the empty case and to load the next round substantially reduces how much recoil is felt by the shooter. This makes the gun much more comfortable to shoot, especially for beginners, or for persons without substantial upper-body strength. The reduced recoil makes the gun easier to keep on target for the next shot, which is important for hunting and target shooting, and very important for self-defense.

Semiautomatics also have a disadvantage. They are more prone to mechanical jams than are simpler, older types of firearms, such as revolvers. Contrary to the hype of anti-gun advocates and less-responsible journalists, there is no rate-of-fire difference between a so-called assault semiautomatic gun and any other semiautomatic gun.

Are Semiautomatics More Powerful Than Other Guns?

The power of a firearm is measured by the kinetic energy it delivers. Kinetic energy is based on the mass of the projectile and its velocity.⁶² So, a heavier bullet will have more kinetic energy than a lighter one moving at the same speed. A faster bullet will have more kinetic energy than a slower bullet of the same weight.⁶³ How much kinetic energy a gun delivers has nothing to do with whether it is a semiautomatic, a lever action, a bolt action, or a revolver. What matters is the weight of the bullet, how much gunpowder is in the particular round of ammunition, and the length of the barrel.⁶⁴ None of this has anything to do with whether the gun is a semiautomatic.

With respect to the rifles that some people call "assault weapons," semiautomatic rifles tend to be intermediate in power as far as rifles go. Consider the AR-15 rifle, a variant of the military's M-16, in its most common caliber, the .223. The bullet is only slightly wider than the puny .22 bullet, but it is longer and heavier. Using typical ammunition, an AR-15 in .223 would have 1,395 foot-pounds of kinetic energy.⁶⁵ That is more than a tiny rifle cartridge such as the .17 Remington, which might carry 801 foot-pounds of kinetic energy. In contrast, a big-game cartridge, like the .444 Marlin, might have 3,040 foot-pounds of kinetic energy.⁶⁶ That is why rifles like the AR-15 in their most common calibers are suitable, and often used, for hunting small to medium animals, such as rabbits or deer, but are not suitable for big game, such as elk or moose.⁶⁷

Many of the ever-changing group of guns which are labeled assault weapons use detachable magazines (a box with an internal spring) to hold their ammunition. This is a characteristic shared by many other firearms, including many non-semiautomatic rifles (particularly bolt actions), and by the large majority of handguns. Whatever the merits of restricting magazine size (discussed above), the ammunition capacity of a firearm depends on the size of the detachable magazine. If one wants to control magazine size, there is no point in banning certain guns that can use detachable magazines, while not banning other guns that also use detachable magazines.

Bans by Name

Rather than banning guns based on rate of fire, or firepower, the various legislative attempts to define an assault weapon have taken two approaches: banning guns by name and banning guns according to certain features.

After a quarter century of legislative attempts to define assault weapon, the flagship bill for prohibitionists, drafted by Senator Feinstein, still relies on banning more than 120 guns by name. That in itself demonstrates that assault weapons prohibitions are not about guns that are more dangerous than other guns. After all, if a named gun really has physical characteristics that make it more dangerous than other guns, then legislators ought to be able to describe those characteristics and ban guns (regardless of name) that **66** The power of a firearm is measured by the kinetic energy it delivers. **99** It is difficult to see how something that makes a gun more accurate makes it so bad that it must be banned. have those supposedly dangerous characteristics.

Bans by Features

An alternative approach to defining assault weapon has been to prohibit guns that have one or more items from a list of features. The problem here is that the listed features have nothing to do with a gun's rate of fire, its ammunition capacity, or its firepower. Here are some of the various items that Senator Feinstein finds objectionable:

BAYONET LUGS. A bayonet lug gives a gun a military appearance, but it has nothing to do with criminal activity. Drive-by bayonetings are not a problem in this country.

ATTACHMENTS FOR ROCKET LAUNCHERS AND GRENADE LAUNCHERS. Since nobody makes guns for the civilian market that have such features, these bans would affect nothing.⁶⁸

FOLDING OR TELESCOPING STOCKS. Telescoping stocks on long guns are very popular because they allow shooters to adjust the gun to their own size and build, to different types of clothing, or to their shooting position. Folding stocks also make a rifle or shotgun much easier to carry in a backpack while hunting or camping. Even with a folding stock, the long gun is still far larger, and less concealable, than a handgun.

GRIPS. The Feinstein bill outlaws any long gun that has a grip, or anything which can function as a grip. In the Rambo movie series, Sylvester Stallone would spray fire from his hip with an automatic rifle, which had a pistol grip. In real life, a grip helps a responsible shooter stabilize a semiautomatic or other rifle while holding the stock against his shoulder. It is particularly useful in hunting where the shooter will not have sandbags or a benchrest, or perhaps anything else, on which to rest the forward part of the rifle. Accurate hunting is humane hunting. And should a long gun be needed for self-defense, accuracy can save the victim's life.

Some gun-control advocates seem to oppose firearms accuracy. On the PBS *Newshour*, Josh Horwitz, an employee of the Coalition to Stop Gun Violence, said that grips should be banned because they prevent "muzzle rise" and thereby allow the shooter to stay on target.⁶⁹ Well, yes, a grip does help stabilize the gun so that a second shot (whether at a deer or a violent attacker) will go where the first shot went. Horowitz seemed to be saying that guns that are easy to fire accurately should be banned. Guns that are more accurate are better for all the constitutionally protected uses of firearms, including self-defense, hunting, and target shooting. To single them out for prohibition is misguided.

BARREL COVERS. For long guns that do not have a forward grip, the user may stabilize the firearm by holding the barrel with his nondominant hand. A barrel cover or shroud protects the user's hand. When a gun is fired repeatedly, the barrel can get very hot. This is not an issue in deer hunting (where no more than a few shots will be fired in a day), but it is a problem with other kinds of hunting, and it is a particular problem in target shooting, where dozens or hundreds of shots will be fired in a single session.⁷⁰

THREADED BARREL FOR SAFETY ATTACH-MENTS. Threading at the end of a gun barrel can be used to attach muzzle brakes or sound suppressors.

When a round is fired through a gun barrel, the recoil from the shot will move the barrel off target, especially for a second, follow-up shot. Muzzle brakes reduce recoil and keep the gun on target. It is difficult to see how something that makes a gun more accurate makes it so bad that it must be banned. A threaded barrel can also be used to attach a sound suppressor. Suppressors are legal in the U.S.—although buying one requires the same severe process as buying a machine gun. They are sometimes inaccurately—called silencers. Suppressors typically reduce a gunshot's noise by about 15–20 decibels, which still leaves the gunshot louder than a chainsaw.⁷¹

James Bond and some other movies give the false impression that a gun with a silencer is nearly silent and is only used by professional assassins. Actually, sound suppressors are typically used by people who want to protect their hearing or to reduce the noise heard by people living close to a shooting range. Many firearms instructors choose suppressors in order to help new shooters avoid the "flinch" that many novices display because of shooting noise.

The bans on guns with grips, folding stocks, barrel covers, or threads focus exclusively on the relatively minor ways in which a feature might help a criminal and ignore the feature's utility for sports and self-defense. The reason that manufacturers include those features on firearms is because millions of lawabiding gun owners want them for entirely legitimate purposes.

Would a Ban be Beneficial?

Connecticut banned so-called assault weapons in 1993.⁷² The Bushmaster rifle used by the Sandy Hook murderer, Adam Lanza, was not an assault weapon under Connecticut law. Nor was it an assault weapon under the federal ban that was in place between 1994 and 2004.⁷³ Feinstein's most recent proposal would cover that particular model of Bushmaster, but it would allow Bushmaster (or any other company) to manufacture other semiautomatic rifles, using a different name, which fire just as fast, and which fire equally powerful bullets.

In order to pass the 1994 federal ban, proponents had to accept two legislative amendments. First, the ban would sunset after 10 years. Second, the Department of Justice would commission a study of the ban's effectiveness. The study would then provide members of Congress with information to help them decide whether to renew the ban or let it expire.

Attorney General Janet Reno's staff selected the researchers, who produced their final report in 2004, which was published by the Department of Justice's research arm, the National Institute of Justice. It concludes: "we cannot clearly credit the ban with any of the nation's recent drop in gun violence. . . . Should it be renewed, the ban's effects on gun violence are likely to be small at best and perhaps too small for reliable measurement."⁷⁴ As the report noted, assault weapons "were used in only a small fraction of gun crimes prior to the ban: about 2% according to most studies and no more than 8%."⁷⁵ Most of the firearms that were used in crime were handguns, not rifles. Recall that "assault weapons" are an arbitrarily defined set of guns. Thus, criminals, to the degree that the ban affected them at all, could easily substitute other guns for so-called assault weapons.

With respect to the ban's impact on crime, the study said that "the share of crimes involving" so-called assault weapons declined, due "primarily to a reduction in the use of assault pistols," but that that decline "was offset throughout at least the late 1990s by steady or rising use of other guns equipped with" magazines holding more than 10 rounds.⁷⁶ In other words, criminals easily substituted some guns for others.⁷⁷

What about state-level assault-weapons bans? As noted above, Connecticut has had such a ban since 1993. Economist John Lott examined data for the five states with assaultweapon bans in his 2003 book, The Bias against Guns. Controlling for sociological variables, and testing the five states with bans against the other 45 states, he found no evidence of a reduction in crime. To the contrary, the bans were associated with increased crime in some categories.⁷⁸ Whether the adverse effect Lott reports is a phantom of statistical analyses or random factors, the state-level data do not support the claim that assault weapons bans reduced crime rates. The National Institute of Justice study, discussed above, also examined state and local laws, and found no statistically discernable reductions in crime or its severity.

Regarding mass murders in particular, in 2012 *Mother Jones* examined 62 mass shootings since 1982, finding that 35 of the 142 guns used were designated as assault weapons.⁷⁹ The *Mother Jones* study has been criticized for its selective and inconsistent decisions about which incidents to include. To take one example of an incident not involving an "assault weapon" that *Mother Jones* did not include, a man murdered 22 people at a Texas cafeteria • The National Institute of Justice study examined state-level assaultweapons bans and found no statistically discernable reductions in crime. **66** Tragically, in order to comply with laws against concealed carry, Suzanna Hupp left her own handgun in her car before entering that cafeteria, rendering her defenseless as the attacker murdered her parents and many others. 99

in 1991 using a pair of ordinary semiautomatic pistols. He reloaded the guns several times.⁸⁰ Tragically, in order to comply with laws against concealed carry, Suzanna Hupp left her own handgun in her car before entering that cafeteria, rendering her defenseless as the attacker murdered her parents and many others, in circumstances when she had a clear, close shot at him while he was distracted.⁸¹ And recall that the most deadly U.S. firearms mass murder perpetrated by a single individual was at Virginia Tech University, where the perpetrator used a pair of ordinary handguns, not assault weapons, to murder 35 people.⁸²

CONFISCATION AND REGISTRATION

The most extreme form of gun control is confiscation. The Brady Campaign, and other gun-control groups, supported a 1976 Massachusetts ballot initiative for handgun confiscation.⁸³ Although the proposal was rejected by 69 percent of the voters, confiscation continues to surface whenever gun-control advocates believe that it might be politically viable.⁸⁴ For example, after the December 2012 murders in Newtown, Connecticut, Governor Dannel Malloy (D-CT) created the Sandy Hook Commission to make recommendations to enhance public safety. That commission released its final report in March 2015. Recommendation No. 10 would ban the possession of "any firearm capable of firing more than 10 rounds without reloading."85 If such a ban were in effect all across the country, it would cover tens of millions of guns already in the homes of gun owners. To avoid the criminal penalty for possession, gun owners would have to surrender their arms to the government. Malloy hedged his response to the commission's recommendation. He said there was no appetite in the legislature for such drastic proposals "at the moment."86

Gun Controls in Great Britain

President Obama and other gun control supporters have urged the United States to follow the policies of Great Britain and Australia, with mass confiscation of firearms.⁸⁷ Australia confiscated all semiautomatic rifles, all semiautomatic shotguns, all pump-action shotguns, and all handguns above .38 caliber. Great Britain confiscated virtually all handguns, and all semiautomatic and pump-action rifles above .22 caliber. Even nonlethal defensive arms, such as pepper sprays or stun guns, are prohibited. The President's advocacy of confiscation helps explain why constitutionalrights advocates resist the registration of guns and gun owners, since registration lists have been used for confiscation.

Great Britain's confiscation of semiautomatic rifles took place in the wake of a mass murder in 1987. The culprit murdered 16 people and wounded 14 more in an eight-hour killing spree in the small town of Hungerford.⁸⁸ Because it took a long time for anyone with a gun to arrive to stop the killer, the rate of fire from his particular guns was irrelevant. However, the British government chose to ban all semiautomatic rifles, since those had been some of the guns used by the killer.

Later, in 1998, after a known pedophile used a handgun to murder kindergarten children in Dunblane, Scotland, Parliament banned handguns. As a result, the Gun Control Network, a prohibition advocacy group, enthused that "British controls over firearms are regarded as 'the gold standard' in many countries." According to the Gun Control Network's spokesperson Gill Marshall-Andrews, "the fact that we have a gold standard is something to be proud of."⁸⁹

Did the British ban reduce mass murders? Before and after the bans, such crimes were so rare in Great Britain that it is hard to say definitively. Great Britain is in some ways safer, and in more ways more dangerous, than the United States. The UK homicide rate tends to fluctuate between one and two per 100,000 population.⁹⁰ The U.S. homicide rate is 4.7 (as of 2011). The difference is not entirely due to guns, since the non-gun U.S. homicide rate is consistently higher than the UK total homicide rate.

The actual rates of criminal homicides in the two countries are somewhat closer than

the above numbers would indicate. The U.S. rate is based on initial reports of homicides, and includes self-defense killings (about 7–12 percent of the total); so the U.S. rate would be about half a point lower if only criminal homicides were counted.⁹¹

The statistics from England and Wales are based only on final dispositions, so an unsolved murder, or a murder that is pleaded down to a lesser offense, is not counted as a homicide. In addition, multiple murders are counted as only a single homicide for Scottish statistics.⁹² Even so, it is true that the U.S. homicide rate is higher than in the UK

In other categories of major violent crime, the UK is generally worse than the United States. In 2010, the assault rate per 100,000 population was 250.9 in the United States; 664.4 in England and Wales; 1449.7 in Scotland; and 80.6 in Northern Ireland.⁹³

For robbery, the results are closer, although the UK as a whole is still worse. The U.S rate was 115.3; England and Wales had 137.9; Northern Ireland 75.0; and Scotland 49.

Burglary rates were: United States 695.9; England and Wales, 946.1; Northern Ireland, 658.7; and Scotland, 479.1. So the overall UK burglary rate is significantly worse (considering that England and Wales contain 89 percent of the UK population, and the burglary rate is more than one-third higher than in the United States). More important, the manner in which burglaries take place in the UK is much worse.

In the United States, only a fairly small percentage of home burglaries take place when the occupants are home, but in Great Britain, about 59 percent do.⁹⁴ In surveys, American burglars say that they avoid occupied homes because of the risk of getting shot.⁹⁵

English burglars prefer occupied homes because there will be wallets and purses with cash, which do not have to be fenced at a discount. British criminals have little risk of confronting a victim who possesses a firearm. Even the small percentage of British homeowners who have a legal gun would not be able to unlock the firearm from one safe, and then unlock the ammunition from another safe (as required by law), in time to use the gun against a criminal intruder.⁹⁶ It should hardly be surprising, then, that Britain has a much higher rate of home-invasion burglaries than does the United States.

If success is measured by a reduction in handgun crime, then the Great Britain handgun confiscation was a failure. A July 2001 study from King's College London's Centre for Defense Studies found that handgun-related crime *increased* by nearly 40 percent in the two years following implementation of the handgun ban.

As the King's College report noted, with passage of the Firearms Act of 1997, "it was confidently assumed that the new legislation effectively banning handguns would have the direct effect of reducing certain types of violent crime by reducing access to weapons."97 The news media proclaimed that the "world's toughest laws will help to keep weapons off the streets."98 Yet faster than British gun owners could surrender their previously registered handguns for destruction, guns began flooding into Great Britain from the international black market, driven by the demands of the country's rapidly developing criminal gun culture.⁹⁹ By 2009, Great Britain's handgun crime rate had doubled from the pre-ban levels.¹⁰⁰

Great Britain was a much safer society in the early 20th century, when the nation had virtually no gun crime and virtually no gun control. Now it has much more of both.

Registration and Confiscation in the United States

Mass prohibitions of guns or gun components or accessories invite a repetition of the catastrophe of alcohol prohibition. Just as alcohol prohibition in the 1920s spawned vast increases in state power and vast infringements of the Bill of Rights, another domestic war against the millions of Americans who are determined to possess a product that is very important to them is almost certain to cause significant erosion of constitutional freedom and traditional liberty.¹⁰¹ Legal and customary protections against unreasonable search and In surveys, American burglars say that they avoid occupied homes because of the risk of getting shot. When Canada tried to impose universal gun registration, the result was a fiasco.

seizure and against invasions of privacy would all suffer.¹⁰²

Americans are well aware that gun registration can be a tool for gun confiscation, and not just in other countries. In New York City during the mid-1960s, street crime was rising rapidly. So as a gesture to "do something," the New York City Council and Mayor John Lindsay (R) enacted long-gun registration. The per gun fee was low, just a few dollars.¹⁰³ Registration never did solve crimes, and crime continued to worsen. So in 1991, with the city becoming increasingly unlivable, Mayor David Dinkins (D) made a grand gesture of his own, convincing the City Council to enact a ban on so-called assault weapons.¹⁰⁴ Then, the New York police used the registration lists to conduct home inspections of individuals whose registered guns had been outlawed. The police said they were ensuring that the registered guns had been moved out of the city, or had already been surrendered to the government.¹⁰⁵

In California, in 2013, only strenuous opposition finally led to the defeat of a proposed law, AB 174, which, before it was amended to cover a different subject, would have confiscated grandfathered assault weapons that had previously been registered in compliance with California state law.

Precisely because of concerns about confiscation, many Americans will not obey laws that would retroactively require them to register their guns. During the first phase of the assault-weapon panic, in 1989 and 1990, several states and cities enacted bans and allowed grandfathered owners to keep the guns legally by registering them. The vast majority of gun owners refused to register.¹⁰⁶

Gun-prohibition advocates are quite correct in characterizing registration as an important step on the way to confiscation.¹⁰⁷ That is why Congress has enacted three separate laws to prohibit federal gun registration.¹⁰⁸ Obama apparently hopes to reverse federal policy with his euphemistic call for a national database of guns, and his imposition of registration for many long gun sales in the southwest border states.¹⁰⁹ Yet when Canada tried to impose universal gun registration the result was a fiasco. The registration system cost a hundred times more than promised. Non-compliance was at least 50 percent, and the registration system proved almost entirely useless in fighting crime. In 2012, the Canadian government repealed the registration law and ordered all the registration records destroyed.¹¹⁰

New Zealand's Arms Act of 1983, enacted at the request of the police, abolished the registration of rifles and shotguns. Rifle registration had been the law since 1920, and shotgun registration since 1968. The New Zealand Police explained that long-gun registration was expensive and impractical, and that the money could be better spent on other police work. The New Zealand Police pointed out that the database management is an enormously difficult and expensive task, that the long-gun registration database was a mess, and that it yielded virtually nothing of value to the police.^{III} Although some gun-control advocates began pushing in 1997 to revive the registry-since computers would supposedly make it work this time-the plan was rejected after several years of extensive debate and analysis.¹¹²

As for registration in the United States, the largest, most detailed comparative study of the effects of various firearms laws was conducted by Florida State University criminologist Gary Kleck, and published in his 1991 book Point Blank: Guns and Violence in America. His book was awarded the highest honor by the American Society of Criminology, the Michael Hindelang Book Award, "for the greatest contribution to criminology in a three-year period." The Kleck study examined many years of crime data for the 75 largest cities in the United States. The study controlled for numerous variables such as poverty, race, and arrest rates. Kleck's study found no crime-reducing benefits from gun registration.¹¹³ In 2013, at the request of the Canadian Department of Justice, Kleck prepared a report that synthesized all prior research in the United States and Canada. He found registration to be of no benefit in reducing any type of firearms misuse.¹¹⁴

WHAT CAN BE DONE?

When policymakers consider steps to address the problem of mass homicide, they should remember that highly publicized and emotionally wrenching events can distort our understanding of risk and what ought to be done about it. Airplane disasters, for example, get a lot of media coverage, but safety experts remind us that one is more likely to get injured in an automobile accident on the way to the airport than injured in an actual airline crash.¹¹⁵ We should similarly acknowledge that mass murders are rare in the United States. The risk of dying in a mass murder is roughly the same as being killed by lightning.¹¹⁶

And because favorable trends are not considered newsworthy, many people are unaware of some very positive developments. Since 1980, the U.S. homicide rate has fallen by over half, from more than 10 victims per 100,000 population annually, to under 5 today.¹¹⁷ Firearm accidents involving minors have also dropped. For children (age 0 to 14), the fatalgun accident rate has declined by 91 percent since 1950. The annual number of such accidents has plunged from its 1967 high of 598. As of 2013, there were only 69 such accidents.¹¹⁸

These favorable trends have taken place during a period when American gun ownership has soared. In 1964, when the homicide rate was about the same as it is now, per capita gun ownership was only .45—fewer than one gun per two Americans. In 1982, there were about .77 guns per capita (about 3 guns per 4 Americans). By 1994, that had risen to .91 (9 guns per 10 Americans). By 2010, there were slightly more guns in America than Americans.¹¹⁹

It would be inaccurate to claim that the entire reason that crime has declined in recent decades is because Americans have so many more guns, but it would be accurate to say that having more guns is not associated with more crime. If anything, just the opposite is true. Policies that seek to stigmatize or criminalize gun ownership per se (such as a universal background check law that criminalizes loaning a gun to one's sister, as discussed above) have little to do with public safety, except to undermine it. We must also recognize that mass murderers often spend months planning their crimes. These are generally not crimes of passion that are committed in the heat of the moment. Dylan Klebold and Eric Harris spent several months plotting their 1999 attack at Columbine High School. Dylann Roof allegedly plotted for six months prior to his attack in Charleston, South Carolina. Adam Lanza attempted to destroy the evidence of his plan to attack Sandy Hook students, but investigators uncovered the extensive research he had done on mass murders in the months leading up to that incident.

While the nature of these crimes makes absolute prevention impossible, there are, nevertheless, certain policy areas that deserve consideration. A large proportion of mass murderers-and about one-sixth of "ordinary" murderers—are mentally ill.¹²⁰ Better care, treatment, and stronger laws for civil commitment could prevent some of these crimes. The Tucson murderer, Jared Loughner, was expelled from Pima Community College because he was accurately found to be dangerously mentally ill; unfortunately, there was no follow-up. The Aurora theater murderer, James Holmes, was reported by his psychiatrist to the University of Colorado Threat Assessment Team because of his expressed thoughts about committing a mass murder. But once Holmes withdrew from the university, there was no follow-up. Newtown murderer Adam Lanza's mother was aware of his anti-social malignancy and recklessly left her firearms accessible to him.121

There are, of course, competing interests involved when debating the curtailment of individual rights based on mental-health screening. Any involuntary commitment must respect the Constitution, which, as applied by the Supreme Court, requires proof by "clear and convincing evidence" that the individual is a danger to himself or others in order for the person to be committed.¹²² Notwithstanding some similar traits among mass shooters young, male, alienated, intelligent—it's important to remember that those traits are present **66** It would be inaccurate to claim that the entire reason that crime has declined in recent decades is because Americans have so many more guns, but it would be accurate to say that having more guns is not associated with more crime.

••• Over the last 25 years, there have been at least to cases in which armed persons have stopped incipient mass murder.

in a great many young men who never harm anyone. It is also important not to stigmatize mental health treatment to such an extent that at-risk people, along with their relatives and friends, refuse to seek help for fear of the consequences.

These are nontrivial considerations that must be weighed before any expansion of the civil commitment system. Better voluntary mental health treatment is expensive in the short run, but pays for itself in the long run through reduced criminal justice and imprisonment costs, not to mention reduced costs to victims.¹²³

Unfortunately, misguided laws in recent years have made certain buildings vulnerable to sociopaths who, like Adam Lanza, aim to kill as many people as possible before there is effective resistance. By state law, Sandy Hook Elementary School was a gun-free zone: the state forbids carrying guns at schools, even by responsible adults who have been issued a permit based on the government's determination that they have the good character and training to safely carry a firearm throughout the state.¹²⁴Thus, law-abiding adults were prohibited from protecting the children in their care, while an armed criminal could enter the school easily.

Over the last 25 years, there have been at least 10 cases in which armed persons have stopped incipient mass murder: a Shoney's restaurant in Alabama (1991); Pearl High School in Mississippi (1997); a middle school dance in Edinboro, Pennsylvania (1998); Appalachian School of Law in Virginia (2002); Trolley Square Mall in Salt Lake City (2007); New Life Church in Colorado (2007); Players Bar and Grill in Nevada (2008); Sullivan Central High School in Tennessee (2010); Clackamas Mall in Oregon (2012; three days before Newtown); Mayan Palace Theater in San Antonio (2012; three days after Newtown); and Sister Marie Lenahan Wellness Center in Darby, Pennsylvania (2014).¹²⁵

Gun prohibitionists insist that armed teachers, or even armed school guards, won't make a difference, but in the real world, they have—even at the Columbine shooting, where the armed school resource officer (a sheriff's deputy, in that case) was in the parking lot when the first shots were fired. The officer fired two long-distance shots and drove the killers off the school patio, saving the lives of some of the wounded students there. Unfortunately, however, the officer failed to pursue the killers into the building—perhaps due to a now-abandoned law enforcement doctrine of waiting for the SWAT team to arrive.

The contrasts are striking and tragic. The attempted massacre at New Life Church in Colorado Springs was stopped by a private citizen with a gun; the massacre at South Carolina's Emanuel AME wasn't. The mass murder at Pearl High School was stopped by a private citizen (the vice principal) with a gun; the mass murder at Newtown's elementary school wasn't stopped until the police arrived. The shootings at Appalachian Law School ended when private citizens (armed students) subdued the gunman; the shootings at Virginia Tech continued until the police arrived. More licensed-carry laws that reduce the number of pretend gun-free zones are an effective way to save lives.126

CONCLUSION

Firearms in the hands of law-abiding citizens enhance public safety. Firearms in the wrong hands endanger everyone. Responsible firearms policies focus on thwarting dangerous people and do not attempt to infringe the constitutional rights of good persons. Background checks on firearms sales can be improved by including more records on persons who have been adjudicated to be so severely mentally ill that they are a genuine threat.

Extending federal gun control to private intrastate sales between individuals—and to firearms loans among friends and family—is constitutionally dubious, and imposes severe burdens for no practical benefit. Such a system is futile without registration of all firearms. Gun owners have justifiably resisted gun registration because it has facilitated gun confiscation in the United States and other nations. It is false to claim that common firearms are "assault weapons" and it is false to claim that common magazines are high capacity. Outlawing standard firearms and their magazines deprives innocent victims of the arms that may be best-suited for their personal defense. Sensational crimes are often used to push poorly conceived laws which criminalize peaceable gun owners. The most effective paths to preventing mass shootings are improving access to mental care and removing impediments to lawful self-defense and defense of others.

NOTES

The author wishes to thank Ari Armstrong for his research assistance in the preparation of this paper.

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2. Quoted in ibid.

3. Brady Center to Prevent Gun Violence, "Charleston Families Join Brady Campaign and Members of Congress to Call for a Vote on Expanding Brady Background Checks," July 8, 2015, http://www.bradycampaign.org/press-room/ charleston-families-join-brady-campaign-andmembers-of-congress-to-call-for-a-vote-on.

4. Alex Seitz-Wald, "Clinton Calls for New Gun Control Laws, Outflanking Sanders," June 20, 2015, http://www.msnbc.com/msnbc/clinton-callsnew-gun-control-laws-outflanking-sanders.

5. See Richard Perez-Pena, "Problems Plague System to Check Gun Buyers," *New York Times*, July 27, 2015; Michael S. Schmidt, "Background Check Flaw Let Dylann Roof Buy Gun, FBI Says," *New York Times*, July 10, 2015.

6. James B. Jacobs, *The Eternal Criminal Record* (Cambridge, MA: Harvard University Press, 2015), p. 149. 7. Quoted in Ed Komenda and Jackie Valley, "What Now? Three Mass Shootings in a Week Leave Communities Wondering How to React," *Las Vegas Sun*, June 15, 2014.

8. Meg Wagner, "Judge Who Detained Lafayette Movie Theater Shooter John Houser Says She Couldn't Force Him into Mental Hospital: 'I Did My Job.'' New York *Daily News*, July 29, 2015, http://www.nydailynews.com/news/national/lacinema-shooter-not-committed-mental-hospitaljudge-article-1.2306183.

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13. Larry Buchanan, Josh Keller, Richard A. Oppel Jr., and Daniel Victor, "How They Got Their Guns," *New York Times*, October 3, 2015, http:// www.nytimes.com/interactive/2015/10/03/us/ how-mass-shooters-got-their-guns.html?action=c lick&contentCollection=U.S.&module=MostPop ularFB&version=Full®ion=Marginalia&src=m e&pgtype=article.

14. Glenn Kessler, "Obama's Continued Use of

the Claim that 40 Percent of Gun Sales Lack Background Checks," *Washington Post*, April 2, 2013, http://www.washingtonpost.com/blogs/factchecker/post/obamas-continued-use-of-theclaim-that-40-percent-of-gun-sales-lack-back ground-checks/2013/04/01/002e06ce-9bof-11e2a941-a19bce7af755_blog.html. Note also Glenn Kessler, "Clinton's Claim that 40 Percent of Guns Are Sold at Gun Shows and Over the Internet," *Washington Post*, October 16, 2015.

15. 18 U.S.C. § 922(d).

16. Greg Ridgeway, *Summary of Select Firearm Violence Prevention Strategies*, National Institute of Justice, January 4, 2013, http://www.nraila.org/me dia/10883516/nij-gun-policy-memo.pdf.

17. 18 U.S.C. § 922(b)(5), 923(g)(1)(A).

18. 18 U.S.C. § 923(g)(1).

19. 18 U.S.C. §§ 922(b)(5), 923(g)(1)(A).

20. See Adam Edelman, "NY SAFE Act Weapons Registry Numbers Released," New York *Daily News*, June 23, 2015. (Low assault-weapon registration stats suggest low compliance with SAFE Act gun control law.) Canadian gun registration is discussed in more detail below.

21. 521 U.S. 898, 938 (1997) (Thomas, J., concurring).

22. *District of Columbia v. Heller*, 554 U.S. 570, 626–27 (2008).

23. 18 U.S.C. §921(a)(21)(D).

24. 18 U.S.C. §§922(a), 924.

25. 18 U.S.C. § 922(t).

26. "Recordkeeping and Background Check Procedures for Facilitation of Private Party Firearms Transfers," ATF Proc. 2013-1 (March 15, 2013), https://www.atf.gov/file/4961/download.

27. Mandatory sentences are specified in 18

U.S.C. § 924.

28. David B. Kopel, "Background Checks for Firearms Sales and Loans: Law, History, and Policy," in *Harvard Journal on Legislation* 53 (forthcoming, 2015), http://ssrn.com/abstract=2665432.

29. Safe Communities, Safe Schools Act of 2013, S. 649, Section 122: Firearm Transfers, 113th Cong. (2013).

30. Ibid.

31. *Lawrence v. Texas*, 539 U.S. 558 (2003) (law against consensual sex by same-sex adults had no legitimate purpose).

32. "Los Angeles Passes Law Banning Large-Capacity Gun Magazines," *New York Times*, July 30, 2015.

33. The New York law originally banned magazines over 7 rounds. But in March 2013, the New York legislature "suspended" the 7-round limit, replacing it with a 10-round limit, since there are many guns for which no magazines of 7 rounds or fewer are manufactured. The law still forbids the purchase of magazines holding more than 10 rounds, and requires that magazines that hold more than 7 rounds not be loaded with more than 7 except at target ranges.

34. A clip is also a device for holding ammunition. A clip is basically a rectangular strip that holds the base of several rounds of ammunition in a line. Clips were most typically used for some rifles from the 1940s. Some people use the word "clip" incorrectly when what they mean is "magazine."

35. Public Safety and Recreational Firearms Use Protection Act, Pub. L. No. 103-322, Title XI, Subtitle A, §110105(2), 108 Stat. 1996, 2000 (1994) (Sunset Sept. 2004).

36. State of Arizona, House of Representatives, House Bill 2640 (2012), amending Ariz. Rev. Stats. §17-231.

37. See Clayton E. Cramer, "High-Capacity-Mag-

azine Bans," *National Review*, December 19, 2012, http://www.nationalreview.com/articles/336006/ high-capacity-magazine-bans-clayton-e-cramer.

38. For a detailed explanation of the problem of magazine loading under stress, see the amicus brief for the International Law Enforcement Educators and Trainers Association and the Independence Institute in *Peruta v. San Diego*, no. 10-56971 (9th Cir., May 11, 2011), http://davekopel.org/Briefs/Peruta/Intl-Law-Enforcement-Educa tors-and-Trainers.pdf.

39. See Bob Parker, "How the North Hollywood Shootout Changed Patrol Arsenals," February 28, 2012, http://www.policemag.com/channel/weap ons/articles/2012/02/how-the-north-hollywoodshootout-changed-patrol-rifles.aspx.

40. "The failure to reduce LCM [large capacity magazines] use has likely been due to the immense stock of exempted pre-ban magazines, which has been enhanced by recent imports," the 2004 study speculates. The study notes that millions of assault weapons and large-capacity magazines were "manufactured prior to the ban's effective date." Christopher S. Koper, Daniel J. Woods, and Jeffrey A. Roth, "An Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence, 1994–2003: Report to the National Institute of Justice, United States Department of Justice," University of Pennsylvania (June 2004), https://www.ncjrs.gov/pdffiles1/ nij/grants/204431.pdf, p. 2.

41. Josh Sugarmann, "Drug Traffickers, Paramilitary Groups . . . ," in *Assault Weapons and Accessories in America*, Violence Policy Center, 1988, http:// www.vpc.org/studies/awadrug.htm.

42. "Third of High School Seniors Take Marijuana," *News Medical*, December, 22, 2012, http:// www.news-medical.net/news/20121222/Third-ofhigh-school-seniors-take-marijuana.aspx.

43. Alicia A. Caldwell, "James Holmes' Gun Jammed During Aurora Attack, Official Says," *Associated Press*, July 22, 2012.

44. Will Grant, "Active Shooter Response: Lessons for Experts," *Blackwater*, January 6, 2013, http://blackwaterusa.com/active-shooter-re sponse-lessons-from-experts.

45. *Fyock v. City of Sunnyvale*, 25 F. Supp. 3d 1267, 1275 (N.D. Cal. 2014) (noting evidence that "magazines having a capacity to accept more than ten rounds make up approximately 47 percent of all magazines owned").

46. The figure is based on over half a century of manufacturing, import, and export data recorded by the Bureau of Alcohol, Tobacco, and Firearms. The table with the annual figures is available online in chapter 12 of Nicholas J. Johnson, David B. Kopel, George Mocsary, and Michael P. O'Shea, Firearms Law and the Second Amendment (New York: Aspen Publishers, 2013). Chapters 12-15 are available at www.firearmsregulation.org. An earlier version of this table is available in the amicus brief of the International Law Enforcement Educators and Trainers Association, et al., in District of Columbia v. Heller, 554 U.S. 570 (2008), pp. App. 13-15, http://davekopel.org/Briefs/07-290bsacreprin tIntlLawEnforcementEduc&Trainers.pdf. However, the numbers in the brief are too low because they omitted firearms imports in certain years.

47. Julie Calhoun, "S.C. Senator Pushing to Strengthen Gun Laws," WRDW.com, August 18, 2015, http://www.wrdw.com/home/headlines/ South-Carolina-Senator-pushing-to-strengthengun-laws-322143841.html.

48. John Wagner, "Martin O'Malley: 'I'm Pissed' at Lack of Action on Gun Control," *Washington Post*, June 19, 2015, http://www.washingtonpost. com/news/post-politics/wp/2015/06/19/omalleyim-pissed-at-lack-of-action-on-gun-control/.

49. Some machine guns are, or may be, set to fire a certain number of rounds with one pull of the trigger. Tri-burst (three rounds) is common for many new machine guns.

50. 26 U.S.C. §§ 5801–02, 5811–12, 5821–22, 5841– 54, 5861; 27 Code of Federal Regulations 478–79; Bureau of Alcohol, Tobacco, and Firearms, *National Firearms Act Handbook* (ATF E-Publication 5320.8; revised April 2009), https://www.atf.gov/file/58251/download.

51. 18 U.S.C. § 922(0); "National Firearms Act (NFA)—Machine Guns," http://www.atf.gov/fire arms/faq/national-firearms-act-machine-guns. html.

52. Bureau of Justice Statistics, Selected Findings: Guns Used in Crime 4 (July 1995), http://www. bjs.gov/content/pub/pdf/GUIC.PDF (there are 240,000 registered machineguns); Gary Kleck, Targeting Guns: Firearms and Their Control (Hawthorne, NY: Aldine de Gryter, 1997), p. 108 (half of registered machine guns are privately owned) (citing BATF, Statistics Listing of Registered Weapons, April 19, 1989). Because the manufacture of new machine guns for sale to ordinary citizens (as opposed to government agents) was banned on May 19, 1986, and because pre-ban machine guns are therefore very valuable (so owners have every incentive to keep them in working order), the 1995 data about private machine guns are likely still valid (there are about 120,000 legally registered ones).

53. Dolf L. Goldsmith, *The Devil's Paintbrush: Sir Hiram Maxim's Gun*, 2nd ed. (Toronto: Collector Grade Publications, 1993).

54. See David B. Kopel, *Guns: Who Should Have Them?* (New York: Prometheus Books, 1995), p. 162; *Defense Intelligence Agency, Small Arms Identification and Operation Guide—Eurasian Communist Countries* (Washington: Government Printing Office, 1988), p. 105.

55. State of Florida, Commission on Assault Weapons, Report of May 18, 1990 (summary of March 18, 1990 meeting), p. 3. (Commission member stating that California "chose those weapons from a book of pictures.")

56. For example, the 1989 California statute outlawed the Heckler and Koch "H-93," the "SIG PE-57," and the Gilbert Equipment Company "Striker 12," none of which have ever existed. Also banned was the "Encom CM-55," which is not a semiautomatic; it is a single-shot gun with a total ammunition capacity of one.

57. Assault Weapons Ban of 2013, S. 150, 113th Congress (2013).

58. In the 97th session of the Illinois General Assembly, see House Bill 0815, House Bill 263, and Amendment #1 to Senate Bill 2899 (amendment by Rep. Eddie Acevedo).

59. Colorado Senate Bill 197 (by Sen. President John Morse); David Kopel, Testimony on SB 197 before Senate Judiciary Committee, March 4, 2013, http://youtu.be/FpzbS7XgfB8.

60. See the 2011 manufacturing data from the Bureau of Alcohol, Tobacco, and Firearms, https:// www.atf.gov/file/4806/download.

61. The energy that is used to turn the cylinder of the revolver (bringing the next round into place, ready to fire) comes from the user pulling the trigger. (The trigger is mechanically linked to the cylinder, and a trigger pull performs the actions of cocking the hammer and firing a round.) Thus, the revolver does not use gunpowder energy in order to load the next round. So even though a revolver is comparable to a semiautomatic handgun in that each pull of the trigger chambers and fires one round, a revolver is a not a semiautomatic.

62. The formula is: KE = $\frac{1}{2}$ MV². Or in words: the kinetic energy is equal to one-half of the mass times the square of the velocity.

63. Rifles have longer barrels than handguns, and rifle cartridges generally burn more gunpowder. Thus, a bullet shot from a rifle spends more time traveling through the barrel than does a bullet shot from a handgun. As a result, the rifle bullet receives a longer, more powerful push from the expanding cloud of gunpowder in the barrel, so rifles generally deliver more kinetic energy than do handguns. As for shotguns, the mass of shot pellets is often heavier than any single rifle or handgun bullet, so shotguns have very high kinetic energy at short ranges. But their kinetic energy drops rapidly because the round pellets quickly lose speed because of air friction. Rifle and handgun bullets are far more aerodynamic than are shotgun pellets.

64. If the gun's caliber is .17, that means the gun's barrel is 17/100 of an inch wide and can accommodate a bullet that is very slightly smaller. So a .38 caliber bullet is bigger than a .17 caliber bullet, and a .45 caliber bullet is bigger than either of them. (Calibers can also be expressed metrically: 9 mm is nearly the same as .357 inches, which is slightly smaller than a .38 bullet). The bullet's size depends on its width (caliber) and on its length, so one .45 caliber bullet might be longer, and hence heavier, than another .45 caliber bullet. For any particular gun in any particular caliber, there are a variety of rounds available, some of which have more gunpowder than others. More gunpowder makes the bullet fly straighter for longer distances (especially important in many types of hunting or target shooting); less gunpowder reduces recoil and makes the gun more comfortable to shoot and more controllable for many people.

65. Measured at the muzzle. Kinetic energy begins declining as soon as the bullet leaves the barrel because air friction progressively reduces velocity.

66. Frank C. Barnes, *Cartridges of the World: A Complete and Illustrated Reference for Over 1500 Cartridges* (Iola, WI: Krause Publications, 2014).

67. Many gun manufacturers produce a single model of firearm in several different calibers. While .223 is the most common caliber for the AR-15, larger calibers are available, and some of those would be suitable for bigger game. The claim that so-called assault weapons are high-velocity is true only in the trivial sense that most guns which are called assault weapons are rifles—and rifles are generally higher velocity than handguns or shotguns.

As for the handguns which are sometimes mislabeled as "assault weapons," they are lower velocity, with less powerful bullets, than the most powerful handguns. The most powerful handgun calibers, such as the .44 Magnum and .454 Casull (often carried by hikers and hunters for self-defense against bears), are mostly revolvers.

68. Bureau of Alcohol, Tobacco, and Firearms, *Federal Explosives Laws and Regulations* (2012), https://www.atf.gov/file/58741/download.

69. "Challenges and Implications of President Obama's Gun Control," PBS *Newshour*, January 16, 2013, http://video.pbs.org/video/2326406075/.

70. The types of hunting that might include enough shots in a short period to heat the barrel include pest and predator control (e.g., prairie dogs on a ranch), and wild boars.

71. A chainsaw's decibel (dB) output measured at one meter away is 105 db. See Tontechnik-Rechner, "Decibel Table-SPL-Loudness Comparison Chart," http://www.sengpielaudio.com/TableOf-SoundPressureLevels.htm. The use of a suppressor takes the dB level for a firearm down to the high 120s. That makes "silenced" firearms about 20 dB louder than a chainsaw. The decibel scale is logarithmic, not linear, so a sound 20 dB more sounds four times louder. See Steve Claridge, "How Loud Is Too Loud: Decibel Levels of Common Sounds," Hearing Aid Know, http://www.hearingaidknow. com/2007/03/how-loud-is-too-loud-decibellevels-of-common-sounds/. For additional background, see Robert Silvers, "Results," 2005, http:// www.silencertalk.com/results.htm. See also, David B. Kopel, "Silencers, gun," in Forensic Science, ed. Ayn Embar-Seddon and Allan D. Pass (Salem, MA: Salem Press, 2008); Alan C. Paulson, Silencer: History and Performance: Sporting and Tactical Silencers (Boulder, CO: Paladin Press, 1996).

72. Conn. Gen. Stats. § 53-202a-0; 1993, P.A. 93-306.

73. Jacob Sullum, "How Do We Know an 'Assault Weapon' Ban Would Not Have Stopped Adam Lanza? Because It Didn't," *Reason*, December 17, 2012, http://reason.com/blog/2012/12/17/how-dowe-know-an-assault-weapon-ban-wou. 74. Christopher S. Koper, Daniel J. Woods, and Jeffrey A. Roth, "An Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence, 1994–2003: Report to the National Institute of Justice, United States Department of Justice," University of Pennsylvania, June 2004, https://www.ncjrs.gov/pdffiles1/ nij/grants/204431.pdf, p. 3.

75. Ibid., p. 2.

76. Ibid.

77. Writing for *Salon*, Alex Seitz-Wald objects to calling the 1994 ban a failure simply because the 2004 study showed no evidence that it did any good. Seitz-Wald believes that the ban showed "some encouraging signs" since, for example, some criminals substituted non-assault guns for assault guns. Interviewing researcher Christopher Koper, Seitz-Wald found that he agrees with speculation that if the 1994 bans had stayed in effect, they might have eventually done some good, although there was as of yet no evidence to support this hope. Alex Seitz-Wald, "Fact Check: LaPierre's Big Fib," *Salon*, January 30, 2013, http://www.salon.com/2013/01/30/wayne_lapierre_hopes_you_dont_read_that_study_he_mentioned.

78. John Lott, *The Bias against Guns: Why Almost Everything You've Heard About Gun Control Is Wrong* (Washington: Regnery Publishing, 2003), p. 207. Looking at the raw crime data, Lott observes:

The comparison group here is the fortyfive states that did not adopt a ban. For both murder and robbery rates, the states adopting assault weapons bans were experiencing a relatively faster drop in violent crimes prior to the ban and a relatively faster increase in violent crimes after it. For rapes and aggravated assaults, the trends before and after the law seem essentially unchanged.

Based on the crime data, Lott concludes that it is "hard to argue that . . . banning assault weapons produced any noticeable benefit in terms of lower crime rates." In statistical analyses that seek to control for other possible factors in the fluctuations of crime rates, Lott finds that, if anything, the state-level assault weapons bans had an adverse effect on crime rates:

Presumably if assault weapons are to be used in any particular crimes, they will be used for murder and robbery, but the data appears more supportive of an adverse effect of an assault weapons ban on murder and robbery rates . . . , with both crime rates rising after the passage of the bans Murder and robbery rates started off relatively high in the states that eventually adopted a ban, but the gap disappears by the time the ban is adopted. Only after instituting the ban do crime rates head back up. There is a very statistically significant change in murder and rape rate trends before and after the adoption of the ban. . . . It is very difficult to observe any systematic impact of the ban on rape and aggravated assault rates. [See p. 214.]

See also Mark Gius, "An Examination of the Effect of Concealed Weapons Laws and Assault Weapons Ban on State-level Murder Rates," *Applied Economic Letters* 21, no. 4 (November 26, 2013): 265–67.

79. Mark Follman, Gavin Aronsen, and Deanna Pan, "A Guide to Mass Shootings in America," Mother Jones, December 15, 2012, http://www. motherjones.com/politics/2012/07/mass-shoot ings-map; see also Mark Follman, Gavin Aronsen, and Deanna Pan, "US Mass Shootings, 1982–2012: Data from Mother Jones' Investigation," Mother Jones, December 28, 2012, http://www.mother jones.com/politics/2012/12/mass-shootings-moth er-jones-full-data. Mother Jones missed more than 40 percent of the cases which met its selection criteria. Nor did it consistently follow its purported selection criteria. See James Alan Fox, "Mass Shootings not Trending," Boston Globe, January 23, 2013, http://www.boston.com/community/blogs/ crime_punishment/2013/01/mass_shootings_not_ trending.html; Grant Duwe, "The Truth about Mass Public Shootings," *Reason.com*, October 28, 2014, http://reason.com/archives/2014/10/28/the-truth-about-mass-public-shootings.

80. Thomas C. Hayes, "Gunman Kills 22 and Himself in Texas Cafeteria," *New York Times*, October 17, 1991, http://www.nytimes.com/1991/10/17/us/ gunman-kills-22-and-himself-in-texas-cafeteria. html; David B. Kopel, "Hennard, George," in *Notorious Lives* (Salem, MA: Salem Press, 2007).

81. Suzanna Gratia Hupp, *From Luby's to the Legislature* (San Antonio: Privateer Publications, 2009).

82. The killer used a .22-caliber Walther P22 handgun and a 9mm Glock 19 handgun. Reed Williams and Shawna Morrison, "Police: No Motive Found," *Roanoke Times*, April 26, 2007.

83. At the time, the Brady Campaign called itself the National Council to Control Handguns.

84. In The Atlantic, senior editor Robert Wright said that the assault weapons issue is a "red herring." As he points out, "there's no clear and simple definition of an assault weapon, and this fact has in the past led to incoherent regulation." Wright's preferred legislation would make it illegal to sell or possess a firearm-rifle or pistol-that can hold more than six bullets, and "illegal to sell or possess a firearm with a detachable magazine." In other words, Wright wants to ban the very large majority of handguns, and most rifles. This plainly violates the constitutional right to keep and bear arms. And even if there were no right to arms, the enforcement problems would be worse than the American experience with alcohol prohibition. Wright uses the example of the Newtown murders, noting that the criminal carried a rifle and two handguns and that he shot about 12 rounds before reaching the students. Wright supposes, "At that point, as he headed for the classrooms, he'd have six more rapid-fire bullets left, after which he'd have to reload his guns bullet by bullet." Robert Wright, "A Gun Control Law That Would Actually Work," The Atlantic, December 17, 2012, http://www.theatlantic. com/national/archive/2012/12/a-gun-control-lawthat-would-actually-work/266342.

But in a mass-murder scenario, a criminal would by no means be limited to three guns; he could easily carry many revolvers (or six-round semiautomatics). Like semiautomatics, doubleaction revolvers fire one round with each pull of the trigger. Besides that, revolvers can quickly be reloaded with speed loaders. The user does not have to put the fresh rounds into the cylinder one at a time.

For more on the effective firing rates of revolvers and other types of guns, see Kopel, *Guns: Who Should Have Them?* pp. 164–65.

85. Final Report of the Sandy Hook Advisory Commission, presented to Dannel P. Malloy, State of Connecticut, March 6, 2015, pp. 67–68.

86. Quoted in "No Appetite for More Gun Control in Conn., Governor Says," Associated Press, March 6, 2015, http://www.nydailynews.com/news/ national/no-appetite-gun-control-conn-governorarticle-1.2140449.

87. "We know that other countries, in response to one mass shooting, have been able to craft laws that almost eliminate mass shootings. Friends of ours, allies of ours—Great Britain, Australia countries like ours. So we know there are ways to prevent it." Barack Obama, presidential statement, October 1, 2015, https://www.whitehouse. gov/the-press-office/2015/10/01/statement-pres ident-shootings-umpqua-community-collegeroseburg-oregon.

88. Joyce Lee Malcolm, "Two Cautionary Tales of Gun Control," *Wall Street Journal*, December 26, 2012, http://online.wsj.com/article/SB1000142412 7887323777204578195470446855466.html.

89. House of Commons, Home Affairs, Second Report, "Controls over Firearms," Session 1999– 2000, April 6, 2000, at ¶22, http://www.publica tions.parliament.uk/pa/cm199900/cmselect/ cmhaff/95/9502.htm.

90. UN Data, "Intentional Homicide, Number, and Rate per 100,000 People," http://data.un.org/ Data.aspx?d=UNODC&f=tableCode%3A1 (1.6. in 1995, rising to 2.1 in 2002, falling to 1.2 in 2009).

91. Gary Kleck, *Point Blank: Guns and Violence in America* (Hawthorne, NY: Aldine de Gruyter, 1991), p. 114.

92. See Joyce Lee Malcolm, *Guns and Violence: The English Experience* (Cambridge, MA: Harvard University Press, 2002), pp. 228–31; and Patsy Richards, "Homicide Statistics," Research Paper 99/56, House of Commons Library Social and General Statistics Section, May 27, 1999, p. 9. See also "Statistics Release: Homicides in Scotland in 2001–Statistics Published," A Scottish Executive National Statistics Publication, November 28, 2002, http://www.scotland.gov.uk/stats/bullet ins/00205-00.asp, at Note 2 ("A single case of homicide is counted for each act of murder or culpable homicide irrespective of the number of perpetrators or victims.")

93. The assault, robbery, and burglary statistics are from the United Nations Office of Drugs http://www.unodc.org/unodc/en/ and Crime, data-and-analysis/statistics/data.html. (For historical reasons, these three jurisdictions within the UK often keep separate crime statistics. In terms of population, England and Wales has about 56 million people, Northern Ireland fewer than two million, and Scotland about five million. Thus, England and Wales have about 90 percent of the UK population.) See "England and Wales Population Rises 3.7m in 10 years," The Guardian (London), July 16, 2012, http:// www.guardian.co.uk/world/2012/jul/16/englandwales-population-rises; Scotland: The Official Gateway to Scotland, "Population of Scotland," http://www.scotland.org/about-scotland/the -scottish-people/population-of-scotland.

94. British Crime Survey, supplementary tables for 2010–2011, Table 1.8 (for 2010/11), http:// www.homeoffice.gov.uk/publications/scienceresearch-statistics/research-statistics/crimeresearch/nature-burglary; David B. Kopel, "Lawyers, Guns, and Burglars," *Arizona Law Review* 43 (2001): 345, 347, http://ssrn.com/ab stract=2594535. 95. Kopel, "Lawyers, Guns, and Burglars," pp. 354–55.

96. By the late 20th century, Great Britain had one of the lowest rates of gun ownership in the Western World. Only 4 percent of British households would admit gun ownership to a telephone pollster. David B. Kopel and Joseph Olson, "All the Way Down the Slippery Slope: Gun Prohibition in England, and Some Lessons for America," *Hamline Law Review* 22 (1999): 399, 427, http:// ssrn.com/abstract=149029.

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98. Philip Johnston, "World's Toughest Laws Will Help to Keep Weapons off the Streets," *The Telegraph*, November 2, 1996.

99. "Illegal Firearms in the United Kingdom," Centre for Defense Studies, King's College London, Working Paper 4, July 2, 2001, p. 15.

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102. For a more detailed analysis of the civil rights implications of gun prohibition laws, see David B. Kopel, "Peril or Protection? The Risks and Benefits of Handgun Prohibition," *St. Louis University Public Law Review* 12 (1993): 285, 319–23, http://davekopel.org/2A/LawRev/Irstlupl.htm.

103. Currently codified at N.Y.C. Administrative Code § 10-304; formerly § 436-6.9, enacted by Local Law 106/1967 § 1.

104. N.Y.C. Administrative Code, § 10-301(16).

105. "Firearms Registration: New York City's Lesson," National Rifle Association, Institute for Legislative Action, January 27, 2000, http:// www.nraila.org/news-issues/fact-sheets/2000/ firearms-registration-new-york-city%60s. aspx?s=New+York+1991&ps= (Jeremy Travis, N.Y. Police Department deputy commissioner of legal matters, quoted in New York *Daily News*: "The department is taking owners at their word, but spot checks are planned.")

106. Kopel, *Guns: Who Should Have Them*? p. 186; Seth Mydans, "California Ends Year with Rush to Comply with Firearms Law," *New York Times*, January 2, 1991 (up to 20,000 persons registered grandfathered assault weapons by the California deadline of December 31, 1990, out of an estimated pool of 300,000); and Carl Ingram, "Few Takers for Assault Gun Grace Period," *Washington Times*, February 17, 1992 (46,000 California assault weapons registered out of an estimated pool of between 200,000 and 600,000).

107. Pete Shields, an early president of the Brady Campaign, explained in 1977: "The first problem is to slow down the number of handguns being produced and sold in this country. The second problem is to get handguns registered. The final problem is to make possession of all handguns and all handgun ammunition—except for the military, police, licensed security guards, licensed sporting clubs, and licensed gun collectors—totally illegal." Quoted in Richard Harris, "A Reporter at Large: Handguns," *New Yorker*, July 26, 1976, p. 58. (At the time, Shields' group was called the National Council to Control Handguns. It later changed its named to Handgun Control, Inc., and then changed again to "Brady Campaign.")

108. Stephen P. Halbrook, "Congress Interprets the Second Amendment: Declarations by a Co-Equal Branch on the Individual Right to Keep and Bear Arms," *Tennessee Law Review* 62 (1995): 597, 623–26.

In December 1940, Congress passed the Property Requisition Act to allow the military to

seize property (with compensation) for national defense needs. The Act expressly forbade the seizure or registration of citizens' firearms. The House Committee on Military Affairs explained that the language to protect the Second Amendment was added "in view of the fact that certain totalitarian and dictatorial nations are now engaged in the wholesale destruction of personal rights and liberties. H.R. Rep. No. 1120, at 2 (1941), 77th Congress, 1st sess. In a floor debate, Rep. Edwin Arthur Hall (R-NY) stated: "Before the advent of Hitler or Stalin, who took power from the German and Russian people, measures were thrust upon free legislatures of those countries to deprive the people of the possession and use of firearms, so that they could not resist the diabolical and vitriolic state police organizations as the Gestapo, the Ogpu, and the Cheka" Cong. Rec. 87 (1941): 6811. Rep. Dewey Short (R-MO) pointed out that "The method employed by Communists in every country that has been overthrown has been to disarm the populace . . ." Cong. Rec. 87 (1941): 7100. Lyle Boren, an Oklahoma Democrat, cited Trotsky and Hitler as executors of the kinds of gun control that must always be resisted in America. Cong. Rec. 87 (1941): 7101.

In 1986, the Firearms Owners' Protection Act became law. It forbids the creation of a federal registry of guns or gun owners. See 18 U.S. Code § 926(a). When Congress set up the National Instant Check System in 1994 it required that once a check was completed, the record of an approved sale should be destroyed. See 18 U.S. Code § 922(t)(2)(C). The Clinton administration did not obey this requirement, but the Bush administration did. See David B. Kopel, Paul Gallant, and Joanne Eisen, "Instant Check, Permanent Record," *National Review Online*, August 10, 2000, http://davekopel.org/NRO/2000/Instant-Check-Permanent-Record.htm.

109. By executive fiat, President Obama unilaterally imposed federal registration on anyone who buys two or more semiautomatic rifles within a one-week period in the four southwest border states. "Acting Director Announces Demand Letters for Multiple Sales of Specific Long Guns in Four Border States," Bureau of Alcohol, Tobacco, and Firearms, December 20, 2010, Agency Information Collection Activities: Proposed Collection, 75 Fed. Reg. 79,021 (Dec. 17, 2010). ATF began issuing demand letters for gun registration in July 2011.

110. 41st Parliament, 1st Session, Bill C-19, "Ending the Long-gun Registry Act," (Royal Assent received April 5, 2012), http://www.parl.gc.ca/ LegisInfo/BillDetails.aspx?Language=E&Mode= 1&billId=5188309; and Gary A. Mauser, "Misfire: Firearm Registration in Canada," Public Policy Sources, No. 48, Fraser Institute Occasional Paper (Vancouver, BC), 2001.

111. See David B. Kopel, *The Samurai, The Mountie, and The Cowboy* (Washington: Cato Institute, 1992), pp. 238–40.

112. Kelly Buchanan, "New Zealand," in *Firearms-Control Regulation and Policy*, Law Library of Congress, February 2013, http://www.loc.gov/law/help /firearms-control/firearms-control.pdf, pp. 149–68.

113. Kleck, Point Blank, p. 420, Table 10.4.

114. Gary Kleck, "Expert Report on Canadian Long Gun Registration Law" (expert opinion presented to Canadian Department of Justice, September 27, 2013).

115. Ransom Stephens, "How Much Safer Is It to Fly Than Drive?" *Examiner.com*, January 24, 2011, http://www.examiner.com/article/how-muchsafer-is-it-to-fly-than-drive-really. See also Bruce Schneier, *Schneier on Security* (Indianapolis: Wiley, 2008); John Mueller, "A False Sense of Insecurity," *Regulation* (Fall 2004): 42–46; and Aaron Wildavsky, *Searching for Safety* (New Brunswick, NJ: Transaction, 1988).

116. According to the FBI, there were 37 mass shooting deaths per year, on average, between 2000 and 2013. J. Pete Blair and Katherine W. Schweit, "A Study of Active Shooter Incidents in the United States Between 2000 and 2013," Texas State University and Federal Bureau of Investigation, U.S. Department of Justice (2014). According to the National Weather Service, there were 32 lightning-strike fatalities per year on average between 2006 and 2014. National Weather Service, "U.S. Lightning Deaths in 2015: 25," www.nws.noaa.gov/om/lightning/fatalities.s html.

117. "Estimated Crime in United States—Total," U.S. Department of Justice, Uniform Crime Reporting Statistics, http://www.ucrdatatool.gov/ Search/Crime/State/RunCrimeStatebyState.cfm.

118. Data available at Centers for Disease Control and Prevention, "About Underlying Cause of Death, 1999–2013," http://wonder.cdc.gov/ ucd-icd10.html. Agree to the terms of data, then under option 6 on the next screen, choose "Injury Intent and Mechanism." Then choose "Unintentional" for "Injury Intent" and choose "Firearm" for "Injury Mechanism."

For persons of all ages, in 2013 there were 505 deaths by "accidental discharge of firearms." This compares to 35,369 deaths that were caused by motor vehicle accidents; 38,851 deaths by accidental poisoning and exposure to noxious substances; 30,208 deaths by falls; and 3,391 deaths by accidental drowning.

Some of these successes can be attributed to changes in public policy, such as greater incarceration of violent criminals. Other successes have come from private initiatives, such the NRA's Eddie Eagle gun accident prevention program for children, or the National Shooting Sports Foundation's programs to give away free gun locks.

119. Nicholas J. Johnson, David B. Kopel, Michael P. O'Shea, and George Moscary, *Firearms Law and the Second Amendment: Regulation, Rights, and Policy* (New York: Aspen Publishers 2012). Chapter 12 is online at http://firearmsregulation. org/FRRP_2012_Ch12.pdf.

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www.jaapl.org/cgi/reprint/36/1/74.

121. "Danbury State's Attorney Releases Additional Information on December 14, 2012, Incident at Sandy Hook Elementary School," State of Connecticut, Division of Criminal Justice, March 28, 2013, http://www.ct.gov/csao/cwp/view. asp?a=1801&Q=521714. ("The gun locker at 36 Yogananda St. was open when the police arrived. It was unlocked and there was no indication that it had been broken into.")

122. Addington v. Texas, 441 U.S. 418 (1979).

123. David B. Kopel and Clayton E. Cramer, "Reforming Mental Health Law to Protect Public Safety and Help the Severely Mentally Ill," *Howard Law Journal* 58 (forthcoming, 2015), http:// ssrn.com/abstract=2564680.

124. Conn. Gen. Stat. Ann. § 53a-217b (making such carry a Class D felony).

125. David B. Kopel, "Pretend 'Gun-free' School Zones: A Deadly Legal Fiction," *Connecticut Law Review* 42 (2009): 515, http://ssrn.com/ab stract=1369783 (detailing Pearl High School, Edinboro, Appalachian School of Law, and New Life Church); Jeanne Assam, *God, the Gunman, and Me* (Denver: Jeane Assam Publishing, 2010); "Former Deputy Speaks On 2001 Santana High School Shooting," *10News.com*, March 2, 2011, http:// www.10news.com/news/former-deputy-speakson-2001-santana-high-school-shooting (in Santee, an off-duty officer was present while dropping off his daughter at school; he called for backup, and with an arriving officer, cornered the killer in

a bathroom, where the killer was reloading); Rain Smith, "Police Officers Kill Gunman at Sullivan Central," TimesNews.net, August 30th, 2010, http:// www.timesnews.net/article.php?id=9025899 (the school resource officer held the armed intruder at bay; he was shot after two more officers arrived on the scene); Rebecca Bessler, "Three Men Killed in Winnemucca Shooting on Sunday," KTVN Channel 2 News, May 25, 2008, http://www.ktvn. com/Global/story.asp?S=8378732 (Players Bar and Grill); J. Neil Schulman, "A Massacre We Didn't Hear About," Los Angeles Times, January 1, 1992 (Shoney's); Mike Benner, "Clackamas Mall Shooter Faced Man with Concealed Weapon," KGW Television, December 17, 2012, http://www.kgw. com/news/Clackamas-man-armed-confrontsmall-shooter-183593571.html; and "Deputy Shoots Gunman at San Antonio Movie Theater Video," KOAI News, December 16, 2012, http://www. woai.com/articles/woai-local-news-sponsoredby-five-119078/terror-at-southwest-side-movietheater-10644119/; Meg Wagner, "Pennsylvania Patient Who Allegedly Killed Caseworker, Shot Doctor Had 39 More Bullets, Intended Mass Shooting: DA," New York Daily News, July 25, 2014, http://www.nydailynews.com/news/nation al/penn-psychiatric-center-shooting-suspect-abu sive-ex-wife-article-1.1880052. See also, Eugene Volokh, "Do Citizens (Not Police Officers) with Guns Ever Stop Mass Shootings?" Washington Post, October 3, 2015, https://www.washingtonpost. com/news/volokh-conspiracy/wp/2015/10/03/docivilians-with-guns-ever-stop-mass-shootings/.

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The US Firearms Industry Production and Supply

by Jurgen Brauer



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Small Arms Survey

Graduate Institute of International and Development Studies 47 Avenue Blanc, 1202 Geneva, Switzerland

t + 41 22 908 5777

f + 41 22 732 2738

- e sas@smallarmssurvey.org
- w www.smallarmssurvey.org

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About the author

Jurgen Brauer, Ph.D., is a professor of economics at the Hull College of Business, Georgia Regents University, and co-editor of *the Economics of Peace and Security Journal*. His recent books include *Castles, Battles, and Bombs: How Economics Explains Military History* (with H. van Tuyll; University of Chicago Press, 2008), *War and Nature: The Environmental Consequences of War in a Globalized World* (Altamira Press, 2009), and *Peace Economics: A Macroeconomic Primer for Violence-afflicted States* (with J. Paul Dunne; US Institute of Peace Press, 2012). A native Berliner, Brauer has held visiting professorships in Australia, Colombia, South Africa, Spain, and Thailand. He may be reached at brauer.jurgen@gmail.com or via http://StoneGardenEconomics.com.

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Abbreviations and acronyms

AFMER	Annual Firearms Manufacturing and Export Report	
ATF	Bureau of Alcohol, Tobacco, Firearms, and Explosives	
Customs	US Customs and Border Protection	
FAET	Firearms and ammunition excise tax	
FBI	Federal Bureau of Investigation	
FFL	Federal firearms licence	
GIS	Geographic information system	
HHI	HI Herfindahl-Hirschman Index	
IRS	Internal Revenue Service	
MSGF	ISGF Multiple gun sales factor	
NAICS	NAICS North American Industrial Classification System	
NICS	NICS National Instant Criminal Background Check System	
RDS Region, District, Sequence		
Ruger Sturm, Ruger & Co. Inc.		
SEC	US Securities and Exchange Commission	
USCB	US Census Bureau	
USITC	US International Trade Commission	

Introduction

This working paper considers economic aspects of the US firearms industry, specifically the civilian, private security, and law enforcement (i.e. non-military) markets for pistols, revolvers, rifles, and shotguns. Although it provides estimates of annual firearms demand in the United States from 1999 to 2010, primarily the paper examines supply-side issues, including: (1) the number of firearms producers selling weapons to end users; (2) the number of firearms produced and disposed of in trade; (3) freedom of entry into and exit from the industry; (4) industry consolidation in the various firearms market segments; (5) competition by overseas firms; (6) firearms exports and imports that complement US-based production; and (7) the structure of the industry (ranging from competitive to monopolistic). The production of 'miscellaneous firearms' (e.g. machine guns or separate frames or receivers, actions, or barrelled actions; see below) and production for export are not considered in this paper. Similarly, intra-industry trade, such as contract manufacturing, is not dealt with here.

Perhaps the most striking, novel features of the paper are the estimation of firearms demand, the estimation of non-reported weapons production, firearms resales (trade in used firearms), insights into the changing composition of firearms sales in terms of domestically produced and imported weapons, and the computation of firearms market concentration measures.

The analysis is based on a data record drawn from the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), the Federal Bureau of Investigation (FBI), US Customs and Border Protection (Customs), and the US Census Bureau (USCB). Although some dates back to 1980, most of the data employed in this paper covers the years 1986–2010. For this latter period, the paper identifies 2,288 US-based firearms manufacturers and traces domestic net production (net of exports) of pistols, revolvers, rifles, and shotguns for domestic sale (i.e. excluding production for export) of over 98 million firearms in the United States between 1986 and 2010, and the net import of probably at least 48 million firearms more for the same years. The result has been a domestic supply of about six million newly produced or imported firearms per year during the 25-year period covered in the paper.

Despite the limited scope of the study, centred as it is around numbers of firearms producers and quantities of firearms produced, the paper generates a great deal of new information based on data that is excruciatingly difficult to access, assemble, assess, and process. Recognizing that different readers will have different interests in the issues, the main findings may be grouped into two categories: (1) producers, production, imports, and net supply of firearms to the US market; and (2) market and supplier characteristics.

Producers, production, imports, and net supply of firearms

- Judged by ATF reports, the frequency and size of data revisions, and interviews with ATF personnel, it appears that firearms production reporting compliance with US law among manufacturers of firearms has been improving. An estimate for the ten-year period 2001–10 suggests underreporting of about 320,000 weapons. While large in absolute numbers, this amounts to less than 1 per cent of overall reported production.
- For the civilian, private security, and law enforcement markets, from 1986 to 2010 some 2,288 US-based producers of civilian firearms have been identified, possibly the most extensive public record yet in existence.¹
- The production of firearms for domestic, non-military use is highly cyclical, particularly for the pistol segment of the market, having oscillated between three million and 5.5 million firearms per year since 1980.
- During the period 1986–2010 overall production of 106,079,100 weapons is reported (i.e. including miscellaneous and exported firearms), or about 4.24 million firearms for each of the 25 years in the database.
- Handgun production (pistols and revolvers) declined by about 10 per cent between 1993 and 2010 when measured in per capita terms. In contrast, in 2008, 2009, and 2010 per capita rifle production reached its highest levels since 1986.
- Firearms imports into the United States have risen almost linearly, from around 500,000 units in the early 1980s to about 3.5 million units by 2010.²

US firearms producers have come under considerable import competition pressure not unlike that experienced by other branches of US manufacturing.

- The annual firearms supply (production for domestic use plus imports) per 100,000 people has stayed fairly constant (2,258 in 1989, as compared to 2,272 in 2008), and has increased remarkably since then (2,674 in 2010). However, the *composition* of the firearms supply sources has changed markedly. In 1989 about 80 per cent of firearms came from domestic sources; this figure fell steadily to between 55 and 65 per cent in the late 2000s.
- An estimate of US domestic firearms resales via licensed firearms dealers (i.e. trade in 'used' weapons) suggests the resale of about 1.5 million units in 2010 alone. For the average of the years 1999–2010, domestically produced new and imported weapons satisfied an estimated 75 per cent of US market demand, while resales of 'used' weapons satisfied the remaining 25 per cent.³

Market and supplier characteristics

- From 1980 to 2010 the industry went through severe business cycles, with reported production levels both declining and rising by 50 per cent within very short time periods, possibly posing severe challenges to the management of firearms firms.
- For the 1986–2010 period around half of all US firearms manufacturers reported production levels of between one and nine weapons per year.⁴ Only a small percentage of firms—between 1.3 and 7.5 per cent—produced more than 100,000 weapons per year.
- Three brands (Sturm, Ruger & Co. Inc. (hereafter Ruger), Remington, and Smith & Wesson) each produced ten million or more weapons over the entire 1986–2010 period, or about 41 per cent of all domestically produced firearms for domestic use documented in this paper (40 million out of 98.2 million).
- Almost all manufacturers specialize in the production of only one weapon type. On the whole, the industry is highly segmented into one of four

product categories (pistols, revolvers, rifles, and shotguns), but since 2007 a number of firms have branched into other product segments.

- Non-US brands have encroached on the US market and have firmly established themselves, particularly pistol manufacturers. In 2010, for example, three of the top five firms were non-US brands (Sig Sauer, Beretta, and Taurus).
- Recent mergers and acquisitions activity has been substantial, particularly in the rifle market, but apparently has not (yet) breached any threshold required for the US Department of Justice to initiate anti-trust investigations.
- In the pistol market considerable market entry and exit—and inter-rank mobility among each year's top 20 firms—can be observed for the 1986– 2010 period. The very top ranks of pistol manufacturers, however, have remained fairly stable over time.
- The revolver market is a stable oligopoly dominated by Ruger and Smith & Wesson, which have been the top two producers since 1986. Similarly, the top four producers have remained virtually unchanged since 1996.
- The rifle market features one parent firm that in 2010 held more than one-third of the market.
- The shotgun market is a solid duopoly, with the two leading sellers, O. F. Mossberg/Maverick and Remington Arms, sharing 91 per cent of the market in 2010.

The paper pays particular attention to a thorough understanding of the detail and limitations of the data on which its findings are based. The economic study of the modern US civilian firearms industry is far from complete indeed, it has barely begun—and may require considerable resources if it is to be developed further. In particular, information on firms' production costs and firearms market prices will be needed to begin a fuller economic analysis of the market.

The paper proceeds as follows. Because of their intricate nature and overwhelming importance to the study, data sources and issues are initially discussed at length. This is followed by sections discussing firearms production levels and the size of firearms-manufacturing firms; a brief section on import competition; extensive sections on firearms imports and total firearms supply and demand; an analysis of manufacturers' market shares and market concentration measures; an analysis of market entry and exit, as well as a rank order and inter-rank mobility analysis; and a discussion of recent mergers and acquisitions in the industry. A summary and discussion of the conclusions reached complete the working paper.

Data sources and issues

In order to appreciate the detail—and potential limitations—of the findings, this section discusses data sources and issues in some depth.

Limited US firearms market data

No comprehensive economic studies of the US firearms industry have been attempted in recent decades.⁵ Primarily, this would seem to be due to the paucity of credible data and the difficulty of accessing it. This is true for data pertaining to both the market as a whole and individual companies.⁶

As for any other market analysis, a comprehensive economic study of the firearms industry would require information about quantities sold, prices charged, revenues obtained, costs incurred, innovations made, regulations imposed, profits gained, and other relevant data. It would also necessitate access to information on the structure of the industry, e.g. the degree to which it is competitive or not; how industry structure may have changed over the years and why; the degree of industry segmentation into distinct product or customer niches; and whether segmentation is contested (i.e. whether companies encroach on one another's turf in an attempt to gain cross-segment market share). Such a study, furthermore, would require information on the role of innovation in firearms platforms, ammunition, and accessories, and the underlying drivers of successful innovation. Much of this has been done for many industries-from health care to beer-but not for the firearms industry, at least not in the public domain. Data limitations make such a full study unfeasible as yet, particularly in terms of production costs and market prices.

Every five years the USCB collects economic census statistics for each industry in the United States. In late 2010 the bureau published the latest numbers for 'Small Arms Manufacturing' under the North American Industrial Classification System (NAICS) code 332994, with data pertaining to 2007 (USCB, 2010a; 2010b).⁷ The census records 212 employers operating in this sector, with 224 'employer establishments' and 11,399 employees, a payroll of nearly USD 507 million, and sales revenues of over USD 2,742 million. It lists value-added as over USD 1,814 million,⁸ costs of materials as approximately USD 988 million, and capital investment as nearly USD 111 million (USCB, 2010b).⁹ While this census data appears to be specific and detailed, it also seems to be incomplete. We know this because the 2007 records from the ATF indicate some 412 US rifle manufacturers alone (see Figure A3), not to mention distinct pistol, revolver, and shotgun manufacturers.

This discrepancy is a clear indication that a study of the US firearms industry needs to expand the scope of its enquiry beyond the limited existing 'industry' data sources. This paper advances knowledge of certain economic aspects of the industry and in particular deals with the number of producers, firearms industry structure, and quantities of non-military firearms produced in the United States in the period 1980–2010.¹⁰ No attempt has been made to convert quantities into market dollar values.

The paper does little to address production costs, location decisions, market prices, total revenue, firearms innovation, or even the effect of government regulation on firms' supply and customers' demand behaviour. At present, much of this information is not available at the industry level.

Data sources

The analysis presented in this paper relies heavily on raw data obtained from the ATF, formerly an agency of the US Department of the Treasury. In 2003 the law enforcement functions of the ATF were transferred to the US Department of Justice, while the tax and trade functions remained with the Treasury (ATF, n.d.a). The ATF collects data supplied by US firearms manufacturers, which are required to obtain a federal firearms licence (FFL) and report annually on calendar-year-based commercial sales (18 USC, para. 923(g)(5) (A); see ATF, 2005, p. 17), i.e. excluding intra-industry trade, such as contract manufacturing, and military sales. The ATF then collates the information in its *Annual Firearms Manufacturing and Export Report* (AFMER); starting with data year 1998, it has placed AFMER online in PDF format. There are nine types of FFLs. With categories 04 and 05 unassigned, they are:

o1 Dealer in Firearms Other Than Destructive Devices (Includes Gunsmiths); o2 Pawnbroker in Firearms Other Than Destructive Devices; o3 Collector of Curios and Relics; o6 Manufacturer of Ammunition for Firearms; o7 Manufacturer of Firearms Other Than Destructive Devices; o8 Importer of Firearms Other Than Destructive Devices; o9 Dealer in Destructive Devices; 10 Manufacturer of Destructive Devices; and 11 Importer of Destructive Devices (ATF, n.d.b).¹¹

Reporting is mandated by law for FFL holders in categories 07 and 10:

Those Federal Firearms Licensees who hold either a Type 07 (manufacture of firearms), or a Type 10 (manufacture of destructive devices) [license] must file in compliance with 27 CFR § 478.126, on an annual basis (ATF, n.d.c, p. 2).

Due to the Trade Secrets Act, the publication of AFMER is delayed by more than a year. For example, data for calendar year 2010 was due to be reported to the ATF by 1 April 2011 and was released to the public in early February 2012. At the time of writing, 2010 data was the latest available. Data for additional years, back to 1986, was obtained via a Freedom of Information Act request lodged with the ATF in November 2008.

AFMER states that

[f]or purposes of this report only, 'production' is defined as: Firearms, including separate frames or receivers, actions or barreled actions, manufactured and disposed of in commerce during the calendar year (e.g. ATF, 2009).

The word 'production' is unfortunate and the use of the conjunction 'and' potentially confusing. In fact, the definition refers specifically to sales into commerce, i.e. to wholesalers, retailers, or directly to end users, whether from current-year production or from prior-year inventories.¹² The phrase 'separate frames or receivers, actions or barreled actions' refers to items captured in the 'miscellaneous firearms' category. This paper focuses on complete firearms only (pistols, revolvers, rifles, and shotguns). Machine guns

manufactured for the non-military market are complete firearms, of course, but the 'miscellaneous firearms' category does not identify them separately and so they are not dealt with here.

For each manufacturing site, the ATF assigns and AFMER uses a 'Region, District, Sequence' (RDS) key. This is *not* a permanent manufacturer or manufacturing site ID number. An FFL is issued to a specific legal entity with respect to a specific manufacturing location (the 'premises' or 'establishment'). If a manufacturer changes location, a new FFL would be required, resulting in a new RDS key. Similarly, if a licensee changes its business name, one licence would be retired and a new one issued, resulting in a new RDS key, even if the location of the manufacturing site remains the same. AFMER also contains the name, street address, city, and state of the FFL holder and the self-reported level of unit production.

The ATF conducts on-site inspections of each manufacturer and this includes a check of the manufacturer's records. At present, the bureau attempts to visit manufacturers about once every five years. If errors in the records are found, a correction should eventually enter a revised AFMER. Thus, the last five years of AFMER reports may not be wholly accurate and in the past have been subject to considerable change.

For the research reported here the information on the licensees' names and units produced has been recorded in a database consisting of over 13,000 entries. Eventual entry of the RDS key (such as it is), street address, city, and state will be important for Geographic Information Systems (GIS) mapping and spatial analysis of location patterns.

Each AFMER contains sections regarding quantities of firearms produced, i.e. production of pistols (by calibre: .22, .25, .32, .380, 9 mm, .50, and total); revolvers (by calibre: .22, .32, .357, .38, .44, .50, total); rifles (totals only); shotguns (totals only); and miscellaneous firearms (totals only). Exports for each of these categories are reported in additional AFMER sections. In this paper miscellaneous firearms are not analysed and exports are analysed only in conjunction with attempts to understand firearms trade and import data.

Because the data reported is from manufacturers, unit sales for the larger firms will mostly refer to sales to wholesalers, retailers, private security firms, and law enforcement agencies at the local, state, and federal levels, but excluding the US armed forces. For smaller manufacturers (often craft producers), most sales are probably direct non-military end-user sales in the United States and abroad.

Detailed unit production data pertaining to pistol, revolver, rifle, and shotgun manufacturing for 2,288 US-based firearms manufacturers was obtained from the ATF for the 25-year period 1986–2010 (Table 1). This would appear to be the most extensive record yet available in the public domain. Further data dating back to 1980 was available in summary form—i.e. not by manufacturer—from another source, *Shooting Industry* magazine (Thurman, 2001, p. 34). Prior to that, some data reaching back to 1946, also in summary form only, was available from the website of the Violence Policy Center (1946–79). Because of questions about the reliability of this data, it is not used for any detailed analysis in this paper. ATF records were not made available in electronic format, only as paper copies. Therefore data for about 106 million firearms in all were hand-entered for processing. Cross-validation computations show that data entry errors are minute in magnitude and can safely be ignored (details are discussed later in this paper).

Additional data was obtained from Customs, the FBI, and other sources. This data is discussed later in the paper.

Data issues

The veracity of ATF unit production data cannot be established independently. Innocuous data reporting or data entry errors cannot ordinarily be detected. In one instance, however, it is clear that exports for 2006 are incorrectly reported: the domestic pistol production numbers for Beretta USA Corp. and Cobra Enterprises of Utah Inc. (74,791 and 42,551 units, respectively) are exactly the same as the companies' reported pistol export numbers. A query lodged with the ATF confirmed that the data entry is correct and that it was the companies who incorrectly reported the numbers. As the ATF cannot arbitrarily correct company-supplied data, the numbers will remain incorrect until a site inspection leads to the issuing of revised data or until the companies themselves note and correct the error. In spite of a legal mandate to report, even large, very prominent manufacturers do not always report to the ATF. For example, Marlin Firearms Co., ordinarily ranked among the top three rifle manufacturers, did not report rifle production in the original 2005 AFMER. For the bracketing years of 2004 and 2006 the company reported rifle production of 228,092 and 266,761 units, respectively. Total rifle production across *all* reporting companies for 2005 of 1,142,472 units would therefore appear to have been underreported by Marlin's 'usual' share of 200,000 or more weapons. This reporting oversight was later corrected and a revised 2005 AFMER issued. Later sections of this paper estimate the total underreporting of firearms production for the years 2001–10.

Similarly, many companies report weapons production in one year, then disappear from the ATF data record as if they had ceased operations, only to reappear in later years. The presumption must be either that these firms were in continuous operation and failed consistently to report to the ATF or operated as contract manufacturers in the intervening years. For example, Briley Manufacturing Inc. of Houston, Texas reports pistol production in 1991 and then again for 2005–09. Data for the intervening years is missing. Moreover, Briley describes itself on its website as a pistol, rifle, and shotgun manufacturer (Briley Manufacturing Inc., n.d.), but in the AFMER reports it shows up only in the pistol and rifle categories (as well as in the pistol, rifles, and miscellaneous firearms export categories). One would be compelled to conclude that Briley produces shotguns only for military customers or as a contractor for other manufacturers. Companies that report only exports in one or more categories without corresponding entries on the 'domestic' side of the ledger are not included in the analysis conducted for this paper, as the focus is on firearms retained for the US market.

As mentioned, the ATF data is available only in PDF format and for the most part cannot be copied electronically into a spreadsheet or other data-gathering software. This situation required hand-entering the data.¹³ While this took a great deal of time, it also became clear that many firms report in different years under slightly varying licensee names, such as Company X Inc., Company X Corp., Company X Corp. Inc., Company X LLC, or, simply, Company X. In these cases the study consolidated data records for firms

that evidently were the same operation, even if the company name changed slightly from year to year. The availability of physical addresses for the companies facilitated this task. When in doubt, the original data record was left unchanged.

Combining data records, however, can also complicate the picture. For example, from 1986 to 1991 Thompson Center Arms Co. Inc., a prominent rifle maker, was listed as a division of KW Thompson Tools Co. Inc. Since then the firm has been listed under the Thompson Center name, even after it was acquired in 2007 by Smith & Wesson Holding Corp. (In the trade, the brand is often referred to by its technically more correct designation, Thompson/Center.) One can argue that three records should be kept for what legally were three distinct companies. But, because the Thompson Center firearms brand is continuous, it can also be argued that a single record should be kept. For this study, it was decided to retain the brand identity whenever possible. Thus, Smith & Wesson, Remington, and other very prominent firearms brands that have changed ownership repeatedly (and sometimes changed their legal names, either slightly or substantially) are recorded and analysed under a unified name that carries the brand forward.

However, for some companies' change in location, name, or both it was difficult or altogether impossible to infer continuity. For example, the pistol manufacturer Bryco Arms is listed in the ATF record until 2004. The firm went bankrupt and was acquired by one of its foremen, Paul J. Jimenez, recorded by the ATF as 'Jimenez Paul J' (Butterfield, 2004). In the record both Bryco and Jimenez are listed for 2004 under the same street address in Costa Mesa, California. But in 2006 Jimenez changed the company name and location, with the firm becoming Jimenez Arms Inc. of Las Vegas, Nevada and later of Henderson, Nevada (with a new RDS key). To the uninitiated, it may appear that there are four firms with four different RDS keys. Arguably, however, cases like this reflect one continuous operation and can be uncovered only through painstaking company-by-company research. (In the end it was decided to treat Bryco as an entity separate from the Jimenez entities.)

A small number of companies operate more than one production site. These include major companies, such as Ruger and Remington, but also a number of small-scale producers. The ATF maintains a separate record, or RDS key, for each production location (or 'premises', or 'establishment'). Where detected, the study combined data records into a single entry for the relevant year and weapons category.

One problem of major proportions that has significant implications concerns the ATF's reporting of data according to the FFL licensee. Thus, a hypothetical 'Brauer Holdings' could own five firearms manufacturers— Harris Arms, Jones Arms, Miller Arms, Smith Arms, and White Arms—each reporting to the ATF as a separate firearms-manufacturing establishment. This study thus reports firm evidence that the market for rifles, for example, is substantially more concentrated than suggested by ATF data alone. Specifically, a single parent company owns at least five prominent rifle brands that in 2010 accounted for more than one-third of the entire US non-military rifle market (see Table 7).

Between 1986 and 2010 ATF records report non-export production (disposal into commerce from current-year production or prior-year inventories) of 98,153,716 pistols, revolvers, rifles, and shotguns—an average of 3.92 million firearms for each of the 25 years. As mentioned, data had to be handentered, raising the possibility of data entry errors. Cross-validation computations show, however, that, of the 30,250,858 pistols produced, all but 11 can be traced to specific companies, so that data entry error is minute. All of the 11,645,188 revolvers, 34,652,605 rifles, and 21,605,065 shotguns are accounted for in the database.

The study also experienced severe data problems in relation to import and export numbers. Gabelnick, Haug, and Lumpe (2006) reported import data for the seven-year period 1998–2004, referencing Customs. To match the ATF record, the present study constructed a firearms import and export time series going back to 1980. In order to do this the author purchased various data series from 1980 onward and then pieced them together. Because of changes in data classifications under the US tariff structure, however, it proved impossible to exclude military weapons from the record or to separate pistols from revolvers. Thus, the international trade data includes an unknown, but probably relatively small, number of military weapons.¹⁴

An initial attempt to reverse compute firearms unit sales at the wholesale level by using federal firearms and ammunition excise tax (FAET) records failed. This does not mean that this is an impossible task, only that some additional expenditure of time would be necessary—with an as-yet uncertain outcome. Of special note here is, firstly, that one will need to use tax liability rather than taxes collected data and, secondly, that the FAET data is subject to very substantial revisions over time and, of course, needs to be adjusted for inflation. Thirdly, an unknown quantity of weapons sales is tax exempt. Fourthly, data prior to 1991 was collected by a different agency, the Internal Revenue Service (IRS), to the one that has collected the data since then, the Alcohol and Tobacco Trade and Tax Bureau. The IRS does have records on taxes collected, but—it appears at this point in the research—not on taxes assessed.

In terms of market demand, data on the number of criminal background checks of potential firearms end customers via the National Instant Criminal Background Check System (NICS) is available on the FBI website (FBI, n.d.). This data is also problematic because background checks do not equate to firearms purchases. Nonetheless, as detailed later, the study shows how one may approximate the demand for non-military firearms in the United States from the NICS data.

The study obtained merger and acquisitions information in part through Meltwater News, an Internet-based news aggregator. At the time, Meltwater indexed more than 30,000 business, trade, and general publications according to search criteria entered by the user. The present study included writing search codes for some of the major firearms manufacturers, but obtained few hits relevant to production-related information, even for major companies. Because ownership shares of the overwhelming majority of firearms manufacturers are not publicly traded, these firms are not required by law to reveal information about their operations that would have been relevant to this study. As a result, much of the trade news consists of little more than recycled press releases and advertisements for company products or product reviews. In addition, many-indeed, most-search results referenced a company's products as part of a crime news story and this was not relevant to this study. Nonetheless, on occasion the Meltwater-enabled searches located important information that, combined with further Internet-based searches, began to reveal large-scale merger and acquisitions activity in 2007. This is addressed in detail later in the paper.

Civilian market production

This section presents the study's findings related to producers and overall non-export production of pistols, revolvers, rifles, and shotguns by US firearms manufacturers for the civilian, private security, and law enforcement markets. Data on military-related production may in principle be derived from US Department of Defense procurement records but, beyond an exploratory foray, this has not been pursued for the present study. This section first discusses reporting compliance, followed by a discussion of types of producers, and total and average production levels. It also estimates possible underreporting of firearms manufactured and discusses business cycles in the US firearms market between 1980 and 2010.

Reporting compliance

Monthly lists of FFL licensees are now available on the ATF website. The January 2010 list, for example, contains records for 60,602 licence holders. Of these, 3,718 licensees held licence type 07 ('Manufacture of Firearms'), and 224 held type 10 ('Manufacture of Destructive Devices'), for a total of 3,942 licensees mandated to report production levels. Assuming that all licensees were in operation in 2009, one would expect 3,942 producers to be listed in the 2009 AFMER, but in fact only about 1,000 are listed. Even allowing for double counting, such as when one licence holder produces in several of the pistol, revolver, rifle, shotgun, and miscellaneous firearms categories, this would suggest a 'raw' reporting rate of only about 26 per cent. Presumably, most of the remainder is accounted for by intra-industry trade, but data for actual reporting compliance is not made available by the ATF.

According to ATF instructions on ATF E-Form 5300.11,

[t]hose Federal Firearms Licensees who hold either a [type 07 or type 10 licence] must file in compliance with 27 CFR § 478.126., on an annual basis Even if there has been no production, an annual report must be filed (ATF, n.d.c).

Interviews with AFMER-related officials at the ATF suggest that, even when the bureau has done so from time to time in the past, ordinarily it does not choose to publish the licensee names of 'zero production' establishments. For the two years for which the ATF itself reported compliance rates, they were in the mid-70 per cent range (the original, unrevised ATF, 2004; 2005). An ATF fact sheet of June 2008 posted on the bureau's website reveals that it views compliance and firearms inventory management and control as somewhat of a problem:

In Fiscal Year 2007, ATF conducted approximately 10,000 compliance inspections. More than 40 percent of the licensees inspected were determined to be in full compliance with the law and regulations and no violations were cited. Approximately 100 federal firearms licenses were revoked or were denied renewal due to willful violations of the GCA [Gun Control Act]. This figure is approximately 1 percent of the number of licensees inspected To assist licensees in achieving and maintaining compliance, ATF conducts recall inspections on all licensees who have committed violations that warranted a warning conference. In 2007, recall inspections resulted in an overall 85-percent reduction in the total instances of violations. Recall inspections also resulted in a 78-percent reduction in disclosed prohibited sales and a 90-percent decrease in inventory discrepancies (ATF, 2008).

If 'more than 40 percent' of licensees were in 'full compliance', then about 60 per cent were not. Nonetheless, because there is no obvious reason why compliance would shift from year to year in systematic ways, one may assume that, even though the total number of firearms produced is underreported, it may be underreported in a consistent way. If this is correct, then some of this paper's observations—regarding firearms production business cycles, for instance—would hold in substance, even if not in numbers. Moreover, exceptions notwithstanding, compliance problems appear to affect small-scale producers far more often than the larger, well-known companies, so that any quantitative effect of non-reporting may not be overly large in relation to the total firearms unit production captured in the ATF record.

Types of producers and average production levels

From the 1986–2010 ATF record this study identified 2,228 federal firearms licensees ('firms'). Of these firms, 721 produced pistols, 133 produced revolvers, 1,817 produced rifles, and 332 produced shotguns, giving a total of 3,003 firms, which implies that a number of them produced in more than one product category.

Table 1 shows that only 26 firms produced in all firearms categories, i.e. pistols, revolvers, rifles, and shotguns. A further 67 firms produced in three of the four categories, giving a total of only 3 per cent of all firms. The most common market position is specialization in a single product category (1,692 firms). The 503 firms that produced in two product categories tend to specialize either in the handgun segment (pistols and revolvers) or in the long-gun segment (rifles and shotguns) and only rarely across the two segments.

Table 1	Total number of US firearms manufacturers, 1986–2010, by product
catego	ry

Number of product categories (among pistols, revolvers, rifles, shotguns)	Number of firms	Percentage
4	26	1.1
3	67	2.9
2	503	22.0
1	1,692	74.0
Total	2,288	100.0

Source: Compiled from ATF (1986-2010)

Figure 1 and Figures A1–A4 in the Annexe show the pattern of the number of firms per firearm type in the period 1986–2010. Until 2004 the number of pistol producers (Figures 1 and A1) consistently numbered between about 60 and 90, and then rapidly increased to well over 200 producers by 2010. Although on a different scale, a similar pattern is seen for revolver manufacturers (Figure A2): the number of producers remains stable at between 15 and 20, then grows from 2004 onward. For rifle and shotgun manufacturers (Figures A3 and A4), a consistent upward trend is apparent from 1986 onwards,

but with a particularly pronounced rise from 2004. Whether this is related in some way to the US invasion of Iraq in 2003 (e.g. to possible increased Iraqrelated demand and hence to market opportunities for new suppliers), to better reporting compliance, or to some other cause is not known.

To gauge the importance of large-volume-producing manufacturers relative to all firearms producers for each of the four production categories, one can compare the respective average levels of firearms production. Figures A5– A12 show the results. For example, the average production run for all pistol makers declined from over 25,000 units in the early 1990s to only about 10,000 units by 2001 and stayed at that level (Figure A5). In contrast, the ten largest pistol manufacturers substantially increased their average production levels from about 60,000 units in 1986 to about 180,000 units in 2010, although with large variations in the intervening years (Figure A6). Taking these two facts together indicates: (1) that most market entrants are small-scale firms; and (2) that the larger firms increasingly dominate the market.

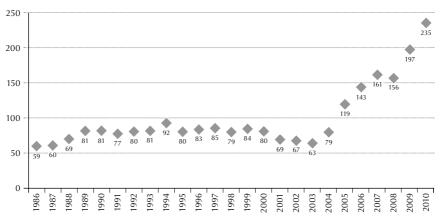


Figure 1 Number of US pistol producers, 1986–2010

The decline in average production across all firms is especially noticeable in the rifle and shotgun segments of the firearms market, and yet neither the ten largest nor the 20 largest firms have seen a decline in average production (Figures A9–A12). As for pistols, this suggests that many small-scale

Source: Compiled from ATF (1986-2010)

producers entered the market in later years (or that reporting compliance improved). The small firms may not have much of a purely commercial interest in firearms production and sales: they may be hobbyists or craft producers. Nonetheless, they are required to be in possession of an FFL and to report their production.

Over the 25-year data record only 26 of the 2,288 firms in the dataset reported production in all four weapons categories: pistols, revolvers, rifles, and shotguns (Table 1). Among the major manufacturers, this includes only Bushmaster Firearms International, Colt's Manufacturing, Smith & Wesson, and Ruger. A further 67 firms reported production in three weapons categories, including Beretta USA, Remington, Savage Arms, and Thompson Center. For the most part, however, manufacturers specialize in only one firearms category and as a result, and with the exception of the largest firms, the industry appears to be strongly segmented into four product categories. However, since 2007 an increasing number of firms reported production in multiple product categories, perhaps reflecting an attempt to gain economies of scope by branching into other product segments.

Underreporting of firearms production

As mentioned, reporting compliance may be poor. At least three types of non-compliance appear commonplace. Firstly, some firms never report data to the ATF in time. Secondly, many firms appear to 'skip' reporting for certain years. Thirdly, some firms seem to adopt 'censored' reporting in which they do not report in the first year or first few years of operation; subsequently report continuously for a period of time; and then do not report for the final year or final few years before going out of business. In this third case firms are said to 'censor' the first and last year or years of their operations in the ATF record.

In the first case the ATF holds no (timely) records of firms that fail to report, and the bureau's documents therefore underreport firearms production. This is also true of censored reporting: there is no record for the censored years and firearms production is therefore underreported. In the second case, however, it is possible to gain an idea of the magnitude of underreporting. Even though firms may skip reporting in certain years, their production can be approximated from reported unit production in adjacent years (e.g. a firm does not report in 2007, but numbers for 2006 and 2008 can be used as proxies).

For example, the ATF record shows that Taurus International Manufacturing Inc. did not report in 2003. For 2002 and 2004 the company reported annual production of around 11,000–12,000 pistols. It seems fair to assume that the firm also produced about this number of pistols in the unreported year, 2003. Averaging the numbers from the surrounding years would suggest a missing report in the order of 11,500 Taurus pistols for 2003. Filling in the 'n/a' entries in this way for companies that were top-25 producers in 2010, Taurus, Sig Sauer, Cobra, Springfield, and Phoenix, suggests non-reporting of at least 162,435 pistols over the ten-year period 2001–10, or an additional 1.4 per cent on top of reported production.

Jimenez, Glock, STI International Inc., and Masterpiece Arms Inc. may be examples of censored reporting. As mentioned, Jimenez (ranked 12 in 2010) is the successor firm to Bryco (which reported, but dropped out of the top 25). Since Bryco's numbers are in the record, no adjustment is needed, but this would not be obvious to the casual observer. The case of Glock (ranked 14 in 2010) is interesting because the firm imported firearms into the United States before 2005. Yet, while importers of firearms are required to possess a valid FFL licence, the AFMER reports do not capture imports, only US-based production.

STI and Masterpiece reported for 2009 (ranked 23rd and 24th, respectively), but not for 2010. As of 11 March 2012 both maintained active websites advertising their products so that the 2010 estimated pistol underreporting, based solely on the top 25 ATF-reporting firms for 2010, is a minimum number. (In 2009 STI and Masterpiece reported pistol production just shy of 10,000 units each. If they produced at similar levels in 2010, the underreporting of pistol production in 2010 would correspondingly rise to about 180,000 units.)

Applying this procedure to all four firearms categories for the years 2001–10 suggests underreporting of 1.4 per cent for pistol manufacture (162,435 weapons); 0.7 per cent for revolvers (27,724 weapons); 0.7 per cent for rifles (105,460 weapons); and 0.3 per cent for shotguns (22,895 weapons). Combined, the

numbers suggest underreporting of at least 318,513 firearms for the ten-year period 2001–10, or about 32,000 per year.

Combined with the relatively slack reporting compliance, these figures suggest a significant understatement of firearms production in the United States in the official record, at least in absolute terms. Of course, this not only complicates an external understanding of the industry, but limits the ability of the industry to understand itself.

US-based total firearms production

Despite the likelihood of poor reporting compliance and underreporting, the data compiled for this paper does suggest that the US firearms industry has experienced severe business cycles over the past several decades.

For example, Figure 2 shows that between 1980 and 1986 total unit production dropped by almost 50 per cent. By 1989 production had risen by more than 40 per cent, falling by around 20 per cent two years later, only to rise by

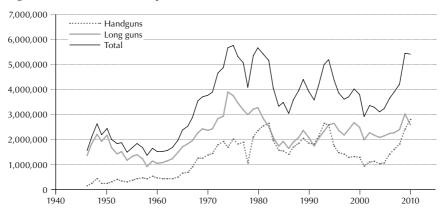


Figure 2 Total US firearms production, 1946–2010

Source: Compiled from ATF (1986-2010); Thurman (2001, p. 34); Violence Policy Center (1946-79)

Note: The Violence Policy Center numbers are self-censored and apply only to FFLs reporting more than 1,000 units of firearms produced in any given year (Violence Policy Center, 2003, p. i). Thus, the data prior to 1980 certainly understates production. Reported handgun production in 1978 in particular would appear to be in error. The *Shooting Industry* numbers (Thurman, 2001) are not revised and thus also may understate production. Since the errors are not likely to be huge in the context of the overall numbers, it was deemed appropriate to show them here, even though for cautionary reasons the pre-1986 numbers are not extensively analysed in this paper.

almost 50 per cent again in 1994. By 2001 production had dropped by onethird—the first time since the late 1960s that fewer than three million units had been manufactured. From then, production rose to around 5.5 million units in 2010.

From the point of view of the firms competing in this market, these drastic variations in production levels may pose a challenge, because they are likely to make capital, debt, labour, production, research and development, marketing, revenue, and other forms of planning and management difficult—and more so because most firms engage in single-firearms-segment production. Moreover, few firms are part of a conglomerate that might be able to ride out business cycles with counter-cyclical activity in other business areas.

Without better information, however, it is difficult to ascertain the impact of market volatility on the firms, particularly information regarding production technology, costs, prices, and profits. Market volatility might pose only minor problems if firms had flexible production methods and/or constant returns-to-scale technology, or if price mark-ups reflected market power, which is a distinct possibility, given the duopoly or oligopoly structures noted later in the paper. Although Hall, Markowski, and Brauer (2008) believe that industry profitability is not stellar, in principle these attributes could permit firms to vary the scale of production without necessarily affecting their profit rates.¹⁵ Thus, without knowing more about the technology of production and the flexibility of input supplies, one cannot say whether or not the industry should consider demand volatility a cause for concern. Furthermore, since the early-to-mid-1990s it appears to be primarily the pistol market that drives overall firearms market volatility, and it is this market that foreign brand names have penetrated most successfully. Volatility in the overall market may be a statistical figment, then, with potential concerns for US manufacturers to be found in the pistol market only. At any rate, it would be of interest for future research to understand firms' management better with regard to demand fluctuations, responses to government regulations, and inroads made by foreign competition.

Figure 2 shows an especially pronounced increase and then drop in firearms production that coincided with President Clinton's administration. This drop is almost entirely accounted for by the handgun segment (pistols and revolvers). In President George W. Bush's first term (2001–04), production was constant and then increased rapidly during his second term (2005–08).

Despite this latter increase in production, per capita handgun production—a unit of measurement that is rarely considered—*declined* by around 10 per cent in 2010 compared to 1993 (see Figure A13). In contrast, by 2010 per capita rifle production again rose to the high levels of the 1970s and early 1980s (Figure A15). From the early 1980s to the early 1990s handguns and long guns (rifles and shotguns) sold in roughly equal numbers (see Figure 2). Because of the pronounced drop in pistol sales during the Clinton administration, overall handgun production dropped far below the fairly constant number of long-gun sales during the early 1990s to mid-2000s. But, since then, handgun sales have again reached the levels of long-gun production.

As noted, volatility in the market stems primarily from the pistol segment (see Figures A14 and A15 for a disaggregation of the data by weapon type). By contrast, relative to the other segments, the rifle market was fairly stable in per capita numbers for almost 25 years from the early 1980s to the mid-2000s and has seen a drastic increase only since then. The shotgun and revolver segments show slow, sustained declines since the mid-1990s (for revolvers since the mid-1980s), but with recent stabilization and even somewhat of a per capita increase since the mid-2000s.

Manufacturer size

To compare variations in the scale of manufacturing among firms, the study computed the production totals of reported unit production from 1986 to 2010 for each manufacturer. Each manufacturer was then assigned a category rank in order of magnitude (Table 2).

Category	Level of production	Pistols	Revolvers	Rifles	Shotguns
6	1,000,000+	8 (1.1%)	2 (1.5%)	6 (0.3%)	5 (1.5%)
5	100,000+	22 (3.1%)	8 (6.0%)	19 (1.0%)	3 (0.9%)
4	10,000+	57 (7.9%)	8 (6.0%)	52 (2.9%)	10 (3.0%)
3	1,000+	62 (8.6%)	13 (9.8%)	113 (6.2%)	13 (3.9%)
2	100+	92 (12.8%)	24 (18.0%)	240 (13.2%)	30 (9.0%)
1	10+	161 (22.3%)	20 (15.0%)	544 (29.9%)	40 (12.0%)
0	1+	319 (44.2%)	58 (43.6%)	845 (46.5%)	231 (69.6%)
Total		721 (100%)	133 (100%)	1,819 (100%)	332 (100%)

Table 2 Size distribution of annual firearms unit production, 1986–2010*

* The initial number in each cell refers to the number of producers who have produced the same number or more than the number of firearms that define the particular category (see second column). The percentage in brackets indicates the proportion of the total number of producers (given in the 'Total' row at the bottom of the table) that the first number in the cell represents.

Source: Compiled from ATF (1986-2010)

For the 1986–2010 period Table 2 indicates that between two-thirds and three-quarters of the companies each reported production of less than 100 firearms annually. Although competition can be fierce and shifts in annual rank order do occur, these shifts are largely contained within categories 5 and 6 (the large-scale producers of 100,000 or more units). Of the large-scale producers, many initially reported very large production runs in just a few years, but since then have closed operations. For example, of the 30 pistol manufacturers in categories 5 and 6, only 19 were going concerns in 2010.

The largest surviving category 5 and 6 companies and their total production levels across the four firearms groups are listed in Table 3.

Ownership changes make it important not to take these numbers entirely at face value. For example, Remington, Bushmaster, and DPMS Firearms are part of the same holding company, the Freedom Group (Freedom Group, n.d.). Similarly, Henry RAC Holding is listed with the combined production of its predecessor, Argus Publications, which held the trade name and business licences for Henry Repeating Arms and Henry Repeating Rifle Co. (information extracted from ATF, n.d.b). Colt split in the early 2000s into two separate legal entities whereby Colt's Manufacturing would continue only in the handgun market and Colt's Defense would enter the civilian longgun market so that, technically, Colt's Manufacturing is not a survivor in the latter market. O. F. Mossberg bought Maverick in 2007, but adopted the Maverick brand name for its shotguns. Note that, while Ruger is not the only big-name company producing across all four segments, it is the only category 5 or 6 company manufacturing across all four segments. (Belatedly, however, its reported shotgun production runs are rather small: 1,000–1,300 from 2008 to 2010.)

Company	Pistols	Revolvers	Rifles	Shotguns
Armalite			152,509	
Arms Technology	709,904			
Beemiller	962,384		286,682	
Beretta USA	2,455,716			
Bushmaster Firearms			747,896	
Century Arms			232,925	
Charco 2000		174,850		
Cobra Enterprises	267,676			
Colt Defense			135,501 (since 2002)	
Colt's Manufacturing	1,411,776	496,569	492,987 (stopped in 2002	
			and continued by Colt Defense)	
DPMS Firearms			400,524	
Glock	232,566			
H&R 1871			916,896	2,735,761

Table 3 Total production of large-scale firearms brands, 1986–2010

Haskell Manufacturing	250,864			
Henry RAC Holding			1,012,939	
Heritage Manufacturing		592,565		
Iberia Firearms	164,623			
Jimenez	169,104			
Kel-Tec	931,451			
Keystone Sporting Arms			399,940	
Kimber Manufacturing	699,513			
Marlin Firearms			7,604,693	
Maverick Arms			157,292	2,185,101
North American Arms		607,328		
O. F. Mossberg			134,683	5,564,808
				(until 2007; since then under Maverick)
Olympic Arms			114,455	
Phoenix Arms	554,396			
Remington Arms			6,456,868	7,792,539
Rock River Arms			170,798	
Ruger	4,778,037	3,277,413	7,047,949	212,104
Saeilo	272,932			
Savage Arms			2,319,226	289,852
				(did not report for 2010)
Sig Sauer	1,299,849			
Smith & Wesson	4,674,459	5,503,658	277,806	
Springfield	489,531		252,835	
Stag Arms			157,797	
Taurus International	371,439			
Thompson Center Arms	293,070		503,184	

Source: Compiled from ATF (1986-2010)

Despite its limitations, this analysis is effective in: (1) identifying variations in the scale of manufacturing among firms; and (2) identifying the larger brands in the firearms market. Ruger leads with about 15.3 million firearms produced in all, followed by Remington Arms (about 14.2 million) and Smith & Wesson (nearly 10.5 million). In terms of the ratings in Table 2, these can be termed 'category 7' manufacturers, with each having produced more than ten million weapons. Together, for the period 1986–2010, the market share of these three brands is 40 million firearms out of 98.2 million, or 40.7 per cent. Measures of market concentration are discussed in another section of this paper.

US vs foreign brand names

When studying firm-by-firm annual records from 1986 onwards, it becomes clear that non-US brands have gradually encroached on the US market and currently are firmly established in it, at least among pistol manufacturers. It is important to understand that, in order to be captured in the ATF record, these firms must have established firearms manufacturing facilities in the United States and should not simply be importing weapons from abroad.

Thus, according to the ATF, in 1986 only the Italian firm Beretta ranked among the top pistol makers (at rank 6). By 2010 the top-ranking manufacturers included five foreign brand names, including the German Sig Sauer (rank 3), Beretta (4), the Brazilian Taurus (5), the Austrian Glock (14), and the Belgian FN (Herstal) Manufacturing (22). Among rifle manufacturers, large US brands still predominate, but a reading of the trade literature indicates that currently components are frequently sourced from countries such as the Russian Federation, Turkey, and Mexico. The next section addresses penetration of the US firearms market by genuine imports, i.e. those *not* captured by the ATF. In addition to domestically produced and retained weapons (i.e. net of exports), these imports constitute a second source of supply to the US market.

Exports, imports, and net firearms supplies

Annual US-based production does not constitute total market supply. This is because some US-manufactured firearms are exported and some non-US-manufactured firearms are imported. Understanding the firearms market therefore requires one to obtain a sense of the magnitude of market demand and the supply of imported firearms, plus domestically produced firearms net of exports (newly produced, domestically retained firearms). But, due to discrepancies between the numbers reported by the ATF and Customs, it is not easy to estimate either net market supply or demand. Further, it is essential to distinguish between used firearms that enter the market for resale and those that have been newly manufactured—abroad or at home—for US domestic sale.

This section of the paper discusses how one may estimate firearms supplies net of exports to the United States. The following section then discusses how to estimate demand for firearms, including used firearms. The logic used is rather intricate and so it may help to visualize the procedure with the assistance of Table 4.

[Demand: ~9.8 m]	Domestically retained firearms	Imports of firearms
New firearms	ATF (~5.4 m)	Customs (20 m)
Used firearms	[Remainder: ~1.5 m max.]	Customs (~2.9 m)

Table 4 Estimating US non-military firearms supply and demand, 2010

Note: Numbers are estimates for 2010. Estimates for other years are given in Table 6.

Consider the whole of the matrix (i.e. Table 4) as equivalent to market *demand*—i.e. demand for new and used firearms—and assume that we know how many firearms are demanded. (The next section discusses the demand

estimation. As explained in conjunction with Table 6, for 2010 this turned out to be about 9.8 million firearms, indicated by the expression placed in square brackets in the top-left, dark-grey-shaded cell of Table 4.) On the *supply* side, ATF records contain information on US-based firearms manufacturers' annual domestic production *and* their exports, so that it is a simple matter to place the number of *domestically retained* firearms, labelled 'ATF', in Table 4 as well. This amounted to about 5.4 million weapons in 2010. As discussed in detail in the following two sub-sections, from Customs data one can obtain numbers for the import of firearms. For 2010 this amounted to about 2.9 million civilian market (i.e. non-military) firearms.

Unfortunately, Customs does not differentiate between new and used imported weapons. Nonetheless, as may be seen from Table 4, if total demand for new and used firearms equals 9.8 million weapons, and 2.9 million of these are supplied by net imports, then the domestically supplied portion must be the remaining 6.9 million. But we know from ATF figures that, of these 6.9 million, 5.4 million were supplied as 'new'. Therefore, the number for the used, non-imported firearms component of the market—the size of the resale market—must be the remainder of about 1.5 million firearms. (An important caveat is that this applies exclusively to used firearms sales via federally licensed firearms outlets; see the next main section for details.)

Having laid out the logic of the argument, the following two sub-sections discuss export and import data so that net import supply may be computed. The following main section then discusses the details of estimating the remainder of supply and market demand.

Export data

Figure 3 displays USCB export data and also export data compiled by the ATF. On the whole, the USCB reports a far higher number of firearms exports than does the ATF and the difference is not uniform from year to year. In fact, the difference between the two datasets has been growing steadily from under 100,000 weapons in the mid-1980s to about 300,000 weapons by 2010 (see Figure 3). The discrepancy relates to a number of features of the data-collecting agencies and to the data itself.

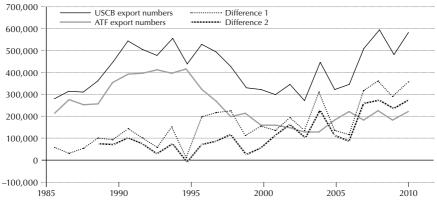


Figure 3 USCB and ATF firearms export numbers, 1986–2010

Source: Compiled from data purchased by the author from the USCB; ATF (1986-2010)

Let us take the USCB data first and begin with an institutional note. Customs *reports* data on firearms imports and exports based on tariff schedules published by the US International Trade Commission (USITC) (see USITC, n.d.). But neither Customs nor the USITC *collects* all of the raw data. Instead, raw export data is collected by the USCB, with Customs serving as the reporting agency. Yet if one wishes to *purchase* data, whether import or export, this again is handled by the USCB.¹⁶

This study purchased the relevant firearms import and export data for the period 1980–2010 from the USCB.¹⁷ There are several problems with the data: the import-export data: (1) does not distinguish between newly manufactured firearms and used weapons; (2) does not consistently distinguish between pistols and revolvers (so that one has to use a combined handgun category); and (3) does not consistently distinguish between military and non-military firearms. Moreover, the USITC's tariff classification, in terms of which Customs reports USCB data for hand-held firearms, has changed repeatedly since 1980 and did so in an especially major way in data year 1989.

As a consequence of all this, some of the data in the handgun category, for example, may refer to weapons intended for the military market, which would make direct comparison to the ATF's non-military production and export numbers difficult. Moreover, the introduction of the USITC's new tariff classification system in data year 1989 does not allow for the wholly consistent translation of pre-1989 firearms-related tariff codes to post-1988 codes. This means that there is a break in the data series. Furthermore, the designation 'military' in both time periods need not imply that the corresponding firearms imports and exports involved only military *customers*, just military-style *weapons*. For example, even though machine guns are available to civilians, there is no 'non-military' machine gun classification in the US Harmonized Tariff Schedule. They must, therefore, have come from the 'military' classification.

Secondly, there is also at least one pertinent problem with the ATF dataset. As noted, ATF data for handgun exports in 2006 is incorrect. Two firms, Beretta and Cobra, each reported the export of the entirety of its 2006 pistol production, which is obviously a data-reporting error on their part. One suspects that similar errors by other companies exist, resulting in the over- or underreporting of exports. (In the author's database, an estimated correction has been entered for the 2006 exports of Beretta and Cobra.)

If we compare the two export datasets, for 2010 the ATF reported exports of 225,206 pistols, revolvers, rifles, and shotguns. In contrast, the USCB reported 'domestic exports' totalling 585,801 firearms. The discrepancy amounts to 360,595 firearms, labelled 'Difference 1' in Figure 3. Subtracting explicitly identified 'military' USCB-reported exports of 81,497 firearms (i.e. 'military' rifles, shotguns, and rifle-shotgun combinations) results in 'Difference 2' of 279,098 weapons, but for 2010 does relatively little to reduce the discrepancy between USCB and ATF numbers. Either way, Figure 3 shows an increasing disparity between ATF and USCB numbers, recently in the order of 250,000 firearms per year.

Data collection and categorization differences might be expected to produce some disparity between datasets: the ATF compiles company-supplied, non-military data for newly produced weapons, while USCB data includes 'military' and 'non-military' exports of new *and* used weapons. Since the USCB's categories are broader, its export figures should be larger, as indeed they are. But this does not explain the *rising* difference between the two datasets, which remains a puzzle to be solved.

Imports

Figure 4 displays the results when one subtracts USCB-reported firearms exports from imports, to arrive at firearms net import numbers for the period 1980–2010. (These numbers therefore include 'military' and 'used' weapons.) The figure shows that net imports have been rising almost linearly, from around zero in the early 1980s to well over three million units by 2009, with a pronounced spike in 1993 and 1994 around the time of the Clinton administration's time-limited assault weapons ban. To a large extent this rise in net imports is primarily due to increased imports of 'military' and 'non-military' rifles and secondarily to increased handgun imports. In particular, just as the assault weapons ban—and fears about possible restrictions on firearms owning and carrying—appears to be responsible for the huge jump in domestic production levels in the early 1990s (see Figure 2), it also may have driven up weapons imports (Figure 4).

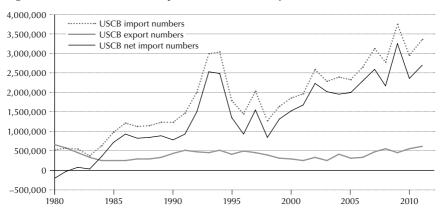


Figure 4 Estimated US net imports of non-military firearms, 1980–2010

Source: Compiled from data purchased by the author from the USCB **Note:** Net imports are calculated as imports minus exports.

Estimating US firearms supply and demand

A long-standing goal of researchers has been to compute US non-military firearms demand and, separately, to estimate the 'new' and 'used' components of this demand. The preceding section discussed the logic of a method for achieving this goal (see the discussion in conjunction with Table 4). This section discusses the details.

One can combine various pieces of information from the ATF, USCB, and FBI to arrive at an approximation of which proportion of the US civilian firearms market is filled by 'new, domestically produced and retained' and by 'new and used imported' weapons, and, therefore, which portion must be filled by 'used domestically produced' (i.e. resold or used) weapons. Neither the logic nor the numerical approximations are entirely airtight, but for the first time in the literature provide a sense of the likely order of magnitude involved.

The reasoning begins with information gleaned from the FBI's NICS, implemented as from November 1998. Monthly data through December 2010 is listed in Table 5 and shows, for example, 1,023,102 background checks conducted in May 2009. The number of background checks cannot, however, be equated with firearms purchases. For example, from November 1998 to February 2012 NICS recorded ten million so-called 'permit' checks for the state of Kentucky. For the same state it also recorded more than one million additional 'handgun' checks and 1.6 million 'long gun' checks. A 'permit' refers to a firearms-carrying licence issued by the state of Kentucky. The state checks monthly whether any of its permit holders may no longer be eligible for gun ownership, e.g. as a result of having committed a felony. Thus, Kentucky's permit checks amount to continued eligibility checks that are wholly unrelated to a prospective customer's intent to purchase a firearm from a licensed dealer. Similarly, Utah's permits are checked every 90 days against FBI records. Each state maintains its own rules regarding the frequency, if any, with which its issued permits are checked against FBI records.¹⁸ Thus,

to compute annual firearms demand, the NICS numbers must be adjusted in some way.

	Jan.	Feb.	Mar.	Apr.	May	June
1998						
999	591,355	696,323	753,083	646,712	576,272	569,493
2000	639,972	707,070	736,543	617,689	538,648	550,561
2001	640,528	675,156	729,532	594,723	543,501	540,491
2002	665,803	694,668	714,665	627,745	569,247	518,351
2003	653,751	708,281	736,864	622,832	567,436	529,334
2004	695,000	723,654	738,298	642,589	542,456	546,847
2005	685,811	743,070	768,290	658,954	557,058	555,560
2006	775,518	820,679	845,219	700,373	626,270	616,097
2007	894,608	914,954	975,806	840,271	803,051	792,943
2008	942,556	1,021,130	1,040,863	940,961	886,183	819,891
2009	1,213,885	1,259,078	1,345,096	1,225,980	1,023,102	968,145
2010	1,119,229	1,243,211	1,300,100	1,233,761	1,016,876	1,005,876
.010	.,,	.,2.13,2.11	.,	.,233,701	.,0.10,07.0	.,000,0,0
.010	July	Aug.	Sept.	Oct.	Nov.	Dec.
					, ,	, ,
998					Nov.	Dec.
998 999	July	Aug.	Sept.	Oct.	Nov. 21,196	Dec. 871,644
1998 1999 2000	July 589,476	Aug. 703,394	Sept. 808,627	Oct. 945,701	Nov. 21,196 1,004,333	Dec. 871,644 1,253,354
1998 1999 2000 2001	July 589,476 542,520	Aug. 703,394 682,501	Sept. 808,627 782,087	Oct. 945,701 845,886	Nov. 21,196 1,004,333 898,598	Dec. 871,644 1,253,354 1,000,962
1998 1999 2000 2001 2002	July 589,476 542,520 539,498	Aug. 703,394 682,501 707,288	Sept. 808,627 782,087 864,038	Oct. 945,701 845,886 1,029,691	Nov. 21,196 1,004,333 898,598 983,186	Dec. 871,644 1,253,354 1,000,962 1,062,559
1998 1999 2000 2001 2002 2003	July 589,476 542,520 539,498 535,594	Aug, 703,394 682,501 707,288 693,139	Sept. 808,627 782,087 864,038 724,123	Oct. 945,701 845,886 1,029,691 849,281	Nov. 21,196 1,004,333 898,598 983,186 887,647	Dec. 871,644 1,253,354 1,000,962 1,062,559 974,059
998 999 2000 2001 2002 2003 2004	July 589,476 542,520 539,498 535,594 533,289	Aug. 703,394 682,501 707,288 693,139 683,517	Sept. 808,627 782,087 864,038 724,123 738,371	Oct. 945,701 845,886 1,029,691 849,281 856,863	Nov. 21,196 1,004,333 898,598 983,186 887,647 842,932	Dec. 871,644 1,253,354 1,000,962 1,062,559 974,059 1,008,118
1998 1999 2000 2001 2002 2003 2004 2005 2006	July 589,476 542,520 539,498 535,594 533,289 561,773	Aug. 703,394 682,501 707,288 693,139 683,517 6666,598	Sept. 808,627 782,087 864,038 724,123 738,371 740,260	Oct. 945,701 845,886 1,029,691 849,281 856,863 865,741	Nov. 21,196 1,004,333 898,598 983,186 887,647 842,932 890,754	Dec. 871,644 1,253,354 1,000,962 1,062,559 974,059 1,008,118 1,073,701
1998 1999 2000 2001 2002 2003 2003 2004 2005	July 589,476 542,520 539,498 533,594 533,289 561,773 561,358	Aug. 703,394 682,501 707,288 693,139 683,517 666,598 687,012	Sept. 808,627 782,087 864,038 724,123 738,371 740,260 791,353	Oct. 945,701 845,886 1,029,691 849,281 856,863 865,741 852,478	Nov. 21,196 1,004,333 898,598 983,186 887,647 842,932 890,754 927,419	Dec. 871,644 1,253,354 1,000,962 1,062,559 974,059 1,008,118 1,073,701 1,164,582
1998 1999 2000 2001 2002 2003 2004 2005 2006	July 589,476 542,520 539,498 535,594 533,289 561,773 561,358 631,156	Aug. 703,394 682,501 707,288 693,139 683,517 666,598 687,012 833,070	Sept. 808,627 782,087 864,038 724,123 738,371 740,260 791,353 919,487	Oct. 945,701 845,886 1,029,691 849,281 856,863 865,741 852,478 970,030	Nov. 21,196 1,004,333 898,598 983,186 887,647 842,932 890,754 927,419 1,045,194	Dec. 871,644 1,253,354 1,000,962 1,062,559 974,059 1,008,118 1,073,701 1,164,582 1,253,840

1,069,792 1,089,374 1,145,798 1,368,184 1,296,223

Table 5 Total number of NICS checks, 1998–2010

Source: FBI (n.d.)

2010

Total

1,521,192

14,409,616 124,427,448 The magnitude of the demand for firearms in the United States can be approximated if one is willing to make two assumptions: firstly, that all *permit* checks are routine procedural checks by states against FBI records and are not associated with an intent to purchase a gun; and, secondly, that all *in-store* (retailer) checks by licensed firearms dealers against FBI records result in at least one firearms purchase. In terms of these assumptions, the percentage of in-store checks out of all NICS checks yields an approximated annual demand.

More specifically, NICS also reports data on 'multiple' background checks. This means that a potential customer's record is checked for both an impending handgun and a long-gun purchase. In addition, a series of retail dealer interviews in Georgia and Ohio suggest that, as a rule of thumb, perhaps 1.1 firearms are sold per in-store customer. This will include multiple handguns only (with a single handgun check), multiple long guns only (with a single long-gun check), or a combination of handguns and long guns (with a 'multiple' check). As approximations go, one may then add 'handgun' checks, plus 'long gun' checks, plus two 'multiple' checks (at least one handgun and one long gun), and augment the resulting number by a factor of 1.1, termed here the multiple gun sales factor (MGSF). This perhaps overstates demand, but it would be easy to employ a smaller factor such as 1.05, for example. Of the 14,409,616 total NICS checks conducted in 2010, a total of 8,700,794 were under the 'handguns', 'long guns', and 'multiple' designations. Counting the 'multiples' twice and augmenting by the MGSF of 1.1 results in a 'demand' of 9,769,543 million firearms at the level of federally licensed firearms dealers.

If this is a reasonable way to approximate retail demand, then the *sources* of market supply can now be computed as well, as shown in Table 6. For example, for 2010 ATF-reported domestic unit production resulted in 5,391,311 domestically retained non-military *new* weapons. Adding in the 2010 USCB-reported import figure of 2,880,333 new and used 'non-military' units thus far yields an overall *supply* of 8,271,644 weapons to licensed dealers. Call this the *commercial supply*. But since *demand* was 9,769,543, the difference of 1,497,899 firearms must have come from domestic weapons resales at the dealer level. (The logic of this is analogous to 'new' and 'used' automobile sales via car dealerships.)

Table 6	Estimating US civilian market firearms purchases by source of supply,
1999–2	010

Year	ATF-reported domestic non-military production ('new') (units)	+ USCB- reported non-military imports ('new' and 'used') (units)	= domestic non-military, commercial market supply (FFL SUPPLY) (units)	NICS-adjusted background checks with MGSF = 1.1 (FFL DEMAND) (units)	= domestic 'used' gun purchases (units)	New + imported gun pur- chases (%)	Domestic used gun purchases (%)
1999	4,007,910	1,482,990	5,490,900	8,757,843	3,266,943	62.7	37.3
2000	3,763,345	1,625,996	5,389,341	7,879,752	2,490,411	68.4	31.6
2001	2,907,580	1,807,001	4,714,581	8,035,308	3,320,727	58.7	41.3
2002	3,345,195	2,308,853	5,654,048	7,084,617	1,430,569	79.8	20.2
2003	3,277,426	2,132,623	5,410,049	7,075,868	1,665,819	76.5	23.5
2004	3,079,517	2,217,721	5,297,238	7,371,405	2,074,167	71.9	28.1
2005	3,218,315	2,117,859	5,336,174	7,750,274	2,414,100	68.9	31.1
2006	3,614,452	2,497,273	6,111,725	8,240,265	2,128,540	74.2	25.8
2007	3,867,152	2,948,421	6,815,573	8,640,641	1,825,068	78.9	21.1
2008	4,195,873	2,713,303	6,909,176	9,473,556	2,564,380	72.9	27.1
2009	5,417,003	3,641,952	9,058,955	10,053,577	994,622	90.1	9.9
2010	5,391,311	2,880,333	8,271,644	9,769,543	1,497,899	84.7	15.3

Source: Author's calculations from ATF (AFMER), USCB, and FBI data for the relevant years

If we apply this logic to the period 1999–2010, Table 6 then suggests that 'domestic new' (ATF) and 'imported new and used' weapons (USCB) satisfy roughly 75 per cent of the market. 'Used weapons' (weapon resales) satisfy the remaining 25 per cent. This calculation can be done only from 1999, because this is the first full year for which NICS data is available. Happily, post-1988, USCB data is separated into that for 'military' and 'non-military' firearms, at least for long guns, if not for handguns, so that we now not only have an approximation of annual firearms demand, but have it separated by the source of supply, domestic new, imported, and domestic resales. It is worth repeating that this estimate of domestic used firearms of about 1.5 million in 2010 applies only to FFL-licensed resale points rather than through classified newspaper advertisements, gun shows, garage sales, or friend-to-friend sales. The rough percentage breakdown of 75/25 per cent would be the baseline number to confirm (or refute) when conducting random sampling of FFL dealers in the United States. At any rate, this approximation appears to

be the first data-based attempt in the literature to derive an order of magnitude of the possible unit size of domestic firearms resales.¹⁹

ATF data on 'domestically retained, new, non-military production' and the import numbers from the USCB can also be used to compute the per capita *source* of supply (domestic or foreign) and the *changing composition* of commercial supplies. The results are shown in Figure 5. (Due to the break in the time series, the USCB data is displayed only from 1989.) The numbers suggest that the domestically produced supply of new, non-military firearms decreased from around 1,769 per 100,000 people in 1989 to 1,020 per 100,000 people in 2001. Since then, this rate has increased to 1,743 per 100,000 people in 2010. In contrast, imports of non-military firearms increased from 489 per 100,000 people in 1989 to 931 per 100,000 people in 2010. Total commercial supply per 100,000 people stayed about constant (2,258 in 1989, compared to 2,272 in 2008, albeit with a large increase by 2010 to 2,674). The weapons' source *composition*, however, has changed markedly. In 1989 domestic manufacturers provided 78.4 per cent of the firearms. This percentage has fallen steadily to 55–65 per cent in the late 2000s.

It may be said, then, that the research reported in this paper has documented a fundamental change in the supply side of the US firearms market. It finds massive—and massively increasing—firearms imports. It also finds an increasing presence of non-US brand names that have established manufacturing facilities in the United States and, with this, increasing market penetration by foreign brand names against US brand names. So far, these observations would appear to be restricted to the pistol market in particular, but as noted above, US rifle manufacturers increasingly appear to source parts from abroad. Moreover, according to the USCB data, non-military longgun imports have more than doubled from a level of about 600,000 in the very early 1990s to above 1.2 million by the late 2000s. As foreign brand names as such are not prominent on the US civilian long-gun market, one suspects that the established US brands simply import large numbers of overseas-produced long guns, and this would need to be confirmed in separate research.

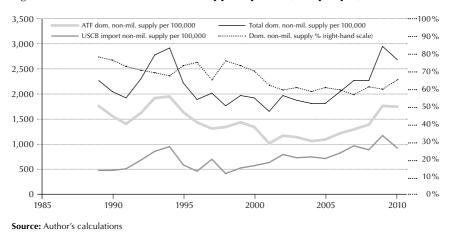


Figure 5 Commercial US firearms supplies per 100,000 people, 1989–2010

Taken as a whole, these findings suggest that traditional US firearm brands/ producers have experienced import pressures not unlike those that have affected other branches of US manufacturing, such as automobiles, consumer electronics, or household furniture. From the point of view of industrial economics, the US firearms industry appears to operate 'just like any other industry', facing the same kinds of market turmoil and pressures as do other branches of US manufacturing. This implies, for example, that any firearms import restrictions would be countered by a resurgence of domestic manufactures, even if at increased end-user prices. Similarly, any restriction of production within the United States—which has already happened in terms of state-level regulation—would likely lead to a displacement of manufacturing to more 'gun-friendly' states or to an even greater reliance on firearms imports.

As for the possibly confounding effect of the 'military' handguns category being included in the USCB handguns data, it is likely that the numbers delivered to military customers are small relative to the size of the overall handgun market.

Market share and market concentration measures

Industrial organization is a branch of economics that, among other things, studies how an industry is structured in terms of the number of suppliers, the degree of competition among them, and the pricing power suppliers may be able to exercise over customers. Common sense suggests that a monopolist supplier can charge higher prices than can any one supplier in a market-place filled with numerous competitors. This is of interest to economists and policy-makers because market concentration—i.e. a reduction in the number of competing suppliers—is often associated with a decline in social welfare, which is a measure of economic well-being for society at large. Thus, virtually all countries maintain government institutions to monitor markets for anti-competitive practices that might diminish social welfare. In the United States, the Antitrust Division of the US Department of Justice carries out this function (US DoJ, n.d.a).

The mere fact of being the sole seller of a product in a market does not necessarily violate anti-trust (anti-competitive) laws. Instead, it is the specific behaviour of a firm, and particularly its pricing behaviour, that is important. What counts, therefore, is any one firm's *conduct* rather than the *structure* of the market as such. While market concentration alone does not imply abuse of market power, the fewer firms in a market, the greater the potential for collusion to limit competition, curtail supply, and drive up prices and profits, and hence improve the firms' *performance*. Thus, measures of market concentration, such as the share of the market dominated by one or more top-level firms, constitute an important first indicator of potential market power.²⁰

Using the relevant definitions of the US Department of Justice, this section of the paper shows that the revolver and shotgun segments of the US firearms market are 'concentrated' and that the pistol and rifle segments are 'moderately concentrated'. The paper also demonstrates that market concentration, especially in the rifle market, is at least twice as high as sole reliance on ATF records would suggest (see the later section on mergers and acquisitions).

Conventional measures of market concentration include calculating the sum of the percentage market shares of the top four or top eight suppliers relative to the total size of the market. For example, if firms 1 to 8 hold, respectively, 20, 20, 20, 20, 5, 5, 5, and 5 per cent of the market each, then the sum is 100 per cent, with the top four suppliers holding 80 per cent of the market. But this measure can be misleading: for instance, if the percentages of market shares are 50, 10, 10, 10, 5, 5, 5, and 5, then the top four suppliers again hold 80 per cent, but the top supplier is a far more dominant player in the market than in the first example.

Thus, to give more weight to larger market shares, the Herfindahl-Hirschman Index (HHI) computes the sum of the *squared* percentages, $HHI = \sum s_i^2$, where s_i is the market share of each of the firms (US DoJ, n.d.b). Thus, for the two examples given above, HHI equals 1,700 and 2,900, respectively. The theoretical maximum HHI equals 10,000 (i.e. 100 squared).

In terms of US anti-trust policy,

[*m*]arkets in which the HHI is between 1000 and 1800 points are considered to be moderately concentrated, and those in which the HHI is in excess of 1800 points are considered to be concentrated. Transactions [i.e. mergers and acquisitions] that increase the HHI by more than 100 points in concentrated markets presumptively raise antitrust concerns under the Horizontal Merger Guidelines issued by the U.S. Department of Justice and the Federal Trade Commission (US DoJ, n.d.b).²¹

As demonstrated below, there was substantial merger and acquisition activity in the US firearms industry in 2007 in particular. A search of the US Department of Justice's website, however, did not uncover any firearms-marketrelated anti-trust activity, presumably because an HHI of 1,800 was not exceeded.

Figures 6 and 7 display the top four and the top eight concentration ratios for the period 1986–2010 by weapons type—pistols, revolvers, rifles, and shotguns—while Figure 8 displays the HHI numbers for the same period and by weapons type.

Figure 6 Market concentration of the top four firms, 1986–2010 (total production)

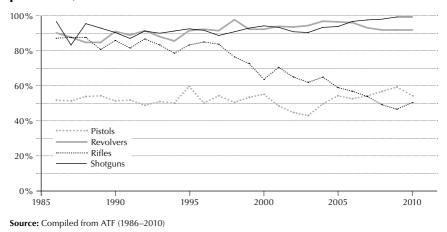
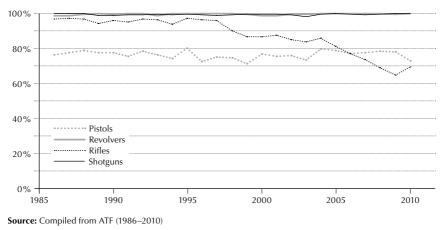


Figure 7 Market concentration of the top eight firms, 1986–2010 (total production)



For the 25 data years plotted in Figures 6, 7, and 8, it might seem remarkable that the top four and top eight shares for pistols, revolvers, and shotguns are fairly stable. They hover between 80 and 100 per cent for revolvers and shotguns (top four) and between 40 and 60 per cent for pistols (top four.) For the top eight firms, this stability is even more pronounced: shares are

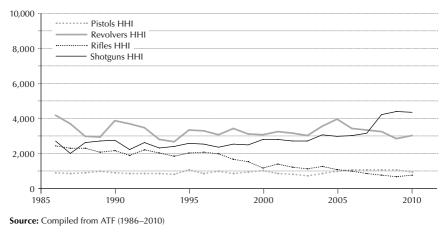


Figure 8 Market concentration, 1986–2010 (HHI)

virtually 100 per cent for revolvers and shotguns, and between 70 and 80 per cent for pistols. Moreover, since the early 2000s the shotgun market has become markedly more concentrated. By 2010 two brands, Maverick and Remington, held 91 per cent of the shotgun market. These two brands now form a duopoly in this market.

An exception to this market concentration appears to occur in the rifle market, in which the top four concentration ratio was above 80 per cent until 1997 and since then appears to have dropped to below 50 per cent by 2010. In terms of the top eight rifle manufacturers, the percentage was above 90 per cent until 1997 and since then appears to have fallen to about 70 per cent. This might suggest that the increasing number of firms in the rifle market (see Figure A3) has contributed to competitive pressure and loss of market concentration. This would appear to be corroborated by the number of rifles produced by the top ten firms (Figure A10), a number that since the early 1990s has oscillated between 100,000 and 140,000 units, with an average of about 120,000. Except for during the late 2000s, the total number of rifles produced has oscillated around 1.3 million units, with no apparent upward trend since the mid-1990s, certainly not in terms of units per 100,000 (Figures A14 and A15). If the top rifle makers produce roughly the same

number of rifles, but the total number of rifle manufacturers increases, then it follows that the market power of the top firms falls, which is what the ATF numbers appear to show.

But the number of firms has increased in the other firearms market segments as well, so this cannot be the whole explanation. In the mergers and acquisitions section of this paper it will be shown that the rifle market is in fact 'moderately concentrated', with the top (parent) firm holding 35.7 per cent of the market in 2010 and the second firm holding another 12.9 per cent.

The HHI measures complement the top four and top eight concentration measures. For example, in 2010 the revolver and shotgun markets are 'concentrated' with HHIs of 3,022 and 4,290, respectively. The pistol market has oscillated around a near-competitive 1,000 for the entire 1986–2010 period. The rifle market started at a 'concentrated' HHI of 2,454 in 1986 and since then appears to have fallen to a rather competitive 793 in 2010. As noted, the section on mergers and acquisitions will show that this is the result of a statistical anomaly and is due to the way in which the ATF collects and reports data. Actual market concentration in the rifle market is far higher than ATF data suggests. By themselves, the top two firms command a joint 50 per cent of the market and their corresponding HHI alone equals 1,441 (i.e. $35.7^2 + 12.9^2$) (for details, see Table 7).

Rank order and market entry/exit (displacement) analysis

Based on the ATF dataset, this section examines entry into and exit from the top ranks of the US non-military firearms market. With low capital and other entry requirements, one would expect to see ease of market entry by new firms, just as one would expect ease of market exit by underperforming firms. Moreover, in a vibrant market one would expect that innovative, competitive suppliers advance within the rank order of competitors, selling large quantities of firearms, whereas not-so-nimble or less-efficient manufacturers would be expected to lose favour with customers and fall in the rankings.

This section does find a considerable degree of market entry and exit, but it also finds considerable stability in the ranks of top-level companies and, by focusing on ownership rather than brands, finds instances where there is less change than the ATF record might at first suggest.

Pistol manufacturers

Table A1 (placed in the Annexe because of its size) presents the top-20-ranked FFL holders ('firms') among pistol manufacturers for each year of the 25-year period from 1986 to 2010.

In 1986 the top-ranked producer was Raven Arms and the 20th-ranked was Essex Arms Corp. One year later, in 1987, three firms had disappeared from the top-20 record, i.e. three other firms displaced them by entering the ranks of the top 20. These three firms—International Die Casting, Spring-field, and AMAC—are listed in the shaded cells for the year 1987.

The bottom line of Table A1 lists for each year the number of top-20 displacements (exits and, therefore, entries). In all, 69 firms are listed: 20 in the original 1986 top-20 list and 49 since then. Re-entries are not double-counted. For example, in 1988 Grendel ranked in 19th place, then dropped to 22nd (1989), 23rd (1990), and was again 23rd (1991), before re-entering the top 20 in 18th place

in 1992, but it is counted only once. (However, if an existing top-20 firm neglected to report data, for example Springfield in 2004, this would open up a fictitious top-20 spot to be filled.)

Table A1 reflects underlying problems with ATF data. For example, Bryco was ranked third in 2004 and then completely disappears from the record. The reason for this is that the company went bankrupt due to a legal ruling against it. But, as noted, it reopened under new ownership and a new name (Jimenez Paul J) when Paul Jimenez, formerly a Bryco foreman, bought Bryco's assets. Jimenez ranked tenth in 2005.

Data problems notwithstanding, it appears that, of the original top 20 firms in 1986, only 5 (25 per cent) survived to 2010 (Ruger, Colt's Manufacturing, Smith & Wesson, Beretta, and Arms Technology). Of these, the first four also constituted part of the original top six and only one of them (Colt's) has since fallen on hard times, dropping steadily from fourth rank in 1986 to 16th in 2010.

The data also shows firms in ascendance. Beemiller entered the rankings as number 12 in 1993, rose as high as third rank in 2003, and since then has dropped to rank 9 in 2010. Cobra rose from rank 20 in 2001 to rank 8 in 2009 and to 15 in 2010. In contrast, Taurus entered the rankings as number 14 in 1993 and had stable rankings until 2010, when it moved up to fifth rank.

As a whole, the data for the pistol makers suggest that inter-rank mobility can be readily observed. Manufacturers cannot take their customers or market position for granted. Firms do compete for business and companies can fall out of favour with their customers. To stay 'on top of the game', deft management would appear to be a necessary ingredient of firm survival in a heavily cyclical, competitive market with domestic and foreign challengers entering with relative ease.

Revolver manufacturers

The market top-20 entry/exit situation is somewhat different in the case of revolvers. Table A2 (also in the Annexe) lists 117 companies reporting revolver production. Smith & Wesson, Ruger, Colt's Manufacturing, and Freedom Arms are listed for all 25 years (forming 20 per cent of the original top 20 in 1986). The first two have consistently held the number 1 and 2 ranks for all 25 years.

In 1992 and 1993 three companies appeared in the top 20 rankings that, together with Smith & Wesson and Ruger, have developed into a remarkably consistent oligopoly for revolver production, consistently holding ranks 1 to 5 since 2001. The additional three companies are Charco 2000, Heritage Manufacturing, and North American Arms. Together, they are the only firms each producing or having produced in the tens of thousands of revolvers each year (category 4 firms in terms of Table 2).

Even in the case of revolvers, however, there is competitive movement. Both Colt's Manufacturing and Freedom Arms have consistently declining production (Colt's from a high of nearly 53,000 revolvers in 1994 to just 2,086 in 2010; Freedom Arms from over 10,000 in 1987 to just 387 in 2010) and have been eclipsed by several other firms in the rankings. The current sixth-ranked firm, US Firearms Manufacturing, produced 12,007 revolvers in 2010, whereas the fifth-ranked firm, Charco 2000, produced 24,789 units in that year.

The top four firms have been virtually unchanged since 1996, when Heritage entered the fourth rank. Moreover, the top two, Smith & Wesson and Ruger, have held the number 1 and 2 ranks since 1986, thus constituting a clear case of a market-leading duopoly. In terms of Table 2 ratings, each of these two firms is a category 5 producer (100,000 units per year).

Below rank 10, the revolver market amounts to small-scale production, from category 0 (single digits) to category 2 (hundreds). Despite the initial impression that Table A2 might convey, there is little relevant inter-rank mobility in the revolver market. Instead, it is a top-level duopoly, followed in a second tier by an oligopoly of a handful of companies. Market entry is easy as such, but evidently it is far from easy to break into the top tier. Of note, however, is that two prominent pistol manufacturers recently reported revolver production as well. They are Magnum Research since 2005—but bought by Kahr Arms in 2010 (Kahr Arms, 2010)—and Cobra Enterprises since 2009. It remains to be seen if there is an attempt here to reap economies of scope based on the general strength of the brands.

Rifle manufacturers

Regarding rifle production (Table A₃), several firms have continuously occupied the top 20 positions over the 25-year period. These firms include Marlin, Ruger, Remington, and Savage, usually the first- to fourth-ranked firms in each of the past ten years. They also include Thompson Center and Springfield, which occasionally have wandered into the top 20 positions. Another firm, US Repeating Arms, is formerly the producer of the Winchester rifle brand, under licence from the trademark holder, Olin Corp., and usually ranked in fourth or fifth place. It last appeared in the record in rank 6 in 2005, with 88,743 units produced. In 2006 Olin signed up with a new trademark licensee, Browning of Morgan, Utah, itself a subsidiary of FN Herstal, Belgium, but neither Browning nor FN Herstal reported civilian rifle production to the ATF in 2006, 2007, or 2008. Instead, FN Herstal's US manufacturing branch in Columbia, South Carolina, called FN Manufacturing, first began to report civilian rifle production of 5,038 units in 2008, and then 21,878 and 19,816 units in 2009 and 2010, respectively. This is where the Winchester Model 70 rifle is now manufactured.²²

The top-20 listing for the rifle market is particularly difficult to decipher. From 2007 onwards, for example, the Marlin, Remington, H&R 1871, Bushmaster, and DPMS Firearms brands all belonged to a single company, Freedom Group. Likewise, Smith & Wesson Holding acquired Thompson Center Arms, and then entered the top-20 rifle rankings only in 2007. Thompson Center's ranking then declined, while Smith & Wesson's increased, perhaps an indication that the Thompson Center brand is gradually being absorbed.

O. F. Mossberg, primarily known as a shotgun producer, acquired Maverick and rebranded itself under the latter's name. Thus, Mossberg dropped out of a respectable rifle ranking (11th in 2007), to be replaced by a seemingly 'new' Maverick (ninth in 2008 and 2009, and seventh in 2010).

A focus on brands rather than ownership therefore distorts an understanding of entry and exit in rifle production. While the very top ranks appear stable among just four brands, below the top tier there is an illusion of considerable entry and exit. As reflected in the declining top four, top eight, and HHI scores in Figures 6, 7, and 8, respectively, competition in the rifle market appears to have increased. However, the rifle market is less competitive when viewed in terms of ownership rather than brands. An additional interesting aspect of the rifle market is that in recent years a number of traditional pistol makers have entered the market, including the aforementioned Smith & Wesson, but also Kel-Tec, Kimber Manufacturing, Saeilo (maker of Kahr pistols), and Sig Sauer. Thus, there is movement between and among traditional rifle brands and segment entry by pistol producers.

Shotgun manufacturers

Regarding the shotgun market (Table A4), O. F. Mossberg and Maverick now operate jointly under the Maverick brand name (but Mossberg ownership), so it might be treated as a continuous operation across all 25 years in the dataset. Similarly, Remington, Ruger, and Savage are in the record for the entire time period (although with the latter not reporting in 2010). In the same way as for rifles, US Repeating Arms (i.e. the Winchester brand) was in the record through 2005 (with 30,517 units) and then was brought under the Browning/FN (Herstal) Manufacturing licence. It appears, however, that the shotguns are now manufactured in Belgium and then imported into the United States, in which case they would not be recorded by the ATF.

When examining production volume rather than ranks, one finds that only three firms ever produced in the category 5 range (hundreds of thousands of shotguns annually; see Table 2): they are Mossberg/Maverick, Remington, and H&R 1871 (now, together with Remington, part of Freedom Group). Other firms that are top ranked, such as Savage and Ruger, produce in the very low thousands (category 3), with annual production of around 1,000–1,500 shotguns. When Beretta started shotgun production in the United States in 2002 its production was just 333 shotguns. This increased to 7,553 shotguns by 2004 and was 5,191 by 2010. Currently the shotgun market is a clear duopoly (Maverick and Remington).

Mergers and acquisitions in the US firearms industry

In 2007 US-based Cerberus Capital Management LP, a private equity firm, bought an 80.1 per cent equity interest in the automobile maker Chrysler from DaimlerChrysler. In that year Cerberus started out on a route that led it to also become the country's largest firearms maker. The maze of corporate entities involved is complex. Cerberus created an entity called American Heritage Arms LLC (later, American Heritage Arms Inc.). In turn, American Heritage Arms bought 100 per cent of an entity called RACI Holding Inc., which in turn owned 100 per cent of Remington Arms Co. Inc. Subsequently, towards the end of 2007, Cerberus announced that its new Remington unit had acquired Marlin Firearms Co. and its facilities in North Haven, Connecticut, and Gardner, Maine. The deal was formally closed on 31 January 2008.23 In 2007 Cerberus also bought Bushmaster Firearms of Windham, Maine, a prominent producer of military-style AR-15 and M16 rifles, and DPMS Panther Arms of St. Cloud, Minnesota, also a well-respected maker of the AR-15 and M16-style rifles. Furthermore, in 2007 Bushmaster in turn acquired Cobb Manufacturing of Dallas, Georgia, a manufacturer of tactical rifles, and announced the formation of a joint venture with Iron Brigade Armory Ltd., which would later be branded Bushmaster Custom Shop by Iron Brigade, located in Jacksonville, North Carolina.

Assembled into an entity called Freedom Group Inc., all of these properties were readied for sale via a public share offering. This happened on 20 October 2009, when Freedom Group filed a registration statement with the US Securities and Exchange Commission (SEC). But then on 1 April 2011 Freedom Group filed a registration withdrawal request. Apparently the company is to remain private after all (US SEC, n.d.).

Since then, Freedom Group has acquired other brands. On 5 June 2009 it closed a deal to acquire Dakota Arms, a shotgun maker, which also includes the Nesika Bay Precision, Miller Arms, and Dan Walter brands, while retaining

Remington's military and ammunition divisions (Freedom Group, 2010). Also in 2009, Freedom Group bought EOTAC, a 'tactical apparel' manufacturer located in West Columbia, South Carolina, and Advanced Armaments Group of Lawrenceville/Norcross, Georgia, a maker of military-grade ammunition. Freedom Group also owns INTC, another military-grade ammunition maker, and Barnes Bullets LLC was acquired in 2009 as well. The group also purchased a 75 per cent stake in Mountain Khakis, another apparel maker. (Remington itself, incidentally, introduced another ammunition brand, UMC, when Cerberus acquired the firm.) Freedom Group, through Remington, has an extensive line of military and law enforcement products and sales. Freedom Group's objective is to produce firearms and ammunition in the military, law enforcement, private security, and civilian markets, both domestically and abroad. On its website it mentions sales in over 80 countries (Freedom Group, n.d.). The firm is branching into pistol production as well, in part via a new Freedom Group subsidiary established in 2008 called E-RPC LLC, which markets and distributes the Remington M1911 pistol. Further, in early 2012 Freedom Group announced the purchase of Para USA, a pistol maker appearing in the ATF record for the first time only in 2009 (Shooting Industry, 2012, p. 8).

In addition to horizontal integration (acquiring firms in the same line of business) and further expansion into complementary products (ammunition and apparel), Freedom Group also undertook a modicum of vertical integration (acquiring suppliers or distributors). On 22 September 2009 it acquired S&K Industries Inc., a wooden-gunstock manufacturing concern located in Lexington, Lafayette County, Missouri (near Kansas City) (Freedom Group, 2010, p. 14). This company produced gunstocks for a number of the major firearms manufacturers in the country, including for Remington since 1986. It is unclear whether, following its acquisition, S&K Industries still produces for customers outside of the Freedom Group family. What is certain (via a manager profile posted on LinkedIn) is that, upon acquisition, Remington's H&R-brand wood-gunstock production was moved to the former S&K Industries (see Jackson, n.d.). In addition, Freedom Group has a division that produces firearms metal components. Clearly, Cerberus/Freedom Group has implemented an elaborate strategy of broad-spectrum asset acquisition and

consolidation. On its website it now refers to itself as the 'Largest Manufacturer of Commercial Firearms and Ammunition' (see Freedom Group, n.d.).

The acquisitions of Bushmaster and DPMS in particular signal that Cerberus/Freedom Group might aim not only to dominate the civilian rifle market, but perhaps also to break into the military rifle market, currently led by Colt's Defense of West Hartford, Connecticut, and FN Herstal's US subsidiary, FN Manufacturing, of Columbia, South Carolina. Cerberus/Freedom Group literature prominently states that it hopes to regain military market share from companies headquartered in foreign countries (Freedom Group, 2010, p. 4 and repeated throughout the document). Arguably, this is about as convincing as Ford or General Motors wishing to reclaim market share from Toyota or Honda just because the former are headquartered in the United States and the latter in Japan. In the end, it is not marketing ambitions but costs, prices, and profits that count. Unsurprisingly, then, Freedom Group has already begun to move manufacturing sites around. Marlin's facility in Gardner, Maine, is now closed; its North Haven, Connecticut, plant was to close by June 2011. Remington's UMC ammunition factory in Bridgeport, Connecticut is also designated for closure. Upon acquisition, Barnes Bullets was relocated to Mona, Utah. Freedom Group is also beginning to consolidate—or at least to streamline—acquired brands. The L. C. Smith and New England Firearms brands, for example, are being phased out. Freedom Group also sold its target shooting business and associated facilities that it owned in Ada, Oklahoma, and Findlay, Ohio.

In all, Freedom Group now appears to operate at least 14 facilities with over 3,000 employees and net sales of about USD 550 million and USD 650 million in 2010 and 2009, respectively (Freedom Group, n.d.). Identified as the controlling entity in the 20 October 2009 SEC filing, at the time of writing Cerberus is still the controlling entity of Freedom Group.

Industry consolidation did not end with the Cerberus–Freedom Group acquisitions. On 3 January 2007 handgun maker Smith & Wesson Holding Corp. acquired the rifle maker Thompson/Center Arms (Smith & Wesson, 2007). US Repeating Arms, formerly the maker of the Winchester rifle models under trademark licence from Olin Corp., was closed and a new licence agreement concluded with Browning, a division of FN Herstal. Keystone Sporting Arms Inc. of Milton, Pennsylvania, the producer of the Davey Crickett rifles (specifically marketed to children to encourage interest in the shooting sports), took over the Chipmunk product line from Rogue Rifle Co. This company then closed down.²⁴ O. F. Mossberg acquired Maverick Arms and now operates under the Maverick brand name.

Following a wave of lawsuits in the late 1990s and early 2000s, Colt's Manufacturing struck an agreement regarding firearms safety with the outgoing Clinton administration. Subsequently Colt suffered a severe customer backlash, as a consequence of which the company split in 2002 into Colt's Manufacturing and Colt Defense.²⁵ The latter then replaced the former in the civilian rifle rankings while keeping its military rifle line. Both Colt's Manufacturing and Colt Defense seem no longer to produce civilian shotguns, but the former remains in the civilian revolver business, while struggling in the civilian pistol market.

Argus Publications Inc. was the licensee for the Henry Repeating Rifle. In 2009, when primary ownership changed from father to son, this became the licensee Henry RAC Holding Inc., retaining the former Argus's fifth rank.

While there is no complete public data on overall US firearms production (commercial and military), one can nonetheless gain a sense of the market power that Freedom Group has acquired. Using 2010 ATF data, it would appear that the firm holds more than a one-third share of the overall unit sales of rifles, nearly three times its nearest competitor, Ruger (see Table 7).

Regarding pistol manufacturers, Beemiller, Haskell, and Iberia, each specializing in different calibre pistols, all appear on the January 2010 FFL list with the business name of Hi-Point Firearms, which gives that entity the number 9, 19, and 21 ranks in pistol manufacturing—a combined 5.7 per cent market share, or fifth rank, in 2010. Kahr Arms acquired Auto-Ordnance in 1999. Kahr also produces under the licence names Saeilo Inc. and SMI-MA Inc.; Saeilo is ranked tenth in the pistol rankings for 2010. (Auto-Ordnance disappeared from the ATF list after 1999.) In 2010 Saeilo/Kahr Arms acquired Magnum Research and thus gained entry into the large-calibre segment of the handgun market.

Saeilo/Kahr Arms presents an interesting story because of its complex web of cross-ownerships. From an undated court document (CoM, n.d.) of a lawsuit filed against Kahr Arms, but evidently drawn up in the early 2000s, defendants are listed as follows (using the court document's spellings and capitalizations): KAHR INC., D/B/A; KAHR ARMS, INC.; KAHR AUTO ORDNANCE CORP.; SAEILO, INC.; SAEILO MACHINERY MA, INC.; SAEILO MACHINERY USA, INC.; SAEILO MANUFACTURING INDUS-TRIES; MACHINE INDUSTRIES, INC.; SAEILO EQUITY HOLDINGS, LLP; and ONE UP ENTERPRISES, INC., the last one being the business arm of the Unification Church. The son of the church's founder is the founder, designer, and lead shareholder of Kahr Arms.

Numerous other examples of merger and acquisition activity could be cited, but not systematically and quantitatively. This is because the vast majority of firms are privately held and there is no unified public record to draw on. Nonetheless, it appears clear that in the late 2000s substantial merger and acquisition activity took place and that a number of companies took measures to reposition themselves in the market. There is evidence of horizontal integration not only within product categories (i.e. pistols or rifles), but also across product categories and, evidently, an attempt by Cerberus/ Freedom Group to position itself for both the military market and the civilian, law enforcement, and private security markets. In addition, virtually all of the major firms have branched into production and sales of firearms parts and accessories, and even into clothing for articles such as T-shirts and hats. Savage Arms, a leading rifle maker, has branched into the ownership of shooting ranges.

If it were possible to trace accurately underlying ownership rather than FFL licence holders, the various segments in the firearms market would turn out to be more concentrated than they already are.

Firm (– subsidiary)	Units	%
Freedom Group Inc.	653,957	35.7
- Remington Arms Co. Inc.	263,934	
– Marlin Firearms Co.	253,521	
– Bushmaster Firearms International LLC	40,878	
– DPMS Firearms LLC	46,891	
– H&R 1871 LLC	48,733	
Sturm Ruger & Co. Inc.	236,616	12.9
Savage Arms Inc.	171,472	9.4
Smith & Wesson Holding Corp.	153,293	8.4
– Smith & Wesson Corp.	100,051	
– Thompson Center Arms Co. Inc.	53,242	
Henry RAC Holding Corp.	124,701	6.8
Maverick/O. F. Mossberg	66,938	3.7
– Maverick Arms Inc.	60,403	
– O. F. Mossberg & Sons Inc.	6,634	
Keystone Sporting Arms LLC	47,835	2.6
Beemiller Inc.	35,300	1.9
Sig Sauer Inc.	29,764	1.6
Rock River Arms Inc.	23,200	1.3
Springfield Inc.	20,463	1.1
Aero Precision Inc.	19,939	1.1
FN Manufacturing LLC	19,816	1.1
Stag Arms Inc.	19,545	1.1
Delaware Machinery& Tool Co. Inc.	17,149	0.9

Table 7 Top rifle makers' unit production and market share, 2010

Note: Top two HHI = 1,441; top four = 1,511; top eight = 1,582. **Source:** Compiled from ATF (2010)

Summary and conclusions

This working paper has considered some economic aspects of the US nonmilitary firearms industry, i.e. pistols, revolvers, rifles, and shotguns for the civilian, private security, and law enforcement markets. Drawing mainly on detailed data for the period 1986–2010 obtained from the ATF, it mostly examines aspects of the supply side of the market, particularly the numbers of firms, and their production and sales volumes. Industry-wide information on prices, costs, investments, financials, and other relevant factors is not readily available and currently hampers a fuller, more complete analysis of the economics of the firearms market.

The paper identifies 2,288 distinct reporting entities ('firms'), roughly three-quarters of which produce in only one of the four product categories (pistols, revolvers, rifles, or shotguns). Only 26 firms have produced in all market segments, and only a further 67 in three of the four segments. About two-thirds of the 2,288 firms reported small-scale production of fewer than 100 firearms per year. Overall, however, the paper traces the production of more than 98 million firearms produced and retained in the United States between 1986 and 2010, and identifies three firms that each have produced ten million or more firearms since 1986 (category 7 firms; see Table 2), for a total of about 41 per cent of all firearms produced. The paper also approximates the underreporting of firearms production in the order of 320,000 weapons since 2001.

The production of new, domestically produced weapons is highly cyclical, oscillating between three million and 5.5 million firearms per year since 1980. Production cycles are especially pronounced in the pistol segment. Analysing data for 1999–2010 from the FBI, the paper also estimates US firearms demand. It suggests that demand for firearms held steady at between seven and eight million weapons per year, albeit with a seemingly unusual increase to about ten million firearms in 2009 and 2010. The paper further reports on an import/export dataset and finds that imports of firearms have been rising continuously since the early 1980s, reaching well over three million units in 2010. It is suggested that, of the overall volume of the firearms trade (but excluding trade not requiring an FFL), on the order of 75 per cent is serviced by new domestically produced and imported new and used weapons. The other 25 per cent consists of sales of used firearms that re-enter the supply chain, for instance via pawnshops and consignment sales. (These numbers in particular are to be interpreted as no more than a first marker against which future studies could orient themselves.)

While there is a fair degree of entry into and exit from the firearms market, it is clear that market leaders have firmly established themselves in every market segment, sometimes in long-lasting stable duopolies. The pistol market in particular has been thoroughly penetrated by non-US brands. An analysis of recent merger and acquisition activity reveals ownership concentration—especially in the rifle market—far beyond what an analysis of ATF data suggests. In particular, it was found that in 2010 a single parent company controlled five major rifle brands that in turn held more than one-third of the rifle market and about three times the market share of its nearest competitor. Finally, the paper paid thorough attention to a detailed understanding of the data on which its findings are based.

Many opportunities exist to enhance data collection in order to advance the economic analysis of the industry. An effort could be made to obtain detailed firearms production data from before 1986. One can also go back further in time with regard to Customs or USCB firearms import and export data. To confirm the supply-side numbers produced in this report from another direction, an attempt might be made to obtain federal firearms and ammunition excise tax records. From these one might be able to deduce the dollar *wholesale* market value of the US firearms trade. (Tax records should go back to fiscal year 1920, when the firearms and ammunition excise tax was first collected.) The National Shooting Sports Foundation—a trade association—has done some of this research, but this is proprietary and not in the public domain. An initial check with the agency that currently collects this data—the Alcohol and Tobacco Tax and Trade Bureau of the US Department of the Treasury—suggests that considerable caution needs to be applied in the use of this data. The importance of assembling data covering many years lies in its potential use in time-series econometrics, e.g. for business cycle analysis. In addition, the manufacturing establishment location information contained in the FFL and ATF data can be used to conduct studies in spatial econometrics or in GIS-based studies of how firms' location decisions respond to changes in federal, state, and local firearms laws and regulation, and other changes in the economic environment (e.g. unionization, improved transportation infrastructure, etc.). An initial exploration employing spatial data—not reported here—suggests, for example, distinct geographic clustering of firearms manufacturing activity both in the United States and abroad. This holds for both contemporary and historical data going back to the late 1700s.

Financial data lodged with the SEC can be obtained for the very few firearms manufacturers that are—or at one point in time were—publicly held corporations (e.g. Ruger, Remington, and Smith & Wesson). For any given financial year this might permit one to extract such economically important data as production costs or levels of research and development expenditure, and investments in plant, property, and equipment. This data might also permit one to compute an average price per weapon sold (sales revenue divided by quantities sold). Assuming competitive pricing, one then might combine this with the ATF's information on quantities produced across all firearms manufacturers, estimate an overall firearms dollar market value, and compare this number to the number derived from the excise tax records or with the USCB's NAICS reports (NAICS 332994: 'Small Arms Manufacturing') or to estimates made by the industry itself. Additional industry information is likely to be contained in court documents. For example, an initial search of the LexisNexis database using the keywords 'firearm' and 'manufacturer' listed 55 cases. Finally, data on *military* firearms production and sales can possibly be acquired via US Department of Defense procurement records. This data could be important, as some companies may well cross-subsidize their civilian market efforts with research and development coming off their military contracts. Further, it may be useful to search company registration records state by state in order to identify ownership and cross-ownership holdings and patterns.

Finally, in terms of industrial economics, it appears that the US *ammunition* industry—the single most important complement to the firearms industry—is very differently organized. But there are at least cursory indications of some degree of ownership overlap between firearms and ammunition companies. As noted in the main text, the Cerberus/Freedom Group, for example, owns several ammunition manufacturers, as does the Winchester brand. Studying complementarities between these two industries should be of interest.

In sum, it is likely that a great deal of information is in fact available that may be used to enhance our understanding of the economics of the US firearms industry.

Annexe: figures and tables

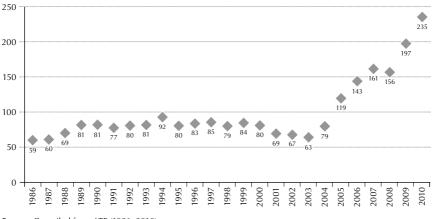


Figure A1 Number of pistol producers, 1986–2010

Source: Compiled from ATF (1986-2010)

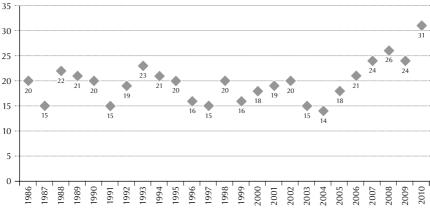


Figure A2 Number of revolver producers, 1986–2010

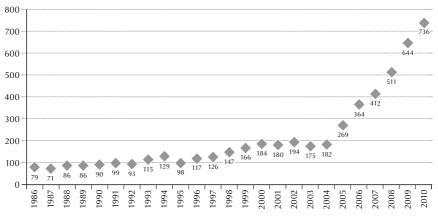


Figure A3 Number of rifle producers, 1986–2010

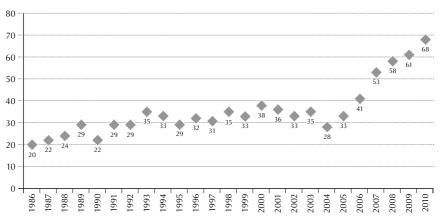


Figure A4 Number of shotgun producers, 1986–2010

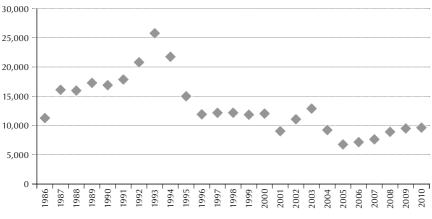
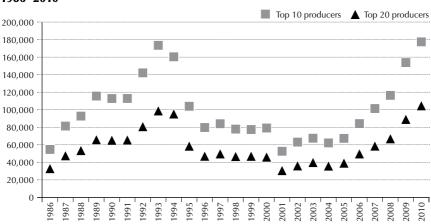
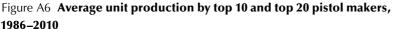


Figure A5 Average unit production by pistol makers, 1986–2010





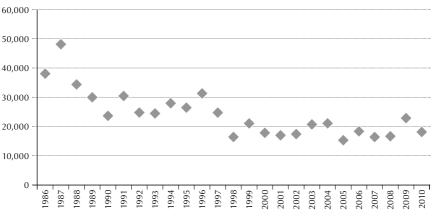
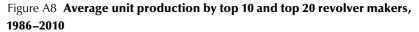
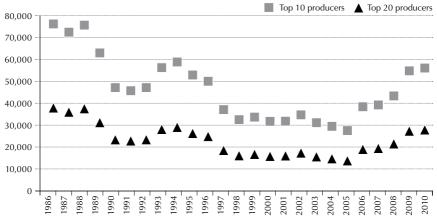


Figure A7 Average unit production by revolver makers, 1986–2010





Source: Compiled from ATF (1986-2010)

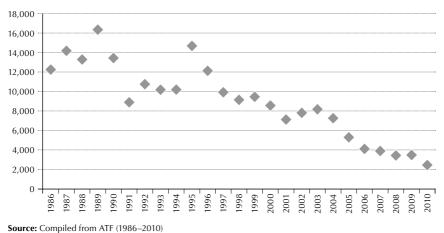
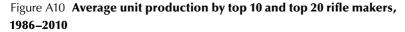
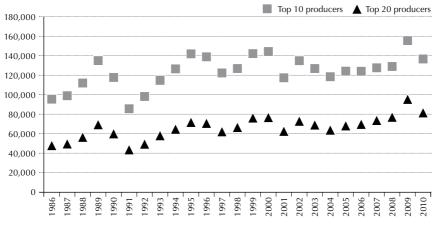


Figure A9 Average unit production by rifle makers, 1986–2010





Source: Compiled from ATF (1986-2010)

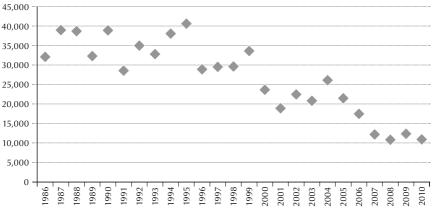
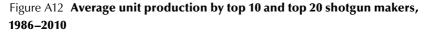
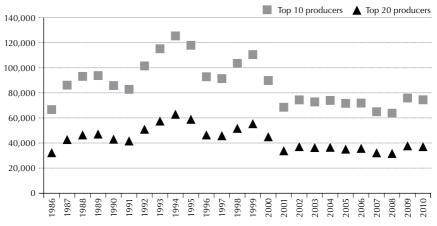


Figure A11 Average unit production by shotgun makers, 1986–2010





Source: Compiled from ATF (1986-2010)

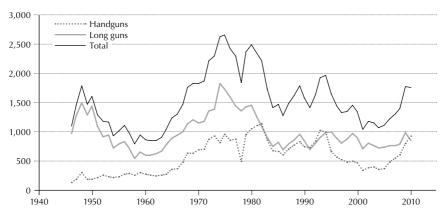


Figure A13 Total US handgun and long-gun unit production per 100,000 people, 1946–2010

Source: Compiled from ATF (1986-2010); Thurman (2001, p. 34); Violence Policy Center (1946-79)

Note: The numbers prior to 1980 are known to understate firearms production. The handguns data point for 1978 may be in error.

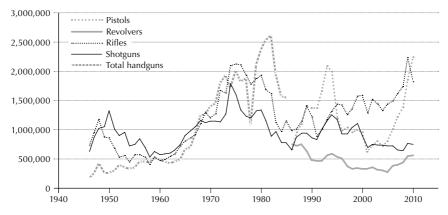


Figure A14 US gun unit production by weapon type, 1946–2010

Source: Compiled from ATF (1986-2010); Thurman (2001, p. 34); Violence Policy Center (1946-79)

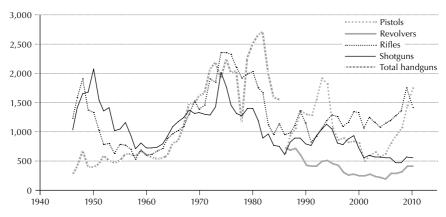


Figure A15 US gun unit production per 100,000 people by weapon type, 1946–2010

Source: Compiled from ATF (1986–2010); Thurman (2001, p. 34); Violence Policy Center (1946–79)

Note: Prior to 1986, only combined handgun (pistols and revolvers) data is available. The handguns data point for 1978 may be in error. Prior to 1980 actual production levels for handguns, rifles, and shotguns are known to be understated.

Regarding Tables A1–A4, below, the author worked from 25 years of annual ATF paper records. These give company names in upper case only. From year to year, however, the precise spelling can change, as can periods or commas or period or comma placement, company designations such as INC or LLC, and so on, even when the ultimate reference is to the same company. To tie all the records across 25 years into a single database required that a homogeneous naming convention be adopted.

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Market
Table A1

Producers	1986	1987	1988	1989	1990	1992	1993 1992	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Count
RAVEN ARMS	-	-	2	3		5																			9
STURM RUGER & COMPANY INC	2	4	m	2	5		2	-	2	2	2	-	-	-	-	-	-	-	2	2	2	2	-	-	25
CALWESTCO INC	3	2	4	~	9																				2
COLT'S MANUFACTURING	4	10	5	4	~	7 8	8	9	4	5	5	9	9	10	10	=	14	17	13	15	16	14	15	16	25
SMITH & WESSON CORP	5	2	-	-	-	4	5	1 2	-	-	-	2	2	4	3	5	5	2	-	-	-	-	2	2	25
BERETTA U S A CORPORATION	9	8	~	9	4	6 6	6 6	5 4	ĉ	e	4	e	e	e	4	2	2	4	10	5	10	5	4	4	25
DAVIS INDUSTRIES	~	~	9	10	~	2	3 5	~~	6	10	6	6	8	6	1										16
FIREARMS IMPORT & EXPORT CORP	80	10	6	80	6																				5
THOMPSON CENTER ARMS CO INC	6	13	15	14	17 1	16 1:	17 17	7 18	3 16	15	15	17	19	15	14	17	18	16	17	16	20				22
RANGER MANUFACTURING CO INC	10	1	10																						ŝ
ARCADIA MACHINE & TOOL INC	Ξ	6	80		15 1	15 13	15 13	3 13	=	18															10
EXCAM INC	12	12	11																						ŝ
ARMS TECHNOLOGY INC	13	14	14	10	10 1	11 11	1 11	1 12	~	8	10	12	13	13	~	10	1	6	6	12	14	11	12	12	25
INTRATEC USA INC	14	15																							2
IVER JOHNSON ARMS INC	15																								-
S W DANIEL INC	16	16	17	16		2	20																		r.
AUTO-ORDNANCE CORP	17	18	18						18																4
CHARTER ARMS CORPORATION	18	20																							2
AMERICAN DERRINGER CORP	19								19																2
ESSEX ARMS CORP	20																								-
INTERNATIONAL DIE CASTING INC		9																							
SPRINGFIELD INC		17	12	13	13 1	12 13	12 19	19 17	7 13	14	16	18	16	11	6	\sim	4		19	19	17	19	19		22
AMAC INC		19	20																						2
NAVEGAR INC			13	6	16 1	10 11	10 10	0 7	15	19	19	15	14												12
BRYCO ARMS			16			-	2 3	ŝ	9	~	~	2	10	2	2	4	9	e							16
GRENDEL INC			19			-	18 18	18 20	~																4
EMCOINC				11	12 1	13 1-	14 16	16 15	5 12	17	18	16	18												11
IRWINDALE ARMS INC				12																					-
LORCIN ENGINEERING CO INC				15	1	9	4	-0	5	4	e	4													10
UNITED SOUTHERN INDUSTRIES INC				17	. 4	20	20	0																	e
AMERICAN ARMS INC				18	19																				2
STALLARD ARMS INC				19	14	18 10	13																		4
AA ARMS INC				20				19	-																2
MASTER TOOL COINC					18																				-

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cers	JONES JOHN DAVID	OGLESBY & OGLESBY GUNMAKERS INC	DANIEL WAYNE E	DEHART T KEITH	HALL JUDERAL E	PHELPS GREGORY G	BOB GIBBONS & SON INC	UNITED STATES FIREARMS MANUFACTURING CO	OLD WEST CO OF TX INC	MUNITIONS INTERNATIONAL LAB INC	AMERICAN FRONTIER FIREARMS	NEW YORK INTERNATIONAL CORP	PRUITT WILLIAM	RAPINE ELLSWORTH D	CASULL ARMS CORP	LEINAD INC	AWA INTERNATIONAL INC	SUPER SIX LLC	CONTRACT MANUFACTURING INC	REEDER GARY NELSON	CLEMENTS CHARLES DAVID	WILDEY F A INC	ULTIMATE ACCURACY INC	YELTON JEFFREY JOE	ST PIERRE THOMAS V	GUN SMOKE ENTERPRISES INC	NC	WESTERN ORDNANCE INTERNATIONAL CORP	US FIREARMS MFG CO
Producers	JONES	OGLE	DANI	DEHA	HALL	PHELF	BOB (UNITE	OLD V	MUNI	AMER	NEW	PRUIT	RAPIN	CASU	LEINA	AWA I	SUPER	CONT	REEDE	CLEM	WILD	ULTIN	VELTO	ST PIE	GUN	FATS INC	WEST	US FIR

MAGNUM RESEARCH INC																		6	6	8	9	10		10
HARTFORD ARMORY INC																		12	18					2
VALLEY TOOL & MFG INC																		13	Ξ					2
CZ-USA INC																		4	10 1	12		19		4
ARSENAL USA I LLC																		16						-
KOHNKE WILLIAM MICHAEL																		17						-
LAND WARFARE RESOURCES CORP																		18						-
APPALACHIAN GUNSMITHING INC																			13 1	13 13	15 15	5 14		10
WHEELER TOPPING LLC																			14					-
GREELEY KEVIN P																			17		2	20 17		ŝ
AWA USA INC																			-	0				-
TURNBULL MANUFACTURING COMPANY																			-	-	11 1.	13 13		4
DUZ MANUFACTURING INC																			-	14	14			2
MEGGITT TRAINING SYSTEMS INC																			-	15	-	18 10	16	e
BRIENT ROBERT HARLOW JR																			-	7				-
O'DAY KERRY DEVON																			-	19				-
CHIAPPA FIREARMS LTD																				w		6 7	~	e
SUPER SIX CLASSIC LLC																					12			-
HORN'S CUSTOM RIFLES INC																				=	18			-
CUTTING EDGE ARMS LLC																				-	19			-
WHITE MELTON RAY																				20	0			-
COBRA ENTERPRISES OF UTAH INC																					~	55	6	2
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ALLEE MICHAEL DAVID																					-	6		-
HIGH SPEED MACHINING INC																						=	0	-
SMITH METAL FINISHING INC																						<u>=</u>	5	-
BAUER RICHARD LAWRENCE JR																						~	ß	-
VERDI ARMORY LTD																						2	20	-
Total = 117 2	20 20	20	20	20	20	20	20 2	20 20	20	20	20	20	20	20	20	20	20	20	20 2	20 2	20 2	20 2(20 4.	4.27
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Note: In some years only fewer than 20 companies reported revolver production to the ATF. Source: Compiled from ATF (1986–2010)

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Table A3

Producers	1986	1987	1988	1989	1990	1991	1992	1994	1995 1994	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Count
MARLIN FIREARMS COMPANY	-	-	-	-	-	2	-	-	1 2	2	÷	2	2	2	2	m	m	m	ε	2	2	m	ε	2	25
STURM RUGER & COMPANY INC	2	÷	÷	÷	2	-	2	2	2 1	-	-	-	-	-	ε	-	2	2	2	ŝ	ŝ	2	-	ŝ	25
REMINGTON ARMS CO INC	e	2	2	2	e	ŝ	e	 	3	m	2	e	m	e	-	2	-	-	-	-	-	-	2	-	25
US REPEATING ARMS COMPANY INC	4	4	4	4	4	4	4	4	4	4	4	4	4	9	4	4	4	ŝ	9						20
SAVAGE ARMS INC	10	10	5	9	10	10	5	5	5 5	10	5	0	5	4	5	5	5	4	4	4	4	4	4	4	25
IVER JOHNSON ARMS INC	9																								-
COLT'S MAN UFACT URING	~	9	~	~	9	9	و	9	6 6	80	9	~	10	10	13	14									17
CHARTER ARMS CORPORATION	80	~	6	19																					4
AMERIND INC	6			12	16																				3
CHIPMUNK MFG INC	10	6	13																						3
KIMBER OF OREGON INC	Ξ	12	80	15																					4
DON FLOYD ENTERPRISES INC	12																								-
THOMPSON CENTER ARMS CO INC	13	15	17		20	16	=	15		17	12	Ξ	13	12	6	6	œ	~	6	80	6	12	17	80	22
ESSENTIAL ARMS CO	14	18	15	80		6	12 1	13																	~
PRECISION BALLISTICS	15	16																							2
SENDRA CORPORATION	16	17																							2
AUTO-ORDNANCE CORP	17				18		16 1	19 1	19 12	2 16	16	20													10
SPRINGHELD INC	18	10	10	10	6	~	6	6	9 9	6	10	16	14	15	15	13	13		15	17	17	20		16	23
FEDERAL ORDNANCE INC	19	19		20	14	12																			5
O F MOSSBERG & SONS INC	20		19															12	11	11	11				9
EXCAM INC		8																							-
AMACINC		1	=																						2
PWA INC		13	14	=	12	18	17 1	1	11 13	~															6
FEATHER INDUSTRIES INC		14	16	18	15	4	14	2	20																~
ARCADIA MACHINE & TOOL INC		20				20			1	18															3
DAISY MANUFACTURING CO INC			9	5	~	~																			4
STREET SWEEPER SALES OF GA INC			12																						-
OREGON ARMS INC			18	14	10	10	8	10 1.	12 10	0															8

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6		19						9							15							17	10			16		~	
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6		20						8							16							13	14		18			~	
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6		13						~							Ξ					19		80	14	17	15	18	20		
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18		13				15		~		10	19	20																	
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17	=			_	8	13	19																						
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BUSHMASTER FIREARMS INTERNATIONAL LLC	NEW ENGLAND FIREARMS COMPANY INC	C		W		4C	GENERAL DYNAMICS WEAPON SYSTEMS INC		APON SYSTEMS	U			ID INC	ACTURING CO			ç	0		FLE CO INC	COOPER FIREARMS OF MONTANA INC		NG ARMS LLC		C	JSTRIES INC	RIES INC	ING CORP	LOADING INC
BUSHMASTER FIRE	NEW ENGLAND FIL	OLYMPIC ARMS INC	EAGLE ARMS INC	BROWN MICHAEL W	B-WEST INC	SURVIVAL ARMS INC	GENERAL DYNAMI	H & R 1871 LLC	CALICO LIGHT WEAPON SYSTEMS	GIBBS RIFLE CO INC	WEATHERBY INC	SILE INC	GLEASON BROS IND INC	KNIGHTS MANUFACTURING CO	ARMALITE INC	S W DANIEL INC	ARMSCORP USA INC	SACO DEFENSE INC	BRYCO ARMS	POWDER RIVER RIFLE CO INC	COOPER FIREARM:	BEEMILLER INC	KEYSTONE SPORTING ARMS LLC	DANIEL WAYNE E	DPMS FIREARMS LLC	KEL TEC CNC INDUSTRIES INC	PASTUSEK INDUSTRIES INC	HENRY RAC HOLDING CORP	MODERN MUZZLELOADING INC

ACROMETAL COMPANIES INC												17	20	17	12	20									r.
WRIGHT PRODUCTS													1	LO.											2
CENTURY ARMS INC													12	Ξ	10	12	12	14		15	14	14	13		10
ARMS TECHNOLOGY INC															16										-
KIMBER MFG INC																19	18	16	16	19	20				9
COLT DEFENSE LLC																	Ξ	Ξ		20	19	1	Ξ		9
ROCK RIVER ARMS INC																	14	17	14	14	15	15	15	15	œ
ATEK PRODUCTS LLC																		20							-
STAG ARMS LLC																			19	12	12	13	10	19	9
LEGACY SPORTS INTERNATIONAL LLC																				13					-
SMITH & WESSON CORP																					13	=	9	9	4
MAVERICK ARMS INC																						6	6	~	e
DOUBLE STAR CORP																						16			-
SIG SAUER INC																						18	14	14	ŝ
CMMG INC																						19			-
AREOTEK INDUSTRIES LLC																							18		-
AERO PRECISION INC																							19	17	2
TG INTERNATIONAL INC																							20		-
FN MANUFACTURING LLC																								18	-
DELAWARE MACHINERY & TOOL CO INC																								20	-
Total = 79	20	20	20	20	20	20 2	20 2	20 21	20 20	20	20	20	20	20	20	20	20	20 20 20	20	20	20	20	20	20	6.33
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Producers	1986	1987	1988	1989	1990	1991	1992	1994	1995 1994	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Count
O F MOSSBERG & SONS INC	-	-	2	2	-	2	2	2	2 2	2	2	2	2	2	2	2	2	2	2	2	-				22
REMINGTON ARMS COINC	2	2	-	-	2	-	-	-	-	-	-	-	-			-	-	-			2	2	2	2	25
US REPEATING ARMS COMPANY INC	ŝ	4	4	e	ŝ	e	4	4	4 4	4	4	4	4	4	4	5	IO.	4	5						20
SAVAGE ARMS INC	4	ŝ	10	6	80	8	10	15 11	1 9	6	80	6	80	6	8	6	80	80	8	6	=	6	4		24
STURM RUGER & COMPANY INC	5	~	7	~	9	9	9	7	7 7	9	9	9	9	9	9	9	6	~	9	9	9	8	7	12	25
BROWN MICHAEL W	9																								-
H & R 1871 LLC	~					4	e		3 3	3	Э	æ	e	æ	3	3	3	3	e	3	3	3	e	 	21
MARLIN FIREARMS COMPANY	8	6	8	11	12	11	13	11	8 6	10	12	10	10	10			~					12		8	18
SPRINGFIELD INC	6	14	15				11				6	~	\sim	~	12	10	10								11
HL GRISEL INC	10																								-
SMITH DONALD J	=																								-
LASER PRODUCTS CORP	12	17	17	12																					4
GORDON LAMONT	13																								-
SEDRAN JOHNATHAN	14																								-
CIENER JONATHAN ARTHUR	15	13	18																						3
BEURY TAD	16	18																							2
S W DANIEL INC	17	10																							2
MARCUS INC	18																								1
SAXON ARMS INC	19																								-
SHARP TOOL & TRADE CO INC	20																								1
NEW ENGLAND FIREARMS COMPANY INC		ę	e	4	4																				4
AMERIND INC		9																							-
ITHACA ACQUISITION CORP		80	9	9	~	6	6	6	6																8
LJUTIC LLC		Ξ	13	14	15	16	16	-	13 12	14	13	14	13	14							20		15	15	16
HATFIELD GUN CO INC		12	11	13	17		17	-	16																9
POLICE AUTOMATIC WEAPONS SERVICE INC		15																							-
ELLIS MERC CO DIV OF MONACHE INVEST- MENT CO		16																							-
GENECCO KENNETH MICHAEL		19																							-
HARDESTY BOYD A		20	19																						2
SPORTING ARMS MFG INC			6	80	6	7	7	9	6 8	80	~	8	6	80											13
SENTINEL ARMS CORPORATION			10	12	14	15																			4
STREET SWEEPER SALES OF GAINC			12	10	10	12	8	10																	9

Table A4 Market entry and exit among the top 20 shotgun maker rankings, 1986–2010

Producers	1986	1987	1988	1989	1990	1992	1993	1994 1993	1995	1996	1997	1998	1999	2000	2001	2002	2003	2003	2000	2007	2008	2009	2010		Count
COMPONENT METAL PRODUCTS INC			14	18					17															,	ŝ
GOODRICH CHARLES R & PEINSIPP DENNIS M			16																					•	-
MCGILL ROBERT TIMOTHY			20																						_
MAVERICK ARMS INC				10	5	5	5 5	5	5	5	2	5	2	5	10	4	4	5	4	4	4	-	-	2	22
SAGE INTERNATIONAL LTD				15	. 91	17		19																4	4
CLASS THREE SUPPLY INC				16					18																2
HECKLER & KOCH INC				19		14																			2
TARGET ARMS INC				20																					-
GILBERT EQUIPMENT COMPANY INC					-	10																			2
GENERAL DYNAMICS WEAPON SYSTEMS INC					13																				-
US COMPETITION ARMS INC					18	13 12	2 13	3 12	=			13	12		13	14	15	12 1	10 1	10 15	5	13	11		17
KNIGHTS MANUFACTURING CO					19	20							17	19										7	4
EDWARDS CLIFFORD & ALICE					20																				_
R M KERNER CO						18																		•	_
PENN ARMS INC						19 1	15 12	12																	ŝ
INTERNATIONAL ORDNANCE CORP						-	14																	•	_
TAR HUNT CUSTOM RIFLES INC						-	18 16	16 14	13	15	17	18			18	16	17	16 1	17 17	4		18	3 18		15
WEATHERBY INC						-	19																	•	
SILVER SEITZ INC						-4	20 17	17 15	19	18	18	19													~
BUSHMASTER FIREARMS INTERNATIONAL LLC							8	8																	-
DANIEL WAYNE E							1	14 10	10	~	Ξ														2
MULTI PRODUCTS CO INC							1	18 17																	2
SOUTHERN NEW ENGLAND SHOTGUN TECHNOLOGIES INC							<u></u>	19																,	_
COLE ARMS INC							20	0	20	17	20													*	4
CONNECTICUT SHOTGUN MANUFACTURING CO								18	14	16	15	15	16	16	15	15	14	13	12 1	12 9	9 7	9	7		17
H S PRECISION INC								20					14	13	17	17	19	19							~
NCP PRODUCTS INC									15	20	19			20										4	4
CONNECTICUT VALLEY CLASSICS INC									16																-
KELBLY'S RIFLE RANGE INC										Ξ															
ITHACA GUN PARTS & SERVICE CORPORATION										12	10	11			~	7	9							Ű	9
COOPER FIREARMS OF MONTANA INC										13	14	16												,	3
ALFERMANN USA INC										19			19	18	16		20		14 1	19					~
AIM INC											16	17	18	17			16	14 1	13 1	16 13	18	20	17		=
LEINAD INC												12	Ξ	Ξ	10	12	13			13		12		~	80
RITCHIE WILLIAM RAYMOND												20													-
WILSONS GUN SHOP INC													15	12	=	=	12	=	9	-	14 11	6	13		12
URBACH MURRAY GLEN													20												_

S R LAMBOY AND CO INC												15	14									2
VERNEY-CARRON USA INC													6	8	6	7	8	8	10			~
DAKOTA ARMS LLC													19	19	15	11	15		20			9
SERBU FIREARMS INC													20									-
BERETTA U S A CORPORATION														13	11 6		7	5	4	80	4	8
HOENIG GEORGE														18	20	~						2
ROBAR COMPANIES INC														20								
CAMBRIDGE VALLEY MACHINING INC														-	18							
THERMAL METAL TREATING INC															10	~						
MUTSCHLER DOUGLAS A															17							
FATS INC															18	3 15						2
NIP MANUFACTURING INC																16	5 18					2
NOWICKI WAYNE THOMAS																18	~					-
CELESTE TIMOTHY MATTHEW																19	•					-
HINELINE DAVID CARL																20	0					-
LEGACY SPORTS INTERNATIONAL LLC																	5					-
ITHACA GUNS USA LLC																	14					
APPALACHIAN GUNSMITHING INC																	20		18	16	16	4
THOMPSON CENTER ARMS CO INC																		~	9	10	6	4
MODERN MUZZLELOADING INC																		10	19			2
YELLOW BRICK ENTERPRISES INC																		12	14	14		ĉ
ITHACA GUN COMPANY																		13	5	2	9	4
WHITSON JON DAVID																		16	_			-
RODMAN RANDOLPH B																		17				-
DEVAULT INDUSTRIES LLC																		19	_			
ALLIANCE MACHINE LLC																			13			
LAWTON MACHINE LLC																			15			
SMITH & WESSON CORP																			16			
GUN SMOKE ENTERPRISES INC																			17			
ADVANCED PRECISION MACHINING																				Ξ		
MEGGITT TRAINING SYSTEMS INC																				17		
KREBS CUSTOM INC																				19		
DEFCOM LLC																					6	
KEYSTONE SPORTING ARMS LLC																					12	
R & R RACING INC																					14	
MACH I ARSENAL LLC																					19	
MOORE DAVID E & MOORE CARLA W																					20	
Total = 106	20 20 2	20 20	20	20	20	20 2	20 20	20	20	20	20	20	20	50	20 20 20 20	2() 20	20	20	20	20	5.19
Top 20 displacement	n/a 9 (f							4			2				1 3				4			86
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Endnotes

- A further 378 companies reported production of 'miscellaneous firearms' or producing only for export. This brings the total number of identified companies to 2,666 for the years 1986–2010. For comparison, the Small Arms Survey (2005, p. 43) refers to '511 known US producers and repairers of small arms and light weapons', with data mostly pointing to around the year 2004. The Small Arms Survey (2004, p. 7) refers to 1,249 firms in 90 countries 'involved in some aspect of small arms and light weapons production'.
- 2 The *Small Arms Survey 2009* chapter on transfers noted an increase in the global small arms trade, which was partially explained by imports by the United States (Small Arms Survey, 2009, ch. 1). At the time it was not known whether this was due to an increase in the size of the US market or simply an increase in the market share of foreign producers. This paper provides an answer: there is an overall increase in US supply even as there is an increase in US market share by non-US firms.
- 3 The estimate pertains to federally licensed firearms dealers only and does not refer to resales via non-licensed channels, such as gun show-related sales or through newspaper advertisements, garage sales, friend-to-friend transfers, and the like.
- 4 Legally, even very small-scale producers are firearms manufacturers. Very many of these appear to be hobbyists, gunsmiths, and craft-type producers. At least one is a technical college that teaches gunsmithing, and its small production requires reporting. Others, however, are larger establishments ordinarily producing military firearms or other items that do not fall under the reporting requirements for commercial firearms on which this paper concentrates.
- 5 The last such study, restricted to manufacturers in the Connecticut Valley, dates to 1948 (Deyrup, 1948).
- 6 For example, extensive financial data is available for only a single major US maker of civilian market firearms, i.e. Sturm, Ruger & Co. Inc., whose shares are publicly traded on the New York Stock Exchange. Sporadic financial records are also available for Smith & Wesson, Remington, and Colt Defense. Financial records for a few non-US companies may be available as well, e.g. for FN Herstal of Belgium.
- 7 Small arms manufacturing is not restricted to firearms, but excludes both ammunition and the wholesaling and retailing of firearms. NAICS 332994 covers the following: ammunition carts (i.e. 30 mm or less, 1.18 inch or less) manufacturing; barrels, gun (i.e. 30 mm or less, 1.18 inch or less), manufacturing; BB guns manufacturing; belts, machine gun (i.e. 30 mm or less, 1.18 inch or less), manufacturing; carbines manufacturing; clips, gun (i.e. 30 mm or less, 1.18 inch or less), manufacturing; cylinders and clips, gun (i.e. 30 mm. or less, 1.18 inch or less), manufacturing; dart guns manufacturing; firearms, small, manufacturing; grenade launchers manufacturing; gun barrels (i.e. 30 mm or less, 1.18 inch or less) manufacturing; gun barrels (i.e. 30 mm or less, 1.18 inch or less)

(i.e. 30 mm or less, 1.18 inch or less) manufacturing; guns, BB and pellet, manufacturing; links, ammunition (i.e. 30 mm or less, 1.18 inch or less), manufacturing; machine gun belts (i.e. 30 mm or less, 1.18 inch or less) manufacturing; machine guns (i.e. 30 mm or less, 1.18 inch or less) manufacturing; pistols manufacturing; pyrotechnic pistols and projectors manufacturing; recoil mechanisms (i.e. 30 mm or less, 1.18 inch or less), gun, manufacturing; revolvers manufacturing; rifles (except recoilless, toy) manufacturing; rifles, BB and pellet, manufacturing; rifles, pneumatic, manufacturing; shotguns manufacturing; sub-machine guns manufacturing; tranquilizer guns, manufacturing. For the definition, see USCB (2010c).

- 8 This is strange because the cost of materials plus value added cannot exceed sales revenue.
- 9 According to the USCB (2010d), small arms *ammunition* manufacturing adds another USD 2,339 million in sales revenue to these figures.
- 10 Handguns are pistols and revolvers; long guns are rifles and shotguns. 'Civilian use' refers to weapons purposed for non-military use, i.e. use by law enforcement agencies, private sector businesses, and citizens. For convenience, this is abbreviated as the US 'firearms' or 'civilian firearms' or 'non-military firearms' industry. Even as important spillover effects may exist from the military segment of the market to the civilian, private security, and law enforcement segments, military firearms are excluded because of lack of data.
- 11 FFLs must be renewed every three years, while FFL holders who discontinue operations must turn their records over to the FBI so that firearms tracing remains possible.
- See ATF (n.d.d). Question 12 reads as follows: 'Q: If I manufacture a weapon in one calendar year, but do not sell it, do I still need to report it? No. The AFMER report is used to report the number of firearms that are produced and have entered commerce. Example: If you produce 100 firearms in a calendar year but only 30 have entered commerce within that same calendar year, then you would only report 30. The other 70 firearms are still in your possession (and on your books) and would not be reported until the calendar year that they enter commerce.'
- 13 Sometimes, but not always, a column-based copy/paste action from the PDF to a spreadsheet program was possible. Even then, all data had to be hand checked.
- 14 Customs data is also problematic with regard to its reported monetary values (Small Arms Survey, 2009, p. 27, Box 1.2). However, the research reported here relies only on *quantity of units* traded information, not on trade *dollar* values. All this is discussed in more detail below.
- 'Returns to scale' refers to the relation between inputs required and outputs produced. If one unit of input produces one unit of output and two units of input produce two units of output, and so on, then one speaks of 'constant' returns, and the up-and-down movement in the business cycle may allow firms to hire or fire the necessary inputs smoothly without necessarily increasing or decreasing their average costs. Total profits would increase or decrease with the market, but profit per unit sold would not necessarily be affected.
- 16 On the confusing US data sources with regard to the small firearms trade, see, for example, Small Arms Survey (2009, p. 27).
- 17 For data purchase, contact Mary E. May, Trade Data Services, USCB (tel.: +1-301-763-2227/2237; email: mary.e.may@census.gov). Data for 1980–88 and 1989–2007 was pur-

chased on 2 December 2008, and data for 2008-09 on 8 February 2011. This data comes with the following notes. Regarding exports: 'Data on U.S. exports of merchandise from the U.S. to all countries, except Canada, is compiled from the Electronic Export Information (EEI) filed by the USPPI or their agents through the Automated Export System (AES). The EEI is unique among Census Bureau data collection methods since it is not sent to respondents soliciting responses as in the case of surveys. Each EEI represents a shipment of one or more kinds of merchandise from one exporter to one foreign importer on a single carrier. Filing the EEI is mandatory under Chapter 9, Title 13, United States Code. Qualified exporters or their agents submit EEI data by automated means directly to the U.S. Census Bureau. The United States is substituting Canadian import statistics for U.S. exports to Canada in accordance with a 1987 Memorandum of Understanding signed by the Census Bureau, U.S. Customs and Border Protection, Canadian Customs, and Statistics Canada. Similarly, under this Memorandum of Understanding, Canada is substituting U.S. import statistics for Canadian exports to the United States. This data exchange includes only U.S. exports destined for Canada and does not include shipments destined for third countries by routes passing through Canada or shipments of certain grains and oilseeds to Canada for storage prior to exportation to a third country. These shipments are reported on and compiled from EEIs. Department of Defense Military Assistance Program Grant-Aid shipments being transported as Department of Defense cargo are reported directly to the U.S. Census Bureau by the Department of Defense.' Regarding imports: 'Published data on U.S. imports of merchandise is compiled primarily from automated data submitted through the U.S. Customs' Automated Commercial System. Data are also compiled from import entry summary forms, warehouse withdrawal forms and Foreign Trade Zone documents as required by law to be filed with the U.S. Customs and Border Protection. Data on imports of electricity and natural gas from Canada are obtained from Canadian sources.' See USCB (2012).

- 18 This description of the NICS checking process is based on an author interview on 22 September 2011 with Sammy J. DeMarco, FBI supervisory management and programme analyst, programme manager, Major Case Contact Center.
- 19 Interestingly enough, when a small—and wholly unscientific—sample of firearms retailers in Georgia and Ohio were asked in late 2010 and early 2011 about the split between 'new' and 'used' firearms sales, all five respondents said 70/30, a split not wholly out of line with the estimate provided in this paper.
- 20 For an advanced overview of the relevant measures, economic theory, and econometrics, see Perloff, Karp, and Golan (2007).
- 21 Also see the division's merger guidelines, US DoJ (n.d.c).
- 22 FN Manufacturing already produced military rifles, but these are not reported to the ATF. FN thus reports non-military rifle production only as from 2008 (and pistol production for many years before that).
- 23 Remington's history goes back to 1816, Marlin's to 1870. Marlin produced the Marlin, H&R 1871 (Harrington & Richardson), New England Firearms, and L. C. Smith brands of long guns, all of which it had acquired over the years. (Remington already owned the rights to another famous gun, the Charles Parker shotgun.)

- 24 There is also a Rogue Riv Rifleworks Inc./John Rigby & Co. in the January 2010 FFL list. ATF-reported production is very small. This is a separate legal entity from Rogue Rifle.
- 25 To participate in the Canadian military and law enforcement markets and international markets, Colt Defense acquired Diemaco in 2005 and renamed it Colt Canada Corporation. (Technically there are two companies: Colt Defense LLC and Colt Defense Inc.) Colt Defense also owns Colt Rapid Mat LLC, a maker of heliopad and landing-strip materials.

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- Afghanistan, Arms and Conflict: Armed groups, disarmament and security in a post-war society, by Michael Bhatia and Mark Sedra, April 2008, published by Routledge, ISBN 978-0-415-45308-0
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- *The Central African Republic and Small Arms: A Regional Tinderbox,* by Eric G. Berman with Louisa N. Lombard, December 2008, ISBN 2-8288-0103-9
- La République Centrafricaine et les Armes Légères: Une Poudrière Régionale, by Eric G. Berman with Louisa N. Lombard, co-published with GRIP, May 2009, ISBN 978-2-87291-027-4
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- The Politics of Destroying Surplus Small Arms Inconspicuous Disarmament, edited by Aaron Karp, July 2009, published by Routledge, ISBN 978-0-415-49461-8

Primed and Purposeful: Armed Groups and Human Security Efforts in the Philippines, by Soliman M. Santos, Jr. and Paz Verdades M. Santos, with Octavio A. Dinampo, Herman Joseph S. Kraft, Artha Kira R. Paredes, and Raymond Jose G. Quilop, a joint publication of the South–South Network for Non-State Armed Group Engagement and the Small Arms Survey, April 2010, ISBN 978-2-940415-29-8



OBJECTIVE ANALYSIS. EFFECTIVE SOLUTIONS.



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The Effects of Bans on the Sale of Assault Weapons and High-Capacity Magazines

March 2, 2018

The term *assault weapon* is controversial. In state and federal gun laws, it generally refers to specific semiautomatic firearm models that are designed to fire a high volume of ammunition in a controlled way or to firearms that have specified design features, such as folding stocks or pistol grips (Giffords Law Center to Prevent Gun Violence, undated-a).^[1] Those in the gun industry refer to many of these firearms as *modern sporting rifles*, contending that *assault rifle* should apply only to automatic weapons used by militaries. Furthermore, they argue that the characteristics used to differentiate banned firearms from nonbanned semiautomatic weapons are cosmetic and do not make them more deadly than similar weapons without those features. In 1994, Congress passed the Violent Crime Control and Law Enforcement Act, which banned "the manufacture of military-style assault weapons, assault weapons with specific combat features, 'copy-cat' models, and certain high-capacity ammunition magazines of more than ten rounds" (U.S. Department of Justice, 1994; see also Pub. L. 103-322). The law included a sunset provision, calling for its repeal after ten years. It was not renewed in 2004, and thus there is not currently a federal assault weapon ban (Plumer, 2012).

How Bans on the Sale of Assault Weapons and High-Capacity Magazines Affect Gun Use Outcomes

MAY INCREASE	MAY DECREASE
Gun Industry Outcomes	We found no qualifying studies showing that bans on the sale of assault weapons and high- capacity magazines decreased any of the eight outcomes we investigated.
INCONCLUSIVE EVIDENCE	NO STUDIES MET OUR CRITERIA
Mass Shootings	Defensive Gun Use
Violent Crime	Hunting and Recreation
	Officer-Involved Shootings
	Suicide
	Unintentional Injuries and Deaths

Laws banning or restricting assault weapons or high-capacity magazines are primarily intended to reduce firearm-related casualties and fatalities from violent crime—and, more specifically, from mass shooting incidents. The bans could impact firearm-related violence by decreasing the number of shooting incidents, decreasing the number of casualties in a given shooting, and decreasing the case fatality rate. That is, other things being equal, a shooter with an assault weapon or other weapon equipped with a high-capacity magazine can fire more ammunition and hence inflict more casualties in a given length of time than would a shooter using weapons with a lower rate of fire and capacity. In a mass shooting incident, the lower rate of fire should allow for more people to evacuate and for law enforcement or others to intervene. To most precisely characterize the causal effect of these laws on violent crime or mass shootings, the ideal data would distinguish crime and violence outcomes by whether a designated assault weapon or high-capacity magazine was used. Although limited data on the weapons used in homicides are available through the Federal Bureau of Investigation (FBI)'s Supplementary Homicide Reports and details of the weapons and ammunition used in mass shooting incidents are increasingly being compiled on a case-by-case basis (e.g., by the Stanford University Mass Shootings in America project), none of the articles meeting our inclusion criteria for this policy analyzed crime or violence outcomes by weapon type.

The majority of crimes are not conducted with rifles but with handguns, most of which are

not considered assault weapons (although most assault weapon bans also list certain "assault pistols" among the banned firearms). In 2015, 252 of the 9,616 firearm-related murders reported in FBI data involved any type of rifle; the type of firearm used in 2,477 of these murders was not specified (FBI, 2016b). Assuming that no substitution to other types of firearms would occur, the elimination of all rifle homicides would have decreased the number of firearm-related murders by 2.6 percent.

Assault weapons and high-capacity magazines are used disproportionately in mass public shootings and killings of law enforcement officers compared with murders overall. However, these incidents are relatively rare. Data combining 184 mass shooting, spree shooting, and active shooter events from 1982 to 2015 suggest that about 30 percent of incidents involved assault weapons and 37 percent of incidents involved high-capacity magazines (Blau, Gorry, and Wade, 2016). Another analysis that focused on mass shooting events involving four or more fatalities between 2009 and 2016 reported that 15 of these incidents (11 percent) involved an assault weapon or high-capacity magazine, resulting in 155 percent more injuries and 47 percent more fatalities compared with other incidents (Everytown for Gun Safety Support Fund, 2017b). Other research, focused on a small subset of shootings in which multiple victims were targeted, suggests that the rate of fire at mass shooting is not so high that reloading would affect the number of rounds fired (Kleck, 2016). If this finding generalized to all multiple-victim shootings, it would call into question the usefulness of laws banning high-capacity magazines, because the primary objective of such laws is to reduce the number of rounds a shooter can fire before having to reload.

Of the 38 felonious fatal shootings of law enforcement officers in 2015, 18.4 percent involved any type of rifle (FBI, 2016d). Although relatively outdated, estimates from 1994 suggest that between 31 percent and 41 percent of firearms used in murders of police officers involved assault weapons or other guns equipped with high-capacity magazines (Adler et al., 1995).

There is little theoretical basis to suggest that bans of assault weapons and high-capacity magazines would impact rates of suicide or unintentional injury. And although these policies could plausibly impact defensive gun use, the magnitudes of any such effects are likely small. The FBI reported that, in 2015, eight of the 328 firearm-related justifiable homicides by private citizens involved any type of rifle (FBI, 2016c).

Laws banning assault weapons and high-capacity magazines would have direct market effects for the gun industry, including impacts on production, price, and potential spillovers from primary to secondary markets (Koper, 2004). The market effects of restricting the manufacturing and sales of a class of weapons or ammunition will depend on the relative demand for these items, the availability of nonbanned weapons that serve as close

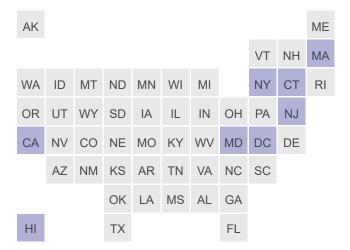
substitutes, and the costs of modifying existing weapon types to meet the requirements of

the ban, to name a few. A nationwide ban could also impact the industry more broadly by generating market effects for ancillary gun companies that produce or sell certain replacement parts, accessories, or specialized magazines and precision barrels used primarily for sport shooting.

Overall, the effects of these policies will depend largely on the design and implementation of the law. Except for heavily regulated weapons manufactured prior to May 1986, assault weapons capable of automatic fire are not available for sale in the United States. Thus, the specifics of which weapons or weapon features are prohibited by a particular ban are key to understanding the marginal effect of each policy on outcomes of interest. Targeting weapons with close substitutes or features unrelated to the deadliness of the weapon or its likelihood of being used in the perpetration of violence likely limits any potential policy effects on violent crime. Further, most existing state bans (and the federal ban of 1994) influence the flow of only new weapons or magazines and do little to affect the existing stock; the National Shooting Sports Foundation, a trade association for the gun industry, estimates that more than 8.5 million assault rifles were either manufactured in or imported to the United States between the 1990s and 2013 (Chang, 2013).

State Implementation of Bans on the Sale of Assault Weapons and High-Capacity Magazines

Ban on the Sale of Assault Weapons and High-Capacity Magazines



Ban on the Sale of High-Capacity Magazines Only



State implementation data valid as of January 1, 2017.

Seven states and the District of Columbia currently ban assault weapons.^[2] Five of the eight

jurisdictions list the specific assault weapons banned and prohibit all weapons with specific features; one state bans only the weapons listed, and two states ban only specific features. The laws that list specific banned models are similar state to state, although the lists are not generally identical.

California is an example of a state that has a list of banned assault weapons, both rifles and shotguns, as well as firearms with specific design features. Specifically, it bans "all AK series including, but not limited to, the models identified," and explains that the term *series* "includes all other models that are only variations, with minor differences, of those models listed in subdivision (a), regardless of the manufacturer."^[3] Furthermore, the state provides a list of features, any one of which renders a firearm an assault weapon and therefore banned. ^[4] For example, the law states that a "semiautomatic, centerfire rifle that has the capacity to accept a detachable magazine" is an assault weapon if it also contains any of the following features: "(A) a pistol grip that protrudes conspicuously beneath the action of the weapon; (B) a thumbhole stock; (C) a folding or telescoping stock; (D) a grenade launcher or flare launcher; (E) a flash suppressor; (F) a forward pistol grip."^[5]

Connecticut's list is similar to California's, but the language is different. For example, in its subsection banning the AK series of weapons, Connecticut's law includes "[a]ny of the following specified semiautomatic centerfire rifles, or copies or duplicates thereof with the capability of any such rifles, that were in production prior to or on April 4, 2013." In addition, like California, Connecticut has a long list of features, any of which render a firearm banned. ^[6] The District of Columbia's list is shorter and does not include statements that the ban includes similar makes and models to the ones listed. However, the law also bans firearms with specific design features.^[7]Maryland and Massachusetts are the other two states that ban by both list and features. Maryland bans weapons that possess any two features from its list.^[8] The Massachusetts law, which refers to the now-expired federal law (Pub. L. 103-322), also requires two features to be included.^[9]

New Jersey is the only state that includes a list of banned assault weapons but not generic features.^[10] Conversely, New York and Hawaii ban a list of only features, not specified models of firearms.^[11] However, unlike the other states, Hawaii bans only certain pistols, not rifles.

In addition to definitional differences, the laws are distinct in other ways—notably, their treatment of grandfathered weapons. For example, the District of Columbia does not allow grandfathering of assault weapons (Giffords Law Center to Prevent Gun Violence, undateda); however, all seven states with assault weapon bans do, but under different regimes. Six of the states require registration of grandfathered assault weapons; in New Jersey, registration allows grandfathered assault weapons to be used only for target shooting.^[12]

The same jurisdictions that have banned assault weapons have also banned high-capacity

magazines, as has Colorado. Hawaii, which bans only assault pistols, similarly bans only highcapacity magazines for pistols.^[13] The rest ban high-capacity magazines for all firearms,^[14] although there are differences in definition here too. California, Connecticut, Hawaii, Maryland, Massachusetts, New York, and the District of Columbia ban magazines with a capacity of more than ten rounds.^[15] Colorado and New Jersey allow up to 15 rounds.^[16]

Notes

1. Semiautomatic pistols and rifles, as defined in 27 C.F.R. 478.11, are firearms that use energy expended from the firing cartridge to extract the fired cartridge case and automatically chamber the next round of ammunition but require a pull of the trigger for each shot (Krouse and Richardson, 2015). In contrast, fully automatic weapons (i.e., machine guns) can produce continuous fire by a single trigger function without manual reloading, and their sale and possession has been federally regulated since the National Firearms Act of 1934 (currently codified as amended as 26 U.S.C. 5801 et seq.). *→*

2. California, Connecticut, Hawaii, Maryland, Massachusetts, New Jersey, New York, and the District of Columbia. See Calif. Penal Code § 30505; Conn. Gen. Stat. § 53-202b; Hawaii Rev. Stat. Ann. § 134-4; Md. Code Ann. § 4-303; Mass. Gen. Laws Ch. 140 § 131M; N.J. Stat. Ann. § 2C:39-1 and 39-5; N.Y. Penal Law § 265.02; D.C. Code Ann. § 7-2502.02. –²

3. Calif. Penal Code § 30510. –

- 4. Calif. Penal Code § 30515. 🔿
- 5. Calif. Penal Code § 30515. –
- 6. Conn. Gen. Stat. § 53-202a. –
- 7. D.C. Code Ann. § 7-2501.01. –
- 8. Md. Code Ann. § 4-301. –
- 9. Mass. Gen. Laws Ch. 140 § 121. 🛥
- 10. N.J. Stat. Ann. § 2C: 39-1. –

11. N.Y. Penal Law § 265.00; Hawaii Rev. Stat. Ann. § 134-1. 🔿

12. Calif. Penal Code § 30605; Conn. Gen. Stat. § 53-202c; Hawaii Rev. Stat. Ann. § 134-4; Md. Code Ann. § 4-303; Mass. Gen. Laws Ch. 140 §§ 121, 123, 131, 131M; N.J. Stat. Ann. § 2C: 58-12; N.Y. Penal Law § 265.20. –?

13. Hawaii Rev. Stat. Ann. § 134-8. 🔿

14. Calif. Penal Code §, 32310; Colo. Rev. Stat. § 18-12-302; Conn. Gen. Stat. § 53-202w; Md. Code Ann. § 4-305; Mass. Gen. Laws Ch. 140 § 131M; N.J. Stat. Ann. § 2C: 39-3; N.Y. Penal Law § 265.02; D.C. Code Ann. § 7-2506.01. –

15. Calif. Penal Code §§ 16350, 16740; Conn. Gen. Stat. § 53-202w; Hawaii Rev. Stat. Ann. § 134-8; Md. Code Ann. § 4-305; Mass. Gen. Laws Ch. 140 § 121; N.Y. Penal Law § 265.00; D.C. Code Ann. § 7-2506.01. –?

16. Colo. Rev. Stat. § 18-12-301; N.J. Stat. Ann. § 2C: 39-1. –

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NOTE

THE PUBLIC USE TEST: WOULD A BAN ON THE POSSESSION OF FIREARMS REQUIRE JUST COMPENSATION?

Ι

INTRODUCTION

The most recent comprehensive estimate places the number of firearms in the United States in the area of 120 million.¹ Assuming an admittedly low value of \$75.00² is placed on each weapon, the present firearm stock is worth approximately nine billion dollars. If Congress or a state legislature banned possession of firearms, Congress and the courts would have to determine whether the ban came within the fifth amendment's command that private property not be "taken for public use, without just compensation."³ This note attempts to answer that question. The high monetary stakes and the public's interest in gun legislation make this issue both important and timely.⁴

One commentator described the Supreme Court's approach to public taking law as "a welter of confusing and apparently incompatible results."⁵ The Court itself recently said that it was "quite simply . . . unable to develop any 'set formula' for determining when 'justice and fairness' require that economic injuries caused by public action be compensated by the government."⁶ The preliminary task of this note is to rationalize these "apparently incompatible results" into a unified taking theory. It is the authors' belief that the several tests which commentators have found to be useful in this area—the physical invasion test, the diminution in value test, the

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^{1.} J. WRIGHT & P. ROSSI, WEAPONS, CRIME, AND VIOLENCE IN AMERICA (EXECUTIVE SUMMARY), NATIONAL INSTITUTE OF JUSTICE 9 (1981).

^{2.} J. LEWIS, GUN DIGEST BOOK OF MODERN GUN VALUES (5th ed. 1985) (lists only a few guns at this value and virtually none at less).

^{3.} U.S. CONST. amend. V. The Supreme Court held that the fifth amendment was applied to the states via the fourteenth amendment in Chicago, B. & Q. Ry. v. Illinois ex rel Drainage Comm'rs, 200 U.S. 561 (1906). This note examines only how a state enactment would be evaluated under the Supreme Court's interpretation of the fifth amendment. How a gun ban would be evaluated under state law or a state constitution by a state court is beyond the scope of this note.

^{4.} Admittedly, before the fifth amendment question is reached, any proposed law would have to pass scrutiny under the second amendment right to bear arms. See infra text accompanying notes 8-9, 115, and 169. For the purposes of this note, however, it will be assumed that gun control legislation would pass second amendment judicial scrutiny.

^{5.} Sax, Takings and the Police Power, 74 YALE L.J. 36, 37 (1964).

^{6.} Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 124 (1978); see Ruckelshaus v. Monsanto Co., 104 S. Ct. 2862, 2874 (1984).

noxious use test, and the police power test⁷—can be unified in a coherent analysis. This analysis, which in general may be called the public use test, explains the major Supreme Court taking cases and is predictable and easy to apply.

The public use test can be summarized briefly. It applies a three-part analysis to any legislation challenged under the taking clause. All three parts of the test must be met before just compensation is required. The first part determines whether there has been an appropriation of property at all. Before the fifth amendment right to just compensation is triggered, private property must be appropriated. To answer this question, the Court has looked to whether the legislation has effected a physical invasion or outright appropriation of the property. When this has not been the case, the Court has looked to whether there has been a significant diminution in value or an interference with distinct, investment-backed expectations.

The second part of the test determines whether the government (be it federal, state, or municipal) has the constitutional power to enact the legislation.⁸ In the case of a federal law, the test is whether the enactment is within the federal government's enumerated powers or such implied powers as are necessary and proper to carry into effect the enumerated powers. In the case of a state or municipal law, the test is whether the enactment is within the ambit of the police power. If the act is not within the government's constitutional power, it is completely invalid.⁹

The third part of the test determines whether a valid appropriation of property requires compensation. Proceeding from the words of the amendment, which requires compensation only when private property is taken for "public use," the test distinguishes between general public welfare or evil-avoidance legislation and legislation in which the government intends for the public, or the government itself, to use the property.

This public use test illustrates the limited scope of the taking clause. At first glance, the public use limits on compensation seem unjust. Surely, when a regulation involves a widespread benefit, as does a zoning ordinance, or a

^{7.} See, e.g., Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law, 80 HARV. L. REV. 1165 (1967) (discussing "Physical Invasion," "Diminution in Value," and "Private Fault and Public Benefit"); Sax, supra note 5 (discussing "Invasion Theory," "Noxious Use," and "Diminution in Value").

^{8.} It is in this portion of the analysis that a ban on the possession of firearms would be tested against the second amendment, an inquiry beyond the scope of this note.

^{9.} If an action is found to be a "taking" and invalidated solely because of a failure to compensate, the government may have the option of either providing permanent compensation or rescinding its action. If the government chooses the latter course, it probably must nevertheless provide compensation for the "temporary taking" which has occurred. San Diego Gas & Elec. Co. v. City of San Diego, 450 U.S. 621, 658-59 (1981) (Brennan, J., dissenting).

If an action — either a police power regulation or an eminent domain taking — is struck down because it goes beyond a government's legitimate powers, however, it cannot be cured by compensation and must be invalidated. In that case, it would be logically inconsistent to say that a "temporary taking" had occurred during the period the invalid act was in effect. Rather, the property owner may have an action for damages under 42 U.S.C. § 1983, arguing that his property was taken without due process of law, thereby depriving him of his civil rights. See San Diego Gas & Elec. Co., 450 U.S. at 656 n.23 (Brennan, J., dissenting).

regulation of firearms, the benefitted public as a whole should pay for whatever individual property rights are destroyed or diminished by the regulation. If one were to frame a new constitution, this sense of justice might be the starting point for a clause requiring compensation for diminished property rights whenever the diminution was caused by public welfare legislation. Our analysis is governed not by some hypothetical constitution, however, but by the fifth amendment, which requires compensation only in a limited number of situations. Moreover, almost any regulation tends to diminish someone's property or his liberty to use it. The government literally cannot afford to pay for every reduction in property values that it may cause. To quote Justice Holmes, "Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law."¹⁰ For better or worse, the taking clause does not require compensation in all cases in which property interests are adversely affected. Rather, it draws the line where private property is taken "for public use."

This note discusses the three subsections of the tripartite analysis: (1) whether there is appropriation; (2) whether there is the power to appropriate; and (3) whether the appropriation is for the public use. Both the established tests and our public use test will then be applied to a federal ban on the possession of firearms.

Π

Appropriation

The beginning point for any analysis of a compensable "taking" is to examine whether property has been taken at all. Straightforward as the question seems, it has caused much controversy and confusion. This note divides the threshold inquiry into two tests. The first, the physical appropriation test, concerns instances in which it is clear that before the alleged taking the owner owned property but afterwards did not. The second, the diminution in value test, argues that government regulation is a taking when it so restricts the use of property that little of its value remains to the owner. Recently, this inquiry has been conducted by reference to an owner's "reasonable investment-backed expectations."¹¹

It bears emphasis that the inquiry into whether property has been appropriated remains only a threshold inquiry. Only when governmental action satisfies all three aspects of the public use test will a compensable taking result. Therefore, the cases discussed in this section may come down

^{10.} Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 413 (1922). In addition, see Justice Brandeis's famous dissent in the same case. *Id.* at 417 ("Every restriction upon the use of property imposed in the exercise of the police power deprives the owner of some right theretofore enjoyed, and is, in that sense an abridgment by the State of rights in property without making compensation.") (Brandeis, J., dissenting).

^{11.} See Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 124 (1978).

on either side of the compensation issue, depending on how they fare under the remainder of the analysis.

A. Physical Appropriation

The physical appropriation test looks for an appropriation in its most literal sense: that is, a transfer of possession or ownership of property away from the owner. Such an appropriation of property obviously occurs where the government takes ownership of the property in its entirety, taking a fee simple interest in the whole. Also included, however, are those cases in which government forces the owner to destroy or abandon the property and those in which government appropriates only part of the owner's "bundle of rights." Courts sometimes characterize the latter situation as "physical invasion" of the property, because typically when only some of an owner's property rights are divested, the property is "invaded" by the rights of others in the form of an easement.12

Instances of total appropriation of property by the government are by their very nature easily determined, occasioning little controversy as to whether divestiture has occurred. Traditional condemnation of realty for construction of highways and other public works, confiscation of needed supplies or fuel in time of war, and forfeiture of property held illegally as contraband would all fall into this category. Similarly, forced destruction of property is fairly clear-cut. Examples include the ordered destruction of oil facilities to prevent their use by enemy forces, as was the case in United States v. Caltex (Philippines), Inc., 13 and the destruction of unwholesome milk to prevent disease, as ordered in Adams v. Milwaukee.¹⁴ Disposal of property, such as handguns under the local ordinance in Quilici v. Village of Morton Grove, 15 or liquor in the various prohibition cases,¹⁶ would also come under this heading.

The "physical invasion" situation has been somewhat more difficult to determine. In one of the most recent Supreme Court cases on the subject, Kaiser Aetna v. United States, 17 the Court found that, although the government was not attempting to take a fee interest in the property in question, its proposal to open a private area to public access constituted a taking of part of the owner's valuable property right to exclude others.¹⁸ Kaiser Aetna, the lessee of a large Hawaiian estate that included both land and a large pond, developed the property into a residential and recreational subdivision called Hawaii Kai. As part of the development, Kaiser Aetna dredged the pond, constructed a marina, and created direct channels from the pond to a bay of the Pacific Ocean. The government claimed that since the pond had become a

17. 444 Ŭ.S. 164 (1979).

See, e.g., Kaiser Aetna v. United States, 444 U.S. 164, 180 (1979).
 344 U.S. 149 (1952).
 228 U.S. 572 (1913).
 532 F. Supp. 1169 (N.D. Ill. 1981), aff d, 695 F.2d 261 (7th Cir. 1982), cert. denied. 464 U.S. 863 (1983).

^{16.} See, e.g., Samuels v. McCurdy, 267 U.S. 188 (1925); Mugler v. Kansas, 123 U.S. 623 (1887).

^{18.} Id. at 180.

navigable waterway, it was subject to the "navigational servitude" of the federal government. As a result, Kaiser Aetna could not deny the general public access to the marina. In his opinion for the Court, Justice Rehnquist stated that:

This is not a case in which the Government is exercising its regulatory power in a manner that will cause an insubstantial devaluation of petitioners' private property; rather, the imposition of the navigational servitude in this context will result in an actual physical invasion of the privately owned marina. . . . And even if the Government physically invades only an easement in property, it must nonetheless pay just compensation.¹⁹

Because the government had taken an easement in the property, it had appropriated some of the owner's property rights, meeting the physical invasion test.

The airport-overflight cases also fall under the invasion analysis. In United States v. Causby,²⁰ a chicken farmer whose property was directly under the flight path of military planes at a government airport complained that his farm was rendered useless because the noise, glare, and vibration so disturbed his chickens that they were killed by flying into the walls from fright. In finding a compensable taking, the Court relied on the theory that the flights constituted a physical invasion of Causby's airspace and as such created an easement across his property taken by the government.²¹ The Court relied upon Causby sixteen years later in Griggs v. Allegheny County²² to award compensation to a homeowner whose house was directly under the flight path of planes using the Allegheny County airport. Consistent with the physical invasion-easement analysis, property owners who have been similarly damaged by noise and vibration but whose properties were not directly under flight paths, and therefore not literally physically invaded, have been universally unsuccessful in obtaining condemnation awards.²³

B. Diminution in Value

Although sometimes put forth as an entirely separate test for determining when there has been a compensable taking, the diminution in value test has been used mainly as a means of determining whether or not there has been a physical appropriation of property. The test is attributed to Justice Holmes's opinion in *Pennsylvania Coal Co. v. Mahon*,²⁴ oft-cited for the proposition that "[o]ne fact for consideration . . . is the extent of the diminution. When it reaches a certain magnitude, in most if not in all cases there must be an exercise of eminent domain and compensation to sustain the act."²⁵ Holmes continued, "The general rule at least is, that while property may be regulated

^{19.} Id.

^{20. 328} U.S. 256 (1946).

^{21.} Id. at 265-67.

^{22. 369} U.S. 84 (1962).

^{23.} See Avery v. United States, 330 F.2d 640 (Ct. Cl. 1964); Batten v. United States, 306 F.2d 580 (10th Cir. 1962), cert. denied, 371 U.S. 955 (1963).

^{24. 260} U.S. 393 (1922).

^{25.} Id. at 413.

to a certain extent, if regulation goes too far it will be recognized as a taking."²⁶ Although this language actually had little bearing on the Court's reasoning in *Pennsylvania Coal*,²⁷ and although the "diminution in value" test has never been determinative in a Supreme Court fifth amendment taking case,²⁸ the test has persisted in dicta throughout the line of Supreme Court eminent domain cases.

For example, in the 1962 case of Goldblatt v. Hempstead, 29 the Court discussed extensively the decrease in value of Goldblatt's property that would result from a zoning ordinance before dismissing it as inapplicable to the outcome of the case. Goldblatt involved a series of ordinances passed by the town of Hempstead which successively restricted the operation of Goldblatt's sand and gravel mine. The town brought suit to enjoin Goldblatt from mining, on the grounds that he was violating an ordinance which both prohibited mining below the water table and imposed an affirmative duty to refill the mine. Goldblatt's defense was based on the premise that the ordinance effectively prevented him from carrying on his business. The prohibition, therefore, so reduced the value of his property as to constitute a taking. The Court stated, however, that "the fact that it [the ordinance] deprives the property of its most beneficial use does not render it unconstitutional."30 The clear implication of this statement should have been that the diminution in value test would never be dispositive of whether a taking had occurred. Nevertheless, Justice Clark's opinion continued (citing Pennsylvania Coal Co. v. Mahon³¹ and United States v. Central Eureka Mining Co.,³² neither of which was ultimately decided by the test³³):

This is not to say, however, that government action in the form of regulation cannot be so onerous as to constitute a taking which constitutionally requires compensation. . . There is no set formula to determine where regulation ends and taking begins. Although a comparison of values before and after is relevant, it is by no means conclusive, see *Hadacheck v. Sebastian*, where a diminution in value from \$800,000 to \$60,000 was upheld. How far a regulation may go before it becomes a taking we need not now decide, for there is no evidence in the present record which even remotely suggests that prohibition of further mining will reduce the value of the lot in question.³⁴

28. E.g., Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104 (regulation forbidding construction of office tower under lease agreement generating at least \$3 million annually); Goldblatt v. Hempstead, 369 U.S. 590 (1962) (regulation prohibiting continued excavation of sand and gravel mine); Village of Euclid v. Ambler Realty Co., 272 U.S. 365 (1926) (zoning law resulting in 75% diminution in value of property); Hadacheck v. Sebastian, 239 U.S. 394 (1915) (property worth \$800,000 for brickmaking reduced to \$60,000 if restricted for residential use); see Sax, supra note 5, at 44.

30. Id. at 592.

- 31. 260 U.S. 393 (1922).
- 32. 357 U.S. 155 (1958).

33. Pennsylvania Coal Co. v. Mahon is discussed *infra*, text accompanying notes 76-81. In *Central Eureka Mining Co.*, the mine owner was prevented from operating his mine, clearly a substantial diminution in its value to him. Nevertheless, compensation was not awarded.

34. 369 U.S. at 594 (citations omitted).

^{26.} Id. at 415.

^{27.} See infra text accompanying notes 76-80.

^{29. 369} U.S. 590 (1962).

The Court apparently felt the need to pay lip service to the diminution in value test without actually relying on it.

The diminution in value test was once again considered by the Court in *Penn Central Transportation Co. v. City of New York*,³⁵ although it was phrased in terms of "distinct investment-backed expectations."³⁶ Justice Brennan's opinion in *Penn Central* provides an apt example of the confusion that arises when the Court continues to invoke a test yet does not rely on it. Early in the opinion, the Court stated: "Appellants concede that the decisions sustaining other land-use regulations, which, like the New York City law, are reasonably related to the promotion of the general welfare, uniformly reject the proposition that diminution in property value, standing alone, can establish a 'taking.'"³⁷ Although the Court thus initially rejected the diminution in value test, it nevertheless returned to the analysis later in its opinion:

We now must consider whether the interference with appellants' property is of such a magnitude that "there must be an exercise of eminent domain and compensation to sustain [it]" [citing *Pennsylvania Coal*]. That inquiry may be narrowed to the question of the severity of the impact of the law on appellants' parcel.³⁸

The Court ultimately concluded that the damage to Penn Central was not sufficiently great to warrant compensation because the law did not interfere with the current use of the terminal and because the company had the ability to transfer its air rights over the terminal for value.³⁹

Penn Central suggests that reciting the diminution in value/investmentbacked expectations analysis remains de rigueur. Similarly, Kaiser Aetna reiterated the test in its basic outline of taking analysis: "Rather, [this Court] has examined the 'taking' question by engaging in essentially ad hoc, factual inquiries that have identified several factors—such as the economic impact of the regulation, its interference with reasonable investment-backed expectations, and the character of the governmental action—that have particular significance."⁴⁰

If it is assumed, then, that the diminution in value test is alive and well, there are two alternative measures of appropriation: that is, either actual appropriation of the property or some portion thereof, or regulatory diminution of its value. In either form, a determination of government appropriation is the threshold inquiry in finding a compensable taking. However, contrary to Professor Michelman's assertion that "courts, while they sometimes do hold nontrespassory inquiries compensable, *never* deny compensation for a physical takeover,"⁴¹ even the physical appropriation test is not dispositive on the issue. Rather, this note shows that all three

^{35. 438} U.S. 104 (1978).

^{36.} Id. at 124 ("The economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations are, of course, relevant considerations.").

^{37.} Id. at 131.

^{38.} Id. at 136.

^{39.} Id. at 136-37.

^{40. 444} U.S. at 175.

^{41.} Michelman, supra note 7, at 1184.

requirements of the public use test must be met before compensable taking is found.

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VALIDITY OF GOVERNMENT AUTHORITY

The next step in the analysis of a compensable taking is to determine whether the act in question is a legitimate exercise of governmental power. States may exercise control over the property of their citizens through their sovereign powers of eminent domain,⁴² their power to tax, and their police powers.

Because the police power and the eminent domain power were traditionally considered to be distinct and mutually exclusive,⁴³ distinguishing which power a state government was exercising became important in determining the legitimacy of a taking and the need for compensation. What emerged was the "police power" test, which held that a given governmental action was not a compensable taking simply because it was an exercise of traditional state police power.⁴⁴ While the distinction between the police and eminent domain powers has become less important over time, the older case law is still cited in modern decisions, sometimes with confusing effect.

Whether characterized as an exercise of eminent domain, police power, or some other source of governmental authority, an appropriation of private property may be undertaken only if the benefit inures to the public as a whole. If the government attempts to appropriate property for an invalid public purpose or for an exclusively private purpose,⁴⁵ the attempt will be struck down as going beyond the government's legitimate sphere of activity, regardless of whether provision is made for compensation.

A. The Police Power

The classic definition of police power is that power of a state which is "exerted for the protection of the health, morals, and safety of the people."⁴⁶ These terms are used in their broadest possible compass: "Public safety, public health, morality, peace and quiet, law and order—these are some of the

^{42.} See P. Nichols, The Power of Eminent Domain §§ 3, 7, 8 (1909); J. Nowak, R. Rotunda & J. Young, Constitutional Law 480-82 (2d ed. 1983).

^{43.} See generally J. NOWAK, R. ROTUNDA & J. YOUNG, supra note 42, at 480; P. NICHOLS, supra note 42, §§ 17, 18; see also Michelman, supra note 7, at 1167-68.

^{44.} See, e.g., 16A C.J.S. Constitutional Law § 645 (1956) ("The guaranty of due process of law prohibits the confiscation of property or the destruction of property without compensation, except where the property is taken or destroyed in a valid exercise of the general police power.") (emphasis added); authorities cited supra note 43; see also Fesjian v. Jefferson, 399 A.2d 861, 866 (D.C. 1979); Lamm v. Volpe, 449 F.2d 1202, 1203 (10th Cir. 1971) (dicta).

^{45. &}quot;It is fundamental in American jurisprudence that private property cannot be taken by the Government, national or state, except for purposes which are of a public character, although such taking be accompanied by compensation to the owner." Madisonville Traction Co. v. Saint Bernard Mining Co., 196 U.S. 239, 251-52 (1905); see also Thompson v. Consolidated Gas Corp., 300 U.S. 55, 80 (1936); Nichols, The Meaning of Public Use in the Law of Eminent Domain, 20 B.U.L. Rev. 615, 615 (1940).

^{46.} Mugler v. Kansas, 123 U.S. 623, 668 (1887).

more conspicuous examples of the traditional application of the police power. . . . Yet, they merely illustrate the scope of the power and do not delimit it."47

In more concrete terms, the police power forms the basis for public welfare legislation, such as zoning laws and provisions for roads and schools; evil-avoidance legislation, such as prohibitions on noxious activities, unhealthy food, or dangerous products; and criminal laws prohibiting the use of property for illegal ends or the possession of unlawful weapons, drugs, or other items. It is clear that the police power suffices to justify government regulation, destruction, or appropriation of property. As the Supreme Court stated over fifty years ago in Miller v. Schoene, 48 "[w]here the public interest is involved preferment of that interest over the property interest of the individual, to the extent even of its destruction, is one of the distinguishing characteristics of every exercise of the police power which affects property."49

1. Police Power Test. Mugler v. Kansas⁵⁰ is generally regarded as the beginning of modern compensation law,⁵¹ and it is, as well, the first case to hold that an exercise of the police power is not a compensable taking. Mugler had built an otherwise lawful brewery in 1877, but in 1881 the state of Kansas passed a law stating that "[t]he manufacture and sale of intoxicating liquors shall be forever prohibited in this State, except for medical, scientific, and mechanical purposes."52 Mugler was indicted for both the sale of his beer and for the maintenance of a " 'common nuisance, to wit:' his brewery."53

The Court held that the prohibition on the use of his property as a brewery was not a taking because:

The exercise of the police power by the destruction of property which is itself a public nuisance, or the prohibition of its use in a particular way, whereby its value becomes depreciated, is very different from taking property for public use In the one case, a nuisance only is abated; in the other, unoffending property is taken away from an innocent owner.54

Mugler thus became the precursor of a long line of cases holding that a government action would not be a fifth amendment taking if it fell within the realm of the police power.

2. Criminal Forfeiture. Criminal forfeiture of property is rarely analyzed as an eminent domain question, because the government's power to enact and enforce criminal laws comes within the police power. These laws can result in government appropriations of property if that property is contraband-stolen property, property used in commission of a crime, or property which it is

^{47.} Berman v. Parker, 348 U.S. 26, 32 (1954); see Noble State Bank v. Haskell, 219 U.S. 104, 111 (1911) (police power includes right to create bank guaranty fund to insure depositors).

^{48. 276} U.S. 272 (1928).
49. Id. at 279-80.
50. 123 U.S. 623 (1887).
51. Sax, Takings, Private Property and Public Rights, 81 YALE L.J. 149, 149 n.3 (1971).
52. 123 U.S. at 624.
53. Id. at 625.

^{54.} Id. at 669.

illegal to possess. Such appropriation of illegally possessed property was challenged as an uncompensated taking in Fesjian v. Jefferson. 55 The District of Columbia handgun statute challenged in that case allowed only certain types of guns to be registered and, where registration was denied, required the guns to be surrendered, removed from the District, or otherwise eliminated. When a gun was voluntarily surrendered, no compensation was paid. In holding that the statute effected no compensable taking, the court stated that the fact "[t]hat the statute in question is an exercise of legislative police power and not eminent domain is beyond dispute."56 This distinction answered the taking question because, presumably, under the court's analysis, the two powers were mutually exclusive.

Criminal forfeiture can even extend to the property owner who is completely "innocent," in that he lawfully acquires property which subsequently becomes contraband per se through force of a statute outlawing possession and subjecting the property to forfeiture. Such was the case in Miller v. McLaughlin.⁵⁷ In that case, Nebraska had passed a statute prohibiting fishing with nets and making the possession of fishing nets unlawful, regardless of whether the nets were actually used. Miller's complaint was based on due process, rather than just compensation grounds; nevertheless, the Court's holding seems equally applicable to either point:

A State may regulate or prohibit fishing in its waters, and, for the proper enforcement of such statutes, may prohibit the possession within its borders of the special instruments of violation, regardless of the time of acquisition or the protestations of lawful intentions on the part of a particular possessor.58

Samuels v. McCurdy⁵⁹ is factually analogous. A Georgia statute made possession of alcoholic beverages illegal, thereby subjecting Samuels's liquor to seizure despite the fact that it had been lawfully purchased and brought into Georgia prior to the enactment of the statute. The reasoning behind the Court's decision was arguably flawed;⁶⁰ nevertheless, its holding-that the liquor could be taken without compensation because "[l]egislation making possession unlawful is . . . within the police power of the state as a reasonable

59. 267 U.S. 188 (1925).

60. Justice Taft's analysis was really an exercise in salami tactics: he reasoned that since under Mugler property can be successively regulated until its worth is negligible, "[w]hv should compensation be made now for the mere remnant of the original right if nothing was paid for the loss of the right to sell [the liquor], give it away or transport it?" 267 U.S. at 198.

^{55. 399} A.2d 861 (D.C. 1979).

^{56.} Id. at 866.

^{57. 281} U.S. 261 (1930).
58. Id. at 264 (citations omitted). See also the opinion of the Nebraska Supreme Court in the case below: "A valid exercise of police power may affect or destroy values, where the use of property for its original purpose has become unlawful by a change in public policy as disclosed by a new statute. Prohibition thus affected property in breweries, but the legislation on that subject was nevertheless sustained. Mugler v. Kansas, 123 U.S. 623." Miller v. McLaughlin, 118 Neb. 174, 178, 224 N.W. 18, 21 (1929).

mode of reducing the evils of drunkenness"⁶¹—puts the case squarely in line with the other forfeiture cases.62

3. Noxious Use. Police power also includes the state's power to abate a nuisance, that is, to forbid the "noxious use" of property. Therefore, some cases have held that if a state confiscates or orders the destruction of a noxious use, it is necessarily using its police power and need not compensate.63 For example, in Lawton v. Steel,64 the Supreme Court upheld a New York statute that stated that any fishing net maintained in the water in violation of the fishing laws "is hereby declared to be, and is, a public nuisance, and may be abated and summarily destroyed by any person."65 After asserting that the preservation of game and fish was within the proper domain of the police power,66 the Court found the summary abatement, without the fifth amendment protections of due process and just compensation, to be legitimate.⁶⁷ In Adams v. Milwaukee,⁶⁸ the destruction of potentially unwholesome milk was found to be the abatement of a public nuisance, and the owners of the milk were not compensated. Similarly, in North American Cold Storage Co. v. Chicago, 69 the Court held that unwholesome food "should be summarily seized and destroyed to prevent the danger which would come from eating it."70

Many of the major fifth amendment cases have been categorized as nuisance cases: Miller v. Schoene⁷¹ involved the destruction of trees which were infected with cedar rust; Mugler v. Kansas⁷² involved the closure of a brewery; Hadacheck v. Sebastian⁷³ involved the closure of a brickyard; and Goldblatt v. Hempstead⁷⁴ involved closure of a gravel pit. The Court in Penn Central Transportation Co. v. New York pointed out, however, that many of these cases involved nothing noxious:

We observe that the uses in issue in Hadacheck, Miller, and Goldblatt were perfectly lawful in themselves. . . . These cases are better understood as resting not on any supposed "noxious" quality of the prohibited uses but rather on the ground that the restrictions were reasonably related to the implementation of a policy-not unlike historic preservation—expected to produce a widespread public benefit and applicable to all similarly situated property.⁷⁵

- 67. Id. at 140.
- 68. 228 U.S. 572, 584 (1913).
- 69. 211 U.S. 306 (1908).

- 71. 276 U.S. 272 (1928).
- 72. 123 U.S. 623 (1887).
- 73. 239 U.S. 394 (1915).
- 74. 369 U.S. 590 (1962).
- 75. 438 U.S. at 133 n.30.

^{61.} Id.

^{62.} See, e.g., Calero-Toledo v. Pearson Yacht Leasing Co., 416 U.S. 663 (1974) (forfeiture of yacht transporting marihauna upheld).

^{63.} See Michelman, supra note 7, at 1196-1201; Sax, supra note 5, at 48-50.

^{64. 152} U.S. 133 (1894).
65. *Id.* at 135.

^{66.} Id. at 138.

^{70.} Id. at 315.

In *Hadacheck* and *Goldblatt*, for example, otherwise lawful uses of property were prohibited so that the land could be used for residential purposes. In both cases, the land was distant from residential property when the "noxious use" was begun. Clearly, the industrial uses of the property were originally lawful. The state merely made a choice between the value of the mine or the brickyard and the value of residential property and decided that residential property was more beneficial to the public. Nevertheless, regardless of whether the original use was prohibited because it was less beneficial to the public, it was within the state's police power to regulate.

B. Eminent Domain and the Public Use Requirement

While the scope of a government's police power has thus been viewed broadly to legitimize any act which accrues to the public benefit, a state's power of eminent domain was at first construed more narrowly. It only allowed property to be taken "for public use," which was defined more narrowly than the broader "public benefit."⁷⁶ Pennsylvania Coal Co. v. Mahon⁷⁷ provides an excellent example of the public use/public benefit distinction. In that case, Pennsylvania enacted a statute that prohibited mining of anthracite coal if it would cause subsidence of the surface at any location on which there were houses, factories, stores, public buildings, or streets. The state justified the act on standard police power grounds: that coal operations under the land carried out without preservation of the support of the surface constituted a "grave menace to the life, health and safety of the public."⁷⁸ The coal company, which had duly paid for not only the mineral rights but also the support rights which would have protected the surface, stood to lose the right

^{76.} See, e.g., J. GELIN & D. MILLER, THE FEDERAL LAW OF EMINENT DOMAIN 12-15 (1982); 1 P. NICHOLS, THE LAW OF EMINENT DOMAIN 128-36 (2d ed. 1917), and cases cited *id.* at 129 n.17; Nichols, *supra* note 45, at 617-33.

The distinctions made between "public use" and "public benefit" in some early state cases striking down a taking as beyond the eminent domain power should not be confused with the distinction which the test set out in this note makes between public use and public benefit. The earlier cases made the distinction as part of an inquiry into the legitimacy of the government's action (the inquiry in the second part of this note's public use test); in part three of the test proposed here, the distinction is made in determining which legitimate government acts require payment of compensation and which do not. Furthermore, the parameters of a defined "public use" have widened considerably over the years, wholly changing the distinction to be made between public use and public benefit. The law has generally progressed to a position which regards a government use of property for the public benefit-even a government sale of property to private parties for the public benefit-as a sufficient public use to legitimize a government taking. After accepting that government use can be equated with public use, so long as it is within the public benefit limitation, this note suggests a new distinction between that "use" and a government regulation which results in some "benefit" to the public without any literal use of the property by either the government or the public at large. For example, under the old use/benefit distinction, a state taking of land for urban renewal might be challenged because the public did not use the property in the same sense that it could use a highway; under the new use/benefit distinction, the government must offer compensation if it takes land for urban renewal, but is not required to compensate if it merely passes a regulation, such as a zoning ordinance, historic preservation law, or height restriction, from which the public passively benefits.

^{77. 260} U.S. 393 (1922).

^{78.} Id. at 405 (argument for Pennsylvania).

to mine substantial coal reserves and brought suit to enjoin enforcement of the statute on the ground that it was unconstitutional.

The Court struck down the statute on two distinctly different grounds. First, as applied to private property, the appropriation was not for a public purpose and could not be sustained under the government's police power. Second, as applied to public property, the taking for public use was constitutional but had to be accompanied by compensation. Justice Holmes arrived at the former conclusion by analyzing the statute as it applied to surface rights owned by a private individual who had his residence on the property. Holmes noted that because the individual homeowner did not own the support rights, a "source of damage to such a house is not a public nuisance even if similar damage is inflicted on others in different places. The damage is not common or public."79 Therefore, the Court ruled that the statute was not a legitimate exercise of governmental power: "[T]he statute does not disclose a public interest sufficient to warrant so extensive a destruction of the defendant's constitutionally protected rights [i.e., the coal company's right of ownership in the mineral and support rights]."80 In contrast, when the Court in dicta addressed the application of the statute to surface rights that were owned by the public, it found the government regulation to be legitimate, but required that it be done in the context of eminent domain proceedings.81

Justice Holmes's analysis could have proceeded equally from a recognition that the statute in effect required a transfer of support rights—a legally recognized property interest—away from the owner, regardless of the value of those rights or the extent to which the statute decreased their value. Requiring such a transfer from one private party to another was beyond the power of the government. Requiring the transfer from a private owner to the government for the support of public roads and buildings was clearly a compensable taking.

C. Rejection of the Police Power Test in Favor of A Public Use Test

While the police power test holds that the police and eminent domain powers are mutually exclusive, an alternate branch of cases holds that the police power *includes* fifth amendment takings. For example, in *Chicago*, *Burlington & Quincy Railroad Co. v. Illinois ex rel. Drainage Commissioners*,⁸² the Court rejected the police power test, holding that the real distinction is between those regulations which take property for public use and those regulations which merely take property for the public good:

Private property cannot be taken without compensation for public use under a police regulation relating strictly to the public health, the public morals or the public

^{79.} Id. at 413.

^{80.} Id. at 414.

^{81.} Id. at 415.

^{82. 200} U.S. 561 (1906).

safety, any more than under a police regulation having no relation to such matters, but only to the general welfare.

. . . The constitutional requirement of due process of law, which embraces compensation for private property taken for public use, applies in every case of the exertion of government power. If in the execution of any power, no matter what it is, the Government, Federal or state, finds it necessary to take private property for public use, it must obey the constitutional injunction to make or secure just compensation to the owner.⁸³

More recently, the district court in *Quilici v. Village of Morton Grove*⁸⁴ stated this view similarly:

It is well established that a Fifth Amendment taking can occur through the exercise of the police power regulating property rights. In order for a regulatory taking to require compensation, however, the exercise of the police power must result in the destruction of the use and enjoyment of a legitimate private property right.⁸⁵

In 1954, the Supreme Court decided Berman v. Parker, 86 which largely eliminated the need for any distinction between a state's police power and its eminent domain power. In that case, property owners challenged the District of Columbia Redevelopment Act of 1945 as effecting a taking of private property that was not for public use. The act set up a comprehensive urban renewal plan for Washington, D.C., under which the District of Columbia Redevelopment Land Agency was to acquire and assemble real property for redevelopment, sometimes by private parties. In deciding the case, the Court first noted that although the law was an act of Congress, Congress was acting in the capacity of a state government for the District of Columbia,87 and thus could exercise the police power normally reserved to the states.⁸⁸ The Court found that in enacting the urban renewal plan, Congress was attempting to improve the general public welfare of the District of Columbia; such public welfare legislation was within the scope of the police power. The fact that the act provided for condemnation and compensation did not limit its scope under some narrower eminent domain power. Rather, the Court ruled, "Once the object is within the authority of Congress [acting as a state government], the right to realize it through the exercise of eminent domain is clear. For the power of eminent domain is merely the means to the end."89

The effect of the *Berman v. Parker* holding was to expand the parameters of the eminent domain power to the outer limits of a state's police power to pass social legislation. Judicial review of this broad power would be extremely limited, since "[s]ubject to specific constitutional limitations, when the legislature has spoken, the public interest has been declared in terms well-nigh conclusive."⁹⁰

90. Id. at 32.

^{83.} Id. at 592-93.

^{84. 532} F. Supp. 1169 (N.D. Ill. 1981), aff d, 695 F.2d 261 (7th Cir. 1982), cert. denied. 464 U.S. 863 (1983).

^{85.} Id. at 1183-84.

^{86. 348} U.S. 26 (1954).

^{87.} Id. at 31.

^{88.} Id. at 32.

^{89.} Id. at 33.

Such an interpretation was explicitly affirmed in 1984 in *Hawaii Housing* Authority v. Midkiff,⁹¹ in which Justice O'Connor flatly stated, "The 'public use' requirement is . . . coterminous with the scope of a sovereign's police powers."⁹² She went on to note that "where the exercise of the eminent domain power is rationally related to a conceivable public purpose, the Court has never held a compensated taking to be proscribed by the Public Use Clause."⁹³

Midkiff illustrates how far the Court has been willing to go to find a public use justifying a taking. The act under challenge in that case was the Hawaii Land Reform Act of 1967, passed to alter the oligopolistic pattern of land ownership in Hawaii. The first Polynesian settlers in Hawaii had established a feudal system of land ownership in which certain subchiefs held large tracts of land at the will of the islands' high chief. In the mid-1960's, the Hawaii legislature found that the pattern of land ownership which had evolved from the original feudal system remained one of concentration of land in the hands of a few owners. Therefore, the legislature set up a procedure whereby tenants wishing to purchase the property on which they lived could ask the Hawaii Housing Authority (HHA) to condemn the property, pay market price to the owners, and sell it to them. The HHA was authorized to lend such purchasers up to ninety percent of the purchase price.94 When the lands of certain landowners were threatened by condemnation under the scheme, the owners filed suit to enjoin the act's enforcement, arguing in part that the taking was not one "for public use." Their argument, as articulated by the Ninth Circuit Court of Appeals, was that the act was "a naked attempt on the part of the state of Hawaii to take the private property of A and transfer it to B solely for B's private use and benefit."⁹⁵ The Supreme Court disagreed with that characterization. While noting that "one person's property may not be taken for the benefit of another private person without a justifying public purpose, even though compensation be paid,"96 the Court found sufficient public use to uphold the Land Reform Act.⁹⁷ Because of its holding that a state's police power and its eminent domain power are identical in scope, the Court's decision inevitably followed from its conclusion that "[r]egulating oligopoly and the evils associated with it is a classic exercise of a State's police powers."98

94. Hawaii Housing Auth. v. Midkiff, 104 S. Ct. at 2325-26.

95. Midkiff v. Tom, 702 F.2d 788, 798 (9th Cir. 1983), revid sub nom. Hawaii Housing Auth. v. Midkiff, 104 S. Ct. 2321 (1984).

96. Hawaii Housing Auth. v. Midkiff, 104 S. Ct. at 2329.

97. Id. at 2330.

.98. Id.

^{91. 104} S. Ct. 2321 (1984).

^{92.} Id. at 2329.

^{93.} Id. at 2329-30. Although Justice O'Connor attempted to distinguish Thompson v. Consolidated Gas Utils. Corp., 300 U.S. 55 (1937), as invalidating an *uncompensated* taking, 104 S. Ct. at 2330, compensation would not have changed the Court's holding in that case. See Thompson. 300 U.S. at 80. Likewise, under Justice Holmes's analysis of Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922), a compensation provision would not have saved the Pennsylvania statute from the Court's ruling of invalidity as applied to private parties. See supra text accompanying notes 76-81.

While Pennsylvania Coal Co. v. Mahon⁹⁹ is never mentioned in the opinion, it seems clear that Mahon's narrow view of what constitutes a public purpose would be rejected under the Midkiff analysis. Under modern doctrine, the Court would surely find the public interest in safety, furthered by a transfer of support rights from the mining company to the private landowners living above the mine, sufficient to uphold the taking if, of course, compensation were provided.¹⁰⁰

D. Federal Powers

Analyzing the legitimacy of government appropriations or regulations of property poses special problems in the case of the federal government, because it is a government of limited powers.¹⁰¹ First, nothing in the Constitution explicitly confers a power of "eminent domain" on the federal government; the words are never used. Rather, the only relevant language is that of the fifth amendment, requiring that property not be "taken" for public use without just compensation. Although the power of eminent domain arguably could be inferred from this language, such an inference is inconsistent with the general notion that all powers not expressly granted to the federal government are reserved to the states. Furthermore, the Bill of Rights is generally regarded as limiting, rather than expanding, the government's powers. Therefore, the better interpretation is that the fifth amendment imposes limitations on government "takings" that are necessary and proper means of carrying out some enumerated power.¹⁰² For example, in Kaiser Aetna v. United States, 103 the Court analyzed the government's taking as an exercise of commerce power: "In light of its expansive authority under the Commerce Clause, there is no question but that Congress could assure the public a free right of access to the Hawaii Kai Marina if it so chose."104 This justification under the commerce power did not provide the answer to the Court's inquiry into the compensation issue, however.¹⁰⁵ In fact, it is clear that the thesis of the police power test-that if a government act can be subsumed under some other general legislative power, it is not an eminent domain "taking"-cannot be valid at the federal level. Compensable takings will always be the means to an end justified by some other power.

Nor can the scope of the federal taking power be analyzed under the police power limitations espoused in *Berman v. Parker*¹⁰⁶ and *Hawaii Housing Authority*

^{99. 260} U.S. 393 (1922). For a discussion of *Mahon*, see *supra* text accompanying notes 76-81. 100. *See supra* text accompanying notes 76-81.

^{101.} Nichols, supra note 45, at 634-39. See generally J. NOWAK, R. ROTUNDA & J. YOUNG, supra note 42, at 121.

^{102.} J. NOWAK, R. ROTUNDA & J. YOUNG, *supra* note 42, at 480; 2A P. NICHOLS, NICHOLS ON EMINENT DOMAIN § 7.14(2) (J. Sackman rev. 3d ed. 1983); P. NICHOLS, *supra* note 42, § 23; *see, e.g.*, United States v. Gettysburg Elec. Ry., 160 U.S. 668, 681 (1896).

^{103. 444} U.S. 164 (1979).

^{104.} Id. at 174.

^{105.} Id.

^{106. 348} U.S. 26 (1954); see supra text accompanying notes 86-90.

v. Midkiff.¹⁰⁷ The simple reason is that there is no general federal police power.¹⁰⁸ If Congress has jurisdiction to legislate pursuant to one of its enumerated powers, however, it may enact laws that resemble police power regulations.¹⁰⁹ "It is no objection to the exercise of power of Congress that it is attended by the same incidents which attend the exercise of the police power of a State."110 The most common jurisdictional hook is the commerce power,¹¹¹ but the taxing power is also often used.¹¹²

Therefore, any limitation on federal taking power must come either from limitations on the enumerated powers or from some remaining vitality of the "public use" requirement of the fifth amendment. For example, in the context of gun control legislation, Congress would have to first justify legislation under some enumerated power, most likely the commerce power. Given the expansive interpretation that has been accorded the commerce power, such police power type legislation would undoubtedly withstand judicial scrutiny. The leading case justifying federal regulation of health, safety, and morals under Congress' power to regulate interstate commerce is Champion v. Ames (the Lottery Case).¹¹³ In that case, the Court supposed that Congress enacted federal legislation prohibiting the sale of lottery tickets through interstate commerce because the tickets were nuisances injurious to public morality.¹¹⁴ Despite the apparent attempt by Congress to exercise "police power," the Court upheld the legislation as supported by the commerce clause.

The second amendment might also circumscribe federal gun legislation efforts.¹¹⁵ If it were found that a ban on private possession of firearms violated the second amendment, such a government act would of course be invalidated, regardless of whether compensation was provided.

Finally, the "public use" requirement of the fifth amendment could still retain some meaning independent of Congress' power to achieve the goal effected by a taking. For example, the public use limitation on federal takings

That the United States lacks the police power, and that this was reserved to the States by the Tenth Amendment, is true. But it is none the less true that when the United States exerts any of the powers conferred upon it by the Constitution, no valid objection can be based upon the fact that such exercise may . . . tend to accomplish a similar purpose.

^{107. 104} S. Ct. 2321 (1984); see supra text accompanying notes 91-100.

^{108.} J. NOWAK, R. ROTUNDA & J. YOUNG, supra note 42, at 480. Therefore, Congress must rely on an enumerated power, such as the commerce power, to establish jurisdiction for federal criminal laws. See id. at 168-69.

^{109.} See Hodel v. Virginia Surface Mining & Reclamation Ass'n, 452 U.S. 264, 291-92 (1981); Brooks v. United States, 267 U.S. 432, 436-39 (1925); Hamilton v. Kentucky Distilleries & Warehouse Co., 251 U.S. 146, 156 (1919). With regard to the power to regulate liquor the Hamilton Court held:

²⁵¹ U.S. at 156. See also Daut v. United States, 405 F.2d 312, 316 (9th Cir. 1968), cert. denied, 402 U.S.

^{945 (1971);} Speert v. Morgenthau, 116 F.2d 301, 305 (D.C. Cir. 1940); Sax, supra note 5, at 36 n.6.

^{110.} FPC v. Natural Gas Pipeline Co., 315 U.S. 575, 582 (1942).

^{110.} FPC V. Natural Gas Fipeline Co., 515 U.S. 575, 582 (1942).
111. See, e.g., Controlled Substances Act of 1970, 21 U.S.C. § 801(3) (1982).
112. See, e.g., Internal Revenue Code of 1954, 26 U.S.C. §§ 5801-5872 (1982) (taxes on firearms).
113. 188 U.S. 321 (1902).
114. Id. at 355-56.
115. See generally United States v. Miller, 307 U.S. 174 (1939) (discussing but rejecting second

amendment challenge to firearm regulation).

was discussed in Monsanto Co. v. EPA.¹¹⁶ In that case, Monsanto challenged amendments to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) which required it to disclose certain trade secrets in applications submitted to the Environmental Protection Agency (EPA). The district court found that these requirements would disclose Monsanto's data to its competitors, so that "[i]n effect, the 1978 amendments to FIFRA g[a]ve Monsanto's competitors a free ride at Monsanto's expense."117 Monsanto argued that the amendments effected a taking of its property (trade secrets) for a private, rather than public, use and were beyond the power of Congress.¹¹⁸ The Supreme Court found that there was in fact a taking, but that the regulation sufficiently benefitted the public interest in competition to come within the public use requirement.¹¹⁹ Astonishingly enough, the Court's rationale was that "[s]uch a procompetitive purpose is well within the police power of the Congress."120 Despite the arguable inaccuracy of this statement, it does seem clear that a federal taking would not be limited any more than a state taking by the public use requirement. Rather, such an act will be upheld "[s]o long as the taking has a conceivable public character."121

IV

PUBLIC USE

The first two parts of this taking analysis have discussed what kinds of regulations are valid appropriations of private property. As was shown in the last section, any appropriation of property by government must benefit the public to be valid. For compensation to be required, validly appropriated property not only must benefit the public, but also must actually be used by the public or the government.¹²² The present section outlines what constitutes a public use.

The public use test is derived from the language of the fifth amendment: "Nor shall private property be taken for public use, without just compensation."123 The essential distinction which this test makes is between taking property for public use, which is a compensable act, and taking property for any other purpose, which is not.

Compensable public use regulations are inspired by the same desire for public welfare that characterizes other valid appropriations. Certainly, an appropriation of property to build a highway or a town hall is intended to benefit the public. It is the nature of the use, however, and not the resulting benefit to the public, which triggers the payment of compensation. In both of

^{116. 564} F. Supp. 552, 566-67 (E.D. Mo. 1983), vacated sub nom. Ruckelshaus v. Monsanto Co., 104 S. Ct. 2862 (1984).

^{117. 564} F. Supp. at 566.
118. See Ruckelshaus v. Monsanto Co., 104 S. Ct. at 2871.
119. Id. at 2879-80.
120. Id. at 2880.
121. Id. at 2879.
122. See supra note 76.
123. U.S. CONST. amend. V (emphasis added).

these situations, the public has used the property in the plain meaning of the word "use." In the case of the highway the public will drive over the appropriated land. In the case of the town hall the government (and derivatively the public) will occupy the property.

In contrast, a public "use" does not exist where the public passively benefits from the appropriation. There was no use, for example, of the cedar trees which were destroyed in Miller v. Schoene.¹²⁴ Indeed, the felled trees were explicitly left to Miller, to be used by him as he saw fit.¹²⁵ Similarly, if a statute banned the possession of firearms, but created an exception for guns which were rendered permanently inoperative,¹²⁶ the public would not use the inoperative weapons. In these situations, the public does not use validly appropriated property; thus the fifth amendment does not require compensation.

The clearest example of the public use principle can be seen in the imminent disaster cases in which the government used its emergency power. In the most famous of these cases, United States v. Caltex (Philippines) Inc., 127 the government destroyed oil reserves and the facilities in which they were stored because the facilities were under imminent threat of being captured by the Japanese. Prior to the destruction, the Army requisitioned a major share of the oil reserves.¹²⁸ The government paid for the petroleum but refused to pay for the destroyed facilities.¹²⁹ The Court upheld the refusal under the theory that the destruction of private property in war must be "borne by the sufferers alone."130

Although the Court did not rely on a public use rationale, it seems clear that the test can easily explain the *Caltex* result. The oil reserves that the Army requisitioned were taken for government use and thus would be compensable losses under the public use test. The oil facility was destroyed in an act of evil-avoidance and as such resulted in no public or government use. As a result, that destruction and all other "injury of private property in battle"¹³¹ were noncompensable losses.

Although the Court has never explicitly adopted the public use test, it used a similar analysis to bolster its judgment that the landmark preservation law in Penn Central Transportation Co. v. City of New York¹³² did not effect a compensable taking. Penn Central involved a New York City ordinance which prevented certain kinds of structural alterations to buildings which were determined to have historic and architectural value. The Penn Central Transportation Company wished to build an office tower over Grand Central

^{124. 276} U.S. 272, 277 (1928).

^{125.} Id.

^{126.} See, for example, the ordinance at issue in Quilici v. Village of Morton Grove, 532 F. Supp. 1169, 1171 (N.D. Ill. 1981), aff'd, 695 F.2d 261 (7th Cir. 1982), cert. denied, 464 U.S. 863 (1983).

^{127. 344} U.S. 149 (1952).
128. Id. at 150.
129. Id. at 151.
130. Id. at 153.

^{131.} *Id.* 132. 438 U.S. 104 (1978).

Station but was prevented from doing so by the ordinance. It therefore sued New York City for the loss in value to its property that resulted from the restriction.¹³³ Among a loosely structured series of holdings which will be discussed more fully below, the Court found that the restriction did not result in government or public use:

[T]he Landmarks Law neither exploits appellants' parcel for city purposes nor facilitates nor arises from any entrepreneurial operation of the city. . . The Landmarks Law's effect is simply to prohibit appellants or anyone else from occupying portions of the airspace above the Terminal, while permitting appellants to use the remainder of the parcel in a gainful fashion. This is no more an appropriation of property by government for its own use than is a zoning law¹³⁴

In Penn Central the Court thus distinguished, as does the test proposed in this note, between mere passive *benefit* to the public and active use by the public or government. Only the latter requires compensation.

The public use portion of the test proposed here bears some similarity to the test which Professor Sax has set forth. Sax distinguishes between regulations that enhance the government's "enterprise capacity" and regulations that are enacted pursuant to the government's "arbitral capacity."135 He defines enterprise capacity as "the economic function of providing for and maintaining the material plant, whether that be the state capitol or a [state-run] retail liquor store."¹³⁶ In contrast, the government acts in its arbitral capacity when it regulates to avoid evil or to promote the public welfare by reconciling differences among private interests in the community. It is acting in this capacity when "it says, as between neighbors, that one fellow must cease keeping pigs in his backyard or must cease making bricks at a certain location."¹³⁷ The rule that Sax proposes is that when government appropriates property in its enterprise capacity, compensation is required.¹³⁸ "But," Sax writes, "losses, however severe, incurred as a consequence of government acting merely in its arbitral capacity are to be viewed as a non-compensable exercise of the police power."139

The differences between the Sax test and the test proposed in this note are more cosmetic than substantive. Whereas Sax wishes to incorporate new vocabulary into a field already overflowing with terms of art (noxious use, diminution in value, etc.), this note's public use terminology returns to the words used in the amendment itself. Further, whereas Sax dismisses the earlier tests as generally unhelpful,¹⁴⁰ the public use test incorporates them in a systematic way and thus comes closer to established doctrine.141

- 138. Id. at 63.
- 139. Id.
- 140. Id. at 37.

^{133.} Id. at 116-19.
134. Id. at 135 (emphasis added).
135. Sax, supra note 5, at 62-63.
136. Id. at 62.
137. Id. at 62-63.

^{141.} These differences will result in different outcomes in some situations. Because the Sax test does not require that there be an initial finding of appropriation (the first step of the public use test), it would compensate the landowners in the overflight cases where property was not directly below

The public use test also has the advantage of explaining why the more traditional tests-physical invasion, diminution in value, noxious use, and police power-work or do not work in a given case. The physical appropriation test seems to work well because government does in fact often use the property which it has appropriated. On the other hand, the numerous exceptions to the physical appropriation rule can only be explained by testing them against the remaining two inquiries of the public use test. For example, the owners of the fishing nets in Miller v. McLaughlin¹⁴² and the owner of the liquor in Samuels v. McCurdy¹⁴³ both suffered confiscation of their property by the government without payment of compensation. The governmental acts in both cases were justified as valid police power, evil-avoidance legislation. The government's confiscation, however, was not undertaken with the purpose of acquiring property with the intent to use it. It is not clear how the government disposed of the appropriated property-perhaps the nets and liquor were destroyed—but in neither case was the property reemployed by the public.

The public use requirement similarly explains the disparity in the airport overflight cases. In United States v. Causby¹⁴⁴ and Griggs v. Allegheny County,¹⁴⁵ the property owners' airspace was actually occupied, or used, by the airplanes.¹⁴⁶ That the degree of damage to property owners is not particularly determinative of a "taking" is evidenced by the cases holding that neighboring property owners, who may have been identically damaged, are not entitled to compensation.¹⁴⁷ One may flinch at the seeming injustice of

the flight paths. Sax, *supra* note 5, at 67-69. These owners were damaged by vibrations and noise but the government did not actually take an interest in their airspace. Although justice would at first seem to require compensation, the taking clause does not require it because there was no appropriation.

This note's tripartite analysis also explains another line of cases, the outcome of which Sax admits does not fit within his scheme. These are cases in which the government required the railroads to build grade crossings where the railroad right-of-way crossed either a public highway or watercourse. See id. at 70; see, e.g., Atchison, T. & S. F. Ry. v. Public Util. Comm'n, 346 U.S. 346 (1953). The courts have consistently held that the railroads could be required to bear the entire burden without any government compensation. Sax, supra note 5, at 70. Under the Sax test, compensation should be required, since the government is engaged in its enterprise capacity of improving the public highways. Id.

What Sax fails to note is that railroad rights-of-way are specialized interests in land that are not accorded conventional treatment. For example, the Supreme Court upheld a statute requiring a railroad to bear all the costs of destroying old bridges and constructing new ones over a watercourse in Chicago, B. & Q. Ry. v. Illinois ex rel. Drainage Comm'rs, 200 U.S. 561 (1906). The Court characterized the watercourse as a natural easement. *Id.* at 587. It then reiterated with approval the Illinois Supreme Court's finding that at common law a railroad which crossed a watercourse or highway had to build and maintain the railroad so as to accommodate the easement "for all future time." *Id.* If the easement required maintenance to accommodate all future use, then nothing was appropriated when the government required the bridge to be rebuilt. The railroad crossing cases, therefore, come to the correct result under the tripartite public use test.

^{142. 281} U.S. 261 (1930).

^{143. 267} U.S. 188 (1925).

^{144. 328} U.S. 256 (1946).

^{145. 369} U.S. 84 (1962).

^{146.} See supra text accompanying notes 20-23.

^{147.} See Avery v. United States, 330 F.2d 640 (Ct. Cl. 1964); Batten v. United States, 306 F.2d 580 (10th Cir. 1962), cert. denied, 371 U.S. 955 (1963).

such distinctions, but it is clear that the fifth amendment draws the line between properties actually used and those "merely" damaged.

The public use test also helps explain why the diminution in value argument has been so universally unsatisfactory. Simply put, it would be a rare instance where it could be shown that the government used property which it had not in fact taken title to or possession of, but rather had merely regulated in a way that diminished its value to the owner.

The diminution in value argument has frequently been rebutted by the police power and noxious use tests. In these instances, the Court will uphold a regulation that severely diminishes property values on the grounds that the regulation is a valid exercise of police power. While no doubt true, the argument is singularly unhelpful as a test. In *Mugler v. Kansas*, ¹⁴⁸ for example, the closing of Mugler's brewery surely decreased the value of his property, since presumably the brewery could not have been put to alternative uses without substantial investment, if indeed it could be put to alternative uses at all. The closing of the brewery was just as surely valid as a police power means to abate a nuisance. The compensation issue, however, should have been determined not by whether the public thereby benefitted from the brewery closing, but by whether the public in fact actually used the property.

In those evil-avoidance cases in which the property is actually destroyed, such as the spoiled milk case, *Adams v. Milwaukee*,¹⁴⁹ clearly the first test of appropriation is met. The property owner owned the milk before the government action; afterward he did not. The second question, the power of the government to act, is similarly met by the Court's finding that the destruction of the milk was a valid means for the government to protect the public. However, the third inquiry, requiring public use, is not satisfied since the public obviously could not make use of the milk which no longer existed. In contrast, if the government had tried to culture antibodies in the spoiled milk, compensation would clearly have been required.

Penn Central Transportation Co. v. City of New York¹⁵⁰ serves as a useful illustration of how the public use test can be applied more rationally than the current taking tests. Justice Brennan's majority opinion in Penn Central actually encompassed all three of the test's inquiries, although not in the order or relationship suggested in this note. The opinion clearly examined the legitimacy of the New York City Landmarks Law, which Penn Central attacked as arbitrary and inequitable in its application.¹⁵¹ In upholding the law, the Court cited the finding of the New York Court of Appeals that the implementation of the objectives of the Landmarks Law constituted an "acceptable reason for singling out one particular parcel for different and less favorable treatment."¹⁵²

^{148. 123} U.S. 623 (1887).

^{149. 228} U.S. 572 (1913).

^{150. 438} U.S. 104 (1978).

^{151.} Id. at 131-33.

^{152. 42} N.Y.2d 324, 330, 397 N.Y.S.2d 914, 918, 366 N.E.2d 1271, 1274 (1977), quoted in Penn Central, 438 U.S. at 132 n.28.

The Court also found that the government had not appropriated the property for its own use.¹⁵³ According to the public use test, the inquiry would end there, for the Court's holding that no compensation was necessary would have been fully justified at that point. But the opinion then proceeded to look at the public use test's threshold level question of appropriation, in terms of the diminution of value test:

Rejection of appellants' broad arguments is not, however, the end of our inquiry, for all we thus far have established is that the New York City law is not rendered invalid by its failure to provide "just compensation" whenever a landmark owner is restricted in the exploitation of property interests, such as air rights, to a greater extent than provided for under applicable zoning laws. We now must consider whether the interference with appellants' property is of such magnitude that "there must be an exercise of eminent domain and compensation to sustain it."¹⁵⁴

The Court then found that Penn Central was not sufficiently damaged to justify compensation. However, the opinion emphasized that the holding was based on the present record, which showed "Penn Central's present ability to use the Terminal for its intended purposes and in a gainful fashion."¹⁵⁵ The Court implied that if the Terminal had ceased to be "economically viable," compensation might have been appropriate.¹⁵⁶

The idea that compensation to a given property owner affected by a government regulation should depend on the severity of the regulation's impact on his parcel misinterprets the law of eminent domain. Of course, the severity of the harm is relevant in determining the *amount* of a compensation award, once it is determined that compensation is to be paid. But an act of government is either an eminent domain taking or it is not; its characterization as a taking should not vary according to the resulting financial condition of the property owners affected. Indeed, an argument can be made that once the government has determined that a property owner is entitled to compensation, it denies equal protection of the laws if it fails to compensate *all* property owners affected by the government act in question, even if they are damaged to a lesser degree.

The public use test proposed by this note avoids these inquiries and focuses, instead, on the factors that are truly relevant: (1) Has there been an appropriation? (2) Is the appropriation a legitimate exercise of power? and (3) Does the public actually use the appropriated property?

V

FIREARMS AND TAKING LAW

Before analyzing a ban on the possession of firearms under this three-part test, it will be useful to consider whether the ban would require just compensation under the more traditional tests: the physical appropriation

^{153. 438} U.S. at 135; see supra text accompanying note 134.

^{154. 438} U.S. at 135-36.

^{155.} Id. at 138 n.36.

^{156.} Id.

test, the diminution in value test, the police power test, and the noxious use test.

Insofar as a statute would require firearm owners to surrender their weapons to the government, the physical appropriation test would be met. The owner would have had a fee simple interest in the weapon before the law was passed and no interest whatsoever after the weapon was turned in. Under this test, therefore, compensation would be required.

It is likely, however, that a law would be more narrowly drawn. For example, the ordinance passed by the Village of Morton Grove forbade the possession of handguns within the village unless (a) the gun was rendered permanently inoperative; (b) the owner was a licensed gun collector, peace officer, prison official, or member of the armed forces; or (c) the gun was kept at a gun club.¹⁵⁷ Each of these situations shifts the analysis from physical appropriation to diminution in value.

Since the Supreme Court has apparently never actually found there to be a taking under this test, it is unclear how much of a diminution would cause compensation to be required. If the Morton Grove alternatives were incorporated into a federal ban, the greatest diminution would occur if the gun were rendered permanently inoperative. In that case, the gun would have value only as a collectible or antique. Under Goldblatt v. Hempstead, however, the fact that the law deprives property of its most beneficial use does not require that compensation be paid.¹⁵⁸ The next greatest diminution would occur if the owner were forced to keep the gun at a club. The weapon could still be used, but not in one's home. Again, the Goldblatt holding would uphold the regulation without compensation.

If a firearm ban were drafted to prohibit ownership or possession without providing for government confiscation, the diminution in value test might indeed be met, since an owner would be deprived of all rights in his gun. The district court that considered the Morton Grove ordinance avoided this issue by pointing out that guns could be sold outside of the village. Therefore, because an owner could fully recover the value of his gun, there was no "destruction of the use and enjoyment of a legitimate private property right."¹⁵⁹ The same reasoning would apply if a state forbade firearm ownership. Thus, the right to sell might be sufficient to overcome the diminution of value test at the state level. A court might draw the line, however, at a federal ban on possession or ownership and consider the guns unsaleable, even if it were legal to transport firearms across international borders. Such a federal ban would thus be found to be a total diminution of value and would be a compensable taking under that test.

The third test which has been used is the police power test. If a state were to pass a law banning the possession of firearms, it could surely justify the act

^{157.} Quilici v. Village of Morton Grove, 532 F. Supp. 1169, 1171 (N.D. Ill. 1981), aff d, 695 F.2d 261 (7th Cir. 1982), cert. denied, 464 U.S. 863 (1983).

^{158. 369} U.S. 590, 592-93 (1962).
159. 532 F. Supp. at 1184.

under its police powers to punish crime and generally legislate for the health and safety of its citizens. Under cases like Fesjian v. Jefferson, 160 Mugler v. Kansas, 161 and Samuels v. McCurdy, 162 which held that no compensation is required when a state law represents an exercise of the police power, such a state ban would not be a compensable taking. At the federal level, the "police power" test applies only by analogy. Under the rationale of the test, so long as an act can be characterized as pursuant to some power other than the eminent domain power, it need not be accompanied by compensation.¹⁶³ Under this test, then, if federal firearm legislation were passed pursuant to the commerce or taxing powers, it would not be a compensable taking. (This test is applied here to federal legislation as part of a demonstrative exercise of the various taking tests, although such an application is, of course, illogical. Because there is no federal eminent domain power, all federal laws are passed under an enumerated power. Therefore, no federal law could ever require compensation under this theory.)

The final test which has been used is the noxious use test. Under this test, which is often coupled with the police power test, evil-avoidance legislation does not require just compensation. Thus, in Mugler v. Kansas, 164 in which a lawfully operated brewery was closed under a prohibition statute which declared the brewery to be a public nuisance, the Court held that legislation to abate a nuisance was not a fifth amendment taking.¹⁶⁵ This logic has also been applied to consumers. In Samuels v. McCurdy, 166 McCurdy had a supply of liquor which was lawfully acquired before the state of Georgia banned its possession. Nevertheless, the Court upheld seizure as a valid exercise of state power to reduce the "evils of drunkenness."167

By analogy, a state or federal government could declare all firearms or handguns in particular to be an evil to be avoided for the benefit of the public. Surely, if the presence of liquor in a community can be prohibited under a nuisance abatement theory, the threat of firearm deaths by accident or violence could support the declaration of firearms as a nuisance with equally strong justification. Thus, under the noxious use test, no compensation would be required for a confiscation of firearms.

It is clear from this summary that these tests reach contradictory results. The physical invasion and diminution in value tests point toward compensation, while the police power and noxious use tests point toward no compensation. Without a statement of how to resolve or balance the tests, it is impossible to resolve taking questions except in the "ad hoc" manner used

^{160. 399} A.2d 861 (D.C. 1979) (firearm legislation).
161. 123 U.S. 623 (1887) (liquor prohibition).
162. 267 U.S. 188 (1925) (liquor prohibition).
163. See Sax, supra note 5, at 36-37 n.6 (referring to the conflict between commerce clause) regulations and fifth amendment takings as "parallel" to the police power-eminent domain distinction at the state level).

^{164. 123} U.S. 623 (1887).

^{165.} Id. at 669.

^{166. 267} U.S. 188 (1925).

^{167.} Id. at 198.

in *Penn Central Transportation Co. v. City of New York.*¹⁶⁸ The three-part public use test, however, can be applied with more certainty. The following analysis describes how a federal or state ban would be analyzed under this test.

The first issue is whether the ban would result in an appropriation. Under this threshold inquiry, either an outright physical invasion or a significant diminution in value would constitute an appropriation. If the ban simply required all weapons to be turned in, it is clear that an appropriation would have occurred. Even in the absence of a physical transfer, however, the owners' property rights in their guns would be appropriated if the guns could not be kept at home, if they had to be rendered inoperative, or if they could not be possessed at all. As has been emphasized previously, such diminution in value is not dispositive of the taking issue. The continued adherence of the courts to the doctrine nevertheless represents a recognition that an affected property owner legitimately feels that something has been taken from him. It would be foolish not to concede that at least some portion of a gun owner's property in a firearm is appropriated when he cannot fire it. Unfortunately, from his point of view, this appropriation is not compensated because of the outcome of the remainder of this analysis.

The second issue is whether the ban would be a valid exercise of government authority. State firearm legislation could easily withstand scrutiny as a valid exercise of police power. This power would not be circumscribed by the second amendment, because that amendment has never been incorporated into the fourteenth amendment to bind the states.¹⁶⁹

If a firearm ban were enacted at the federal level, it would have to be justified under one of the government's enumerated powers. Congress could, for example, find that the law was necessary to protect commerce because it would prevent robberies. This note expresses no opinion on the validity of that assumption, but presumes that a congressional finding to that effect would be sufficient to invoke the commerce clause. A federal firearm law would also have to be tested under the second amendment, but, as stated earlier, that analysis is not within the compass of this note. For our purposes, it is assumed that a federal ban would be upheld as a valid exercise of government power.

The final issue is whether the ban would be for public use as the term has been defined in this note. If the ban were passed in response to some kind of military emergency in which the government needed to give the confiscated weapons to the armed forces, the ban would clearly be an example of public use and require compensation. Such military use would be available only to the federal government. Theoretically, though, a state government could similarly confiscate firearms for the sole purpose of equipping its police force, for example. In that case, too, compensation would be required. Such examples are exceptions, however, to the ordinary intent of firearms

^{168.} See 438 U.S. 104, 124 (1978).

^{169.} United States v. Cruikshank, 92 U.S. 542, 553 (1876). See generally J. NOWAK, R. ROTUNDA & J. YOUNG, supra note 42, at 413.

legislation. Such laws would much more likely be passed for the purpose of ridding society of firearms and not because there is a public need to use the weapons. In fact, the weapons would probably be destroyed after seizure. In this more likely case, the public would benefit passively from the arguably safer society in which they would live. This benefit, however, is not public use as defined in this note and does not require compensation under the fifth amendment.

Thus, under the three-part public use test, no compensation would be required by the fifth amendment if there were a federal or state ban on the possession of firearms. Such a result may seem viscerally unfair; however, one must remember that if every regulation of property required compensation, a government would be unable to operate. More importantly, this result is dictated by the words of the Constitution. Under the analysis proposed in this note, that constitutional language is capable of a single, clear interpretation, which can guide courts to a rational treatment of the taking issue.

MAY 2013



Firearm Violence, 1993-2011

Michael Planty, Ph.D., and Jennifer L. Truman, Ph.D., BJS Statisticians

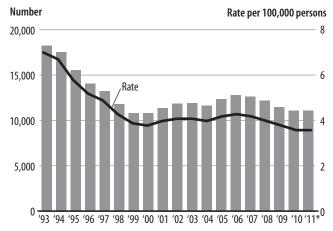
n 2011, a total of 478,400 fatal and nonfatal violent crimes were committed with a firearm (table 1). Homicides made up about 2% of all firearm-related crimes. There were 11,101 firearm homicides in 2011, down by 39% from a high of 18,253 in 1993 (figure 1). The majority of the decline in firearm-related homicides occurred between 1993 and 1998. Since 1999, the number of firearm homicides increased from 10,828 to 12,791 in 2006 before declining to 11,101 in 2011.

Nonfatal firearm-related violent victimizations against persons age 12 or older declined 70%, from 1.5 million in 1993 to 456,500 in 2004 (**figure 2**). The number then fluctuated between about 400,000 to 600,000 through 2011.¹ While the number of firearm crimes declined over time, the percentage of all violence that involved a firearm did not change substantively, fluctuating between 6% and 9% over the same period. In 1993, 9% of all violence was committed with a firearm, compared to 8% in 2011.

¹Many percentages and counts presented in this report are based on nonfatal firearm victimizations. Since firearm homicides accounted for about 2% of all firearm victimizations, when firearm homicides are included in the total firearm estimates, the findings do not change significantly.

FIGURE 1

Firearm homicides, 1993–2011



Note: Excludes homicides due to legal intervention and operations of war. See appendix table 1 for numbers and rates.

*Preliminary estimates retrieved from Hoyert DL, Xu JQ. (2012) Deaths: Preliminary data for 2011. *National Vital Statistics Reports*, 61(6).

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

HIGHLIGHTS

- Firearm-related homicides declined 39%, from 18,253 in 1993 to 11,101 in 2011.
- Nonfatal firearm crimes declined 69%, from 1.5 million victimizations in 1993 to 467,300 victimizations in 2011.
- For both fatal and nonfatal firearm victimizations, the majority of the decline occurred during the 10-year period from 1993 to 2002.
- Firearm violence accounted for about 70% of all homicides and less than 10% of all nonfatal violent crime from 1993 to 2011.
- About 70% to 80% of firearm homicides and 90% of nonfatal firearm victimizations were committed with a handgun from 1993 to 2011.

- From 1993 to 2010, males, blacks, and persons ages 18 to 24 had the highest rates of firearm homicide.
- In 2007-11, about 23% of victims of nonfatal firearm crime were injured.
- About 61% of nonfatal firearm violence was reported to the police in 2007-11.
- In 2007-11, less than 1% of victims in all nonfatal violent crimes reported using a firearm to defend themselves during the incident.
- In 2004, among state prison inmates who possessed a gun at the time of offense, less than 2% bought their firearm at a flea market or gun show and 40% obtained their firearm from an illegal source.

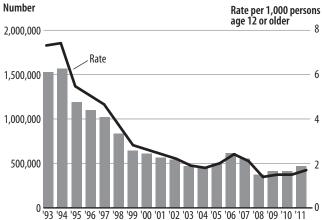


The primary source of information on firearm-related homicides was obtained from mortality data based on death certificates in the National Vital Statistics System of the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention's (CDC) Web-based Injury Statistics Query and Reporting System (WISQARS). These mortality data include causes of death reported by attending physicians, medical examiners, and coroners, and demographic information about decedents reported by funeral directors who obtain that information from family members and other informants. The NCHS collects, compiles, verifies, and prepares these data for release to the public.

The estimates of nonfatal violent victimization are based on data from the Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS), which collects information on nonfatal crimes against persons age 12 or older reported and not reported to the police from a nationally representative sample of U.S. households. Homicide rates are presented per 100,000 persons and the nonfatal victimization rates are presented per 1,000 persons age 12 or older. Additional information on firearm violence in this report comes from the School-Associated Violent Deaths Surveillance Study (SAVD), the FBI's Supplemental Homicide Reports (SHR), the Survey of Inmates in State Correctional Facilities (SISCF), and the Survey of Inmates in Federal Correctional Facilities (SIFCF). Each source provides different information about victims and incident characteristics. Estimates are shown for different years based on data availability and measures of reliability. (For more information about these sources, see *Methodology*.)

FIGURE 2 Nonfatal firearm victimizations, 1993–2011

Nonialai meann victimizations, 1995–201



Note: See appendix table 2 for numbers, rates, and standard errors. Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011.

TABLE 1

			Number			Percent		
Year	Total fatal and nonfatal firearm violence	Firearm homicides	Nonfatal firearm victimizations ^a	Nonfatal firearm incidents ^b	Rate of nonfatal firearm victimization ^c	All violence involving firearms	All firearm violence that was homicide	
1993	1,548,000	18,253	1,529,700	1,222,700	7.3	9.2%	1.2%	
1994	1,585,700	17,527	1,568,200	1,287,200	7.4	9.3	1.1	
1995	1,208,800	15,551	1,193,200	1,028,900	5.5	7.9	1.3	
1996	1,114,800	14,037	1,100,800	939,500	5.1	7.9	1.3	
1997	1,037,300	13,252	1,024,100	882,900	4.7	7.7	1.3	
1998	847,200	11,798	835,400	673,300	3.8	7.0	1.4	
1999	651,700	10,828	640,900	523,600	2.9	6.1	1.7	
2000	621,000	10,801	610,200	483,700	2.7	7.3	1.7	
2001	574,500	11,348	563,100	507,000	2.5	7.7	2.0	
2002	551,800	11,829	540,000	450,800	2.3	7.4	2.1	
2003	479,300	11,920	467,300	385,000	2.0	6.2	2.5	
2004	468,100	11,624	456,500	405,800	1.9	6.9	2.5	
2005	515,900	12,352	503,500	446,400	2.1	7.4	2.4	
2006	627,200	12,791	614,400	552,000	2.5	7.4	2.0	
2007	567,400	12,632	554,800	448,400	2.2	8.3	2.2	
2008	383,500	12,179	371,300	331,600	1.5	6.0	3.2	
2009	421,600	11,493	410,100	383,400	1.6	7.4	2.7	
2010	426,100	11,078	415,000	378,800	1.6	8.6	2.6	
2011 ^d	478,400	11,101	467,300	414,600	1.8	8.2	2.3	

Criminal firearm violence, 1993–2011

Note: See appendix table 3 for standard errors.

^aA victimization refers to a single victim that experienced a criminal incident.

^bAn incident is a specific criminal act involving one or more victims or victimizations.

^cPer 1,000 persons age 12 or older.

^dPreliminary homicide estimates retrieved from Hoyert DL, Xu JQ. (2012) Deaths: Preliminary data for 2011. National Vital Statistics Reports, 61(6).

Sources: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011; and Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

Trend estimates of nonfatal firearm violence are presented as annual 1-year averages or 2-year rolling averages, as noted in each table or figure. For ease of presentation, 2-year estimates are referenced according to the most recent year. For example, estimates reported for 2011 represent the average estimates for 2010 and 2011. Other tables in this report focus on a single 5-year aggregate period from 2007 through 2011. These approaches—using rolling averages and aggregating years—increase the reliability and stability of estimates, which facilitiates comparisons over time and between subgroups.

The majority of firearm crimes were committed with a handgun

From 1993 to 2011, about 60% to 70% of homicides were committed with a firearm (**table 2**). Over the same period, between 6% and 9% of all nonfatal violent victimizations were committed with a firearm, with about 20% to 30% of robberies and 22% to 32% of aggravated assaults involving a firearm.

Handguns accounted for the majority of both homicide and nonfatal firearm violence (**table 3**). A handgun was used in about 83% of all firearm homicides in 1994, compared to 73% in 2011. Other types of firearms, such as shotguns and rifles, accounted for the remainder of firearm homicides. For nonfatal firearm violence, about 9 in 10 were committed with a handgun, and this remained stable from 1994 to 2011.

TABLE 2

Percent of violence involving a firearm, by type of crime, 1993–2011

Year	Homicide	Nonfatal violence ^a	Robbery	Aggravated assault
1993	71.2%	9.1%	22.3%	30.7%
1994	71.4	9.2	27.1	31.9
1995	69.0	7.8	27.3	28.0
1996	68.0	7.8	24.6	25.7
1997	68.0	7.6	19.9	27.0
1998	65.9	7.0	20.1	26.5
1999	64.1	6.0	19.2	22.4
2000	64.4	7.2	21.1	26.6
2001 ^b	55.9	7.5	29.5	26.0
2002	67.1	7.3	23.4	28.7
2003	67.2	6.1	22.4	22.2
2004	67.0	6.8	19.7	23.6
2005	68.2	7.2	21.8	25.7
2006	68.9	7.3	16.6	24.3
2007	68.8	8.1	20.0	32.6
2008	68.3	5.8	19.6	24.6
2009	68.4	7.2	27.0	23.2
2010	68.1	8.4	24.7	25.4
2011 ^c	69.6	8.0	25.7	30.6

Note: See appendix table 4 for standard errors.

^aNonfatal violence includes rape, sexual assault, robbery, aggravated and simple assault. A small percentage of rape and sexual assaults involved firearms but are not shown in table due to small sample sizes.

^bThe homicide estimates that occurred as a result of the events of September 11, 2001, are included in the total number of homicides.

^cPreliminary homicide estimates retrieved from Hoyert DL, Xu JQ. (2012) Deaths: Preliminary data for 2011. *National Vital Statistics Reports*, 61(6).

Sources: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011; and Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

TABLE 3Criminal firearm violence, by type of firearm, 1994–2011

	Homicide					Nonfatal violence						
Year	Handgun		Other firearm*		Handgun		Other firearm*		Gun type unknown			
	Annual number	Percent	Annual number	Percent	Average annual number	Percent	Average annual number	Percent	Average annual number	Percent		
1994	13,510	82.7%	2,830	17.3%	1,387,100	89.5%	150,200	9.7%	11,700 !	0.8%!		
1995	12,090	81.9	2,670	18.1	1,240,200	89.8	132,800	9.6	7,700 !	0.6!		
1996	10,800	81.1	2,510	18.9	999,600	87.1	141,000	12.3	6,400 !	0.6!		
1997	9,750	78.8	2,630	21.2	894,200	84.2	159,800	15.0	8,400 !	0.8!		
1998	8,870	80.4	2,160	19.6	783,400	84.3	141,100	15.2	5,300 !	0.6!		
1999	8,010	78.8	2,150	21.2	659,600	89.4	74,100	10.0	4,500 !	0.6!		
2000	8,020	78.6	2,190	21.4	555,800	88.8	65,300	10.4	4,500 !	0.7!		
2001	7,820	77.9	2,220	22.1	506,600	86.3	65,900	11.2	14,100 !	2.4!		
2002	8,230	75.8	2,620	24.2	471,600	85.5	63,200	11.5	16,700 !	3.0!		
2003	8,890	80.3	2,180	19.7	436,100	86.6	53,200	10.6	14,400 !	2.9!		
2004	8,330	78.0	2,350	22.0	391,700	84.8	53,400	11.6	16,900 !	3.7!		
2005	8,550	75.1	2,840	24.9	410,600	85.5	56,200	11.7	13,200 !	2.8!		
2006	9,060	77.0	2,700	23.0	497,400	89.0	47,600	8.5	14,000 !	2.5!		
2007	8,570	73.6	3,080	26.4	509,700	87.2	65,600	11.2	9,300 !	1.6!		
2008	7,930	71.8	3,120	28.2	400,700	86.5	57,400	12.4	5,000 !	1.1!		
2009	7,370	71.3	2,970	28.7	348,700	89.2	37,600	9.6	4,400 !	1.1!		
2010	6,920	69.6	3,030	30.4	382,100	92.6	26,700	6.5	3,800 !	0.9!		
2011	7,230	72.9	2,690	27.1	389,400	88.3	49,700	11.3	2,100 !	0.5!		

Note: Nonfatal violence data based on 2-year rolling averages beginning in 1993. Homicide data are presented as annual estimates. See appendix table 5 for standard errors. *Includes rifle, shotgun, and other types of firearms.

! Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

Sources: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011; and FBI, Supplementary Homicide Reports, 1994–2011.

Males, blacks, and persons ages 18 to 24 were most likely to be victims of firearm violence

Sex

In 2010, the rate of firearm homicide for males was 6.2 per 100,000, compared to 1.1 for females (**figure 3**). Firearm homicide for males declined by 49% (from 12.0 per 100,000 males in 1993 to 6.2 in 2010), compared to a 51% decline for females (from 2.3 per 100,000 females in 1993 to 1.1 in 2010). The majority of the decline for both males and females occurred in the first part of the period (1993 to 2000). Over the more recent 10-year period from 2001 to 2010, the decline in firearm homicide for both males and females slowed, resulting in about a 10% decline each.

FIGURE 3



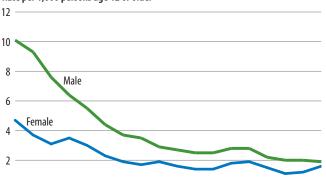
Note: See appendix table 6 for numbers and rates.

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars. In 2011, the rate of nonfatal firearm violence for males (1.9 per 1,000 males) was not significantly different than the rate for females (1.6 per 1,000) (**figure 4**). From 1994 to 2011, the rate of nonfatal firearm violence for males declined 81%, from 10.1 to 1.9 per 1,000 males. During the same period, the rate of nonfatal firearm violence against females dropped 67%, from 4.7 to 1.6 per 1,000 females. As with fatal firearm violence, the majority of the decline occurred in the first part of the period. From 2002 to 2011, the rate of nonfatal firearm violence for males declined 35%, while there was no no statistical change in the rate for females.

FIGURE 4

Nonfatal firearm violence, by sex, 1994–2011

Rate per 1,000 persons age 12 or older



⁰ '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 Note: Data based on 2-year rolling averages beginning in 1993. See appendix table 7 for rates and standard errors.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011.

Race/Hispanic origin

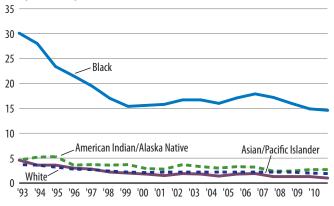
In 2010, the rate of firearm homicide for blacks was 14.6 per 100,000, compared to 1.9 for whites, 2.7 for American Indians and Alaska Natives, and 1.0 for Asians and Pacific Islanders (**figure 5**). From 1993 to 2010, the rate of firearm homicides for blacks declined by 51%, down from 30.1 per 100,000 blacks, compared to a 48% decline for whites and a 43% decline for American Indians and Alaska Natives. Asian and Pacific Islanders declined 79% over the same period, from 4.6 to 1.0 per 100,000. Although blacks experienced a decline similar to whites and American Indians and Alaska Natives, the rate of firearm homicide for blacks was 5 to 6 times higher than every other racial group in 2010. As with other demographic groups, the majority of the decline occurred in the first part of the period and slowed from 2001 to 2010.

The rate of firearm homicide for both Hispanics and non-Hispanics was about 4 per 100,000 each in 2010 (**figure 6**). However, the Hispanic rate had a larger and more consistent decline over time. The Hispanic rate declined 54% from 1993 to 2001 and declined 34% since 2001. In comparison, the non-Hispanic rate declined more slowly, down 42% from 1993 to 2001 and down 5% since 2001.

FIGURE 5

Firearm homicides, by race, 1993–2010

Rate per 100,000 persons



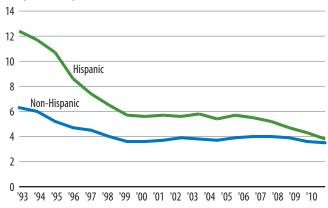
Note: See appendix table 8 for numbers and rates

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars. In 2011, non-Hispanic blacks (2.8 per 1,000) and Hispanics (2.2 per 1,000) had higher rates of nonfatal firearm violence than non-Hispanic whites (1.4 per 1,000) (**figure 7**). The rate of nonfatal firearm violence for Hispanics was not statistically different from the rate for blacks. From 1994 to 2011, the rates of nonfatal firearm violence for blacks and Hispanics both declined by 83%, compared to 74% for whites.

FIGURE 6

Firearm homicides, by Hispanic origin, 1993–2010

Rate per 100,000 persons



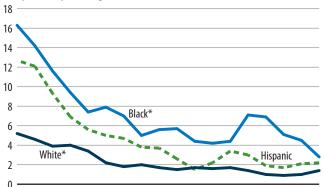
Note: See appendix table 9 for numbers and rates.

Source: Bureau of Justice Statistics, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

FIGURE 7

Nonfatal firearm violence, by race and Hispanic origin, 1994–2011

Rate per 1,000 persons age 12 or older



*Excludes persons of Hispanic or Latino origin.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011.

Age

In 2010, the rate of firearm homicide was 10.7 per 100,000 for persons ages 18 to 24, compared to 8.1 for persons ages 25 to 34 and 0.3 for persons age 11 or younger (table 4). Firearm homicide against persons ages 18 to 34 accounted for about 30% of all firearm homicides in 2010. From 1993 to 2010, the rate of homicides for persons ages 18 to 24 declined 51%, compared to a 35% decline for persons ages 25 to 34 and 50% for persons age 11 or younger.

In 2011, persons ages 18 to 24 had the highest rate of nonfatal firearm violence (5.2 per 1,000). From 1994 to 2011, the rates of nonfatal firearm violence declined for persons ages 18 to 49, with each group declining between 72% and 77%. The rate for persons ages 12 to 17 declined 88%, from 11.4 to 1.4 per 1,000.

Persons living in urban areas had the highest rates of nonfatal firearm violence

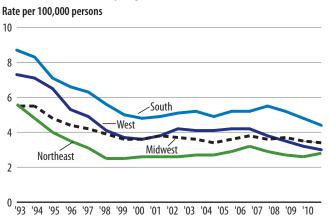
Region

In 2010, the South had the highest rate of firearm homicides at 4.4 per 100,000 persons, compared to 3.4 in the Midwest, 3.0 in the West, and 2.8 in the Northeast (**figure 8**).

From 1993 to 2010, the rate of firearm homicides in the South declined by 49%, compared to a 50% decline in the Northeast, a 37% decline in the Midwest, and a 59% decline in the West.

FIGURE 8

Firearm homicides, by region, 1993-2011



Note: See appendix table 13 for numbers and rates.

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars).

TABLE 4

Fatal and nonfatal firearm violence, by age, 1993–2011

	Firearm homicide rate per 100,000 persons						Nonfatal firearm violence rate per 1,000 persons age 12 or older					
Year	11 or younger	12–17	18-24	25-34	35–49	50 or older	12-17	18-24	25-34	35–49	50 or older	
1993	0.5	8.0	21.9	12.4	6.7	2.2	~	~	~	~	~	
1994	0.4	7.8	21.2	12.0	6.3	2.1	11.4	18.1	8.7	6.3	1.6	
1995	0.4	7.0	18.6	10.6	5.3	2.0	9.8	16.1	7.7	5.5	1.6	
1996	0.4	5.6	17.2	9.4	4.9	1.8	7.6	12.3	6.8	4.8	1.4	
1997	0.4	4.8	16.3	9.0	4.6	1.6	7.1	12.8	5.4	4.5	1.2	
1998	0.3	3.7	14.4	7.9	4.2	1.5	5.7	12.4	4.5	3.8	1.0	
1999	0.3	3.6	12.4	7.6	3.7	1.4	4.7	8.9	4.6	2.6	0.7	
2000	0.2	2.9	12.4	7.7	3.8	1.4	3.2	7.0	3.6	2.5	1.0	
2001	0.3	2.8	12.9	8.4	3.9	1.3	2.2	6.8	3.1	2.4	1.0	
2002	0.3	2.9	13.0	8.8	4.0	1.4	2.4	7.3	3.1	1.8	0.8	
2003	0.3	2.7	13.3	9.0	4.0	1.3	2.8	6.3	2.7	1.6	0.7	
2004	0.2	3.0	11.9	8.9	3.9	1.4	1.9	3.9	2.5	2.1	0.8	
2005	0.2	3.1	12.9	9.6	4.1	1.3	1.2	4.4	3.1	1.8	1.0	
2006	0.3	3.6	13.6	9.6	4.1	1.4	2.3	5.6	3.4	1.8	1.0	
2007	0.3	3.5	13.1	9.5	4.2	1.3	4.3	4.6	3.0	2.2	0.9	
2008	0.3	3.3	12.1	9.0	4.1	1.3	3.5	3.2	2.7	1.6	0.7	
2009	0.3	2.9	11.1	8.1	3.9	1.4	0.9	3.9	2.3	1.5	0.6	
2010	0.3	2.8	10.7	8.1	3.6	1.4	0.6 !	5.8	2.0	1.3	0.6	
2011							1.4	5.2	2.2	1.4	0.7	

Note: Nonfatal firearm violence data based on 2-year rolling averages beginning in 1993. Homicide data are annual estimates. See appendix table 11 for firearm homicide numbers and appendix table 12 for nonfatal firearm violence standard errors..

~Not applicable.

...Not available.

! Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011; and Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

In 2011, residents in the South (1.9 per 1,000) had higher rates of nonfatal firearm violence than those in the Northeast (1.3 per 1,000) (**figure 9**). Residents in the South (1.9 per 1,000), Midwest (1.7 per 1,000), and West (1.8 per 1,000) had statistically similar rates of nonfatal firearm violence.

Urban-rural location

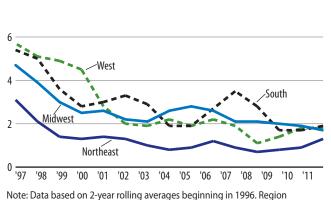
The publicly available National Vital Statistics System fatal data files do not contain information about the incident's urban-rural location or population size. This information is limited to nonfatal firearm victimizations. Urban residents generally experienced the highest rate of nonfatal firearm violence (figure 10). In 2011, the rate of nonfatal firearm violence for residents in urban areas was 2.5 per 1,000,

FIGURE 9

8

Nonfatal firearm violence, by region, 1997–2011





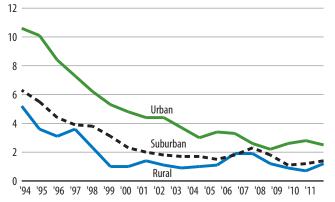
information was not available from 1993 to 1995. See appendix table 14 for rates and standard errors.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1996–2011.

FIGURE 10

Nonfatal firearm violence, by urban-rural location, 1994–2011





Note: Data based on 2-year rolling averages beginning in 1993. See appendix table 15 for rates and standard errors.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011.

compared to 1.4 per 1,000 for suburban residents and 1.2 for rural residents. From 1994 to 2011, the rates of nonfatal firearm violence for all three locations declined between 76% and 78%.

Population size

In 2011, higher rates of nonfatal violence occurred in areas with a population of more than 250,000 residents than in areas with a population under 250,000 (**table 5**). From 1997 to 2011, the rates of nonfatal firearm violence for populations between 250,000 and 499,999 and 1 million residents or more declined between 57% and 62%, compared to a 37% decline for residents living in populations between 500,000 and 999,999 residents.

TABLE 5

Nonfatal firearm violence, by population size, 1997–2011

	Rate per 1,000 persons age 12 or older					
Year	Not a place*	Less than 100,000	100,000- 249,999	250,000- 499,999	500,000- 999,999	1 million or more
1997	3.9	3.8	7.0	10.3	7.3	7.3
1998	3.0	3.9	4.8	7.0	9.2	5.7
1999	1.9	3.1	3.1	5.5	9.0	6.4
2000	1.5	2.2	3.9	6.5	6.3	5.6
2001	1.4	2.1	4.1	6.1	5.5	5.1
2002	1.2	2.3	2.8	3.9	4.9	5.3
2003	1.4	2.0	2.8	3.3	5.1	3.6
2004	1.4	1.4	3.0	4.1	5.5	2.7
2005	1.2	1.6	2.9	3.6	4.5	4.6
2006	1.6	2.1	2.6	2.6	3.8	4.9
2007	1.5	2.6	2.7	2.4	5.4	2.1
2008	0.8	2.1	2.1	3.2	4.9	1.4
2009	0.9	1.1	2.2	3.0	4.0	3.5
2010	0.9	1.2	1.8	2.8	5.1	4.0
2011	1.4	1.2	1.3	3.9	4.6	3.2

Note: Data based on 2-year rolling averages beginning in 1996. Population size information was not available from 1993 to 1995. See appendix table 16 for rates and standard errors.

*A concentration of population that is not either legally bounded as an incorporated place having an active government or delineated for statistical purposes as a census designated place with definite geographic boundaries, such as a city, town, or village.

About 11% of nonfatal violence committed by a stranger involved a firearm

Intimate partners suffered about 4.7 million nonfatal violent victimizations in the 5-year period from 2007 through 2011, and the offender used a firearm in about 4% of these victimizations (about 195,700 incidents) (table 6). Similar to intimate partner violent victimizations, offenders who were either a relative or known to the victim (e.g., a friend or acquaintance) used a firearm in about 4% to 7% of these total victimizations. In comparison, persons

victimized by strangers experienced about 11 million violent victimizations, and the offender used a firearm in 11% of these victimizations.²

In 2007-11, the majority of nonfatal firearm violence occurred in or around the victim's home (42%) or in an open area, on the street, or while on public transportation (23%) (**table** 7). Less than 1% of all nonfatal firearm violence occurred in schools.

²The fatal data from the National Vital Statistics System does not have victim-offender relationship information. The SHR victim-offender relationship data are not shown due to the large amount of missing data.

TABLE 6

Nonfatal firearm and nonfirearm violence, by victim-offender relationship, 2007–2011

		Fire	earm violence	Nonfirearm violence	
Relationship to victim	Total nonfatal violence	Number	Percent of total violence	Number	Percent of total violence
Total	29,611,300	2,218,500	7.5%	27,392,800	92.5%
Nonstranger	15,715,900	738,000	4.7	14,977,900	95.3
Intimate ^a	4,673,600	195,700	4.2	4,477,900	95.8
Other relative	2,157,700	158,100	7.3	1,999,500	92.7
Friend/acquaintance	8,884,600	384,100	4.3	8,500,500	95.7
Stranger	10,983,100	1,177,900	10.7	9,805,200	89.3
Unknown ^b	2,912,300	302,600	10.4	2,609,600	89.6

Note: Detail may not sum to total due to rounding. See appendix table 17 for standard errors.

^aIncludes current or former spouses, boyfriends, or girlfriends.

^bIncludes relationships unknown and number of offenders unknown.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2007–2011.

TABLE 7

Nonfatal firearm and nonfirearm violence, by location of crime, 2007–2011

	Total nonfat	al violence	Firearm v	iolence	Nonfirearr	n violence
Location	Number	Percent	Number	Percent	Number	Percent
Total	29,618,300	100%	2,218,500	100%	27,399,800	100%
Victims home or lodging	6,491,400	21.9	427,600	19.3	6,063,800	22.1
Near victim's home	4,804,700	16.2	504,500	22.7	4,300,200	15.7
In, at, or near a friend, neighbor, or relative's home	2,175,900	7.3	132,600	6.0	2,043,300	7.5
Commercial place	2,878,600	9.7	195,400	8.8	2,683,200	9.8
Parking lot or garage	1,688,400	5.7	340,600	15.4	1,347,900	4.9
School*	3,931,100	13.3	12,600 !	0.6 !	3,918,500	14.3
Open area, on street, or public transportation	4,636,900	15.7	508,400	22.9	4,128,500	15.1
Other location	3,011,200	10.2	96,800	4.4	2,914,400	10.6

! Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%. See appendix table 18 for standard errors. *Includes inside a school building or on school property.

School-related homicides of youth ages 5 to 18 accounted for less than 2% of all youth homicides

The number of homicides at schools declined over time, from an average of 29 per year in the 1990s (school year 1992-93 to 1999-00) to an average of 20 per year in the 2000s (school year 2000-01 to 2009-10) (table 8). Generally, homicides in schools comprised less than 2% of all homicides of youth ages 5 to 18. During the 2000s, an average of about 1,600 homicides of youth ages 5 to 18 occurred per year. The majority of homicides against youth both at school and away from school were committed with a firearm.

TABLE 8

School-associated homicides of youth ages 5 to 18, by location and school years, 1992–93 to 2009–10

	Homicides of yo	Homicides of youth ages 5 to 18			
School year	Total homicides ^a	Homicides at school ^{b,c}	Percent of all homicides of youth at school		
1992–93	2,719	34	1.3%		
1993–94	2,911	29	1.0		
1994–95	2,691	28	1.0		
1995–96	2,548	32	1.3		
1996–97	2,210	28	1.3		
1997–98	2,104	34	1.6		
1998–99	1,791	33	1.8		
1999-00	1,566	14	0.9		
2000-01	1,501	14	0.9		
2001–02	1,494	16	1.1		
2002-03	1,538	18	1.2		
2003–04	1,459	23	1.6		
2004–05	1,545	22	1.4		
2005–06	1,687	21	1.2		
2006–07	1,796	32	1.8		
2007–08	1,740	21	1.2		
2008–09	1,579	17	1.1		
2009–10		17			

Note: At school includes on school property, on the way to or from regular sessions at school, and while attending or traveling to or from a school-sponsored event. ...Not available.

^aYouth ages 5 to 18 from July 1, 1992, through June 30, 2009.

^bYouth ages 5 to 18 from July 1, 1992, through June 30, 2010.

The data from school year 1999–00 through 2009–10 are subject to change until interviews with school and law enforcement officials have been completed. The details learned during the interviews can occasionally change the classification of a case.

Sources: Table 1.1 from Robers, S., Zhang, J., and Truman, J. (2012). *Indicators of School Crime and Safety: 2011* (NCES 2012-002/NCJ 236021). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Homicide data are from: Centers for Disease Control and Prevention (CDC), 1992–2010 School-Associated Violent Deaths Surveillance Study (SAVD); FBI and Supplementary Homicide Reports (SHR), 1992–2009.

In 2007-11, about 23% of all nonfatal firearm victims were injured

In 2007-11, about 23% of all nonfatal firearm victims were physically injured during the victimization (**table 9**). About 7% suffered serious injuries (e.g., a gunshot wound, broken bone, or internal injuries), while 16% suffered minor injuries

(e.g., bruises or cuts). Of the nonfatal firearm victims who were injured, 72% received some type of care, with about 82% receiving care in a hospital or medical office.

The victim reported that the offender had fired the weapon in 7% of all nonfatal firearm victimizations. The victim suffered a gunshot wound in 28% of these victimizations (not shown in table).

TABLE 9

Nonfatal firearm and nonfirearm violence, by injury and treatment received, 2007–2011

	Total nonfa	tal violence	Firearm v	iolence	Nonfirear	m violence
Injury and treatment	Number	Percent	Number	Percent	Number	Percent
Injury	29,618,300	100%	2,218,500	100%	27,399,800	100%
Not injured	22,187,500	74.9	1,707,800	77.0	20,479,700	74.7
Injured	7,430,800	25.1	510,700	23.0	6,920,100	25.3
Serious ^a	1,249,300	4.2	148,300	6.7	1,147,000	4.2
Gun shot	46,000	0.2	46,000	2.1	~	~
Minor ^b	5,742,700	19.4	357,100	16.1	5,385,700	19.7
Rape without other injuries	374,300	1.3	5,400!	0.2 !	368,900	1.3
Treatment for injury ^c	7,430,800	100%	510,700	100%	6,920,100	100%
No treatment	4,304,300	57.9	140,700	27.5	4,163,600	60.2
Any treatment	3,103,500	41.8	370,000	72.5	2,733,500	39.5
Treatment setting ^d	3,103,500	100%	370,000	100%	2,733,500	100%
At the scene/home of victim, neighbor, or friend/location	1,078,000	34.7	68,000	18.4	1,010,000	36.9
In doctor's office/hospital emergency room/ overnight at hospital	2,025,600	65.3	302,000	81.6	1,723,500	63.1

Note: See appendix table 19 for standard errors.

! Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

~Not applicable.

^aIncludes injuries such as gun shots, knife wounds, internal injuries, unconsciousness, and broken bones.

^bIncludes bruises, cuts, and other minor injuries.

^cIncludes only victims who were injured.

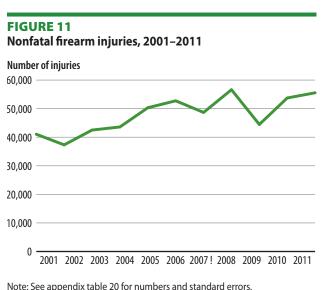
^dIncludes only victims who were injured and received treatment.

Nonfatal shooting victims

According to the NCVS, an average of about 22,000 nonfatal shooting victims occurred annually from 1993 to 2002 (not shown in table). From 2002 to 2011, the number of victims declined by about half to 12,900 per year. In the 5-year aggregate period from 2007-11, a total of 46,000 nonfatal firearm victims were wounded with a firearm and another 58,483 were victims of a firearm homicide. The total firearm nonfatal gunshot injuries and homicides accounted for 5% of all firearm violent crimes in 2007-11.

Data on nonfatal injury are also available in the National Electronic Injury Surveillance System All Injury Program (NEISS-AIP), which is operated by the U.S. Consumer Product Safety Commission (CPSC). According to these data, an average of 47,870 nonfatal assault injuries resulted from a firearm from 2001 to 2011 (**figure 11**). In 2007-11, the average number of nonfatal injuries from a firearm increased slightly to 51,810.

The differences noted between the NCVS and NEISS-AIP firearm injury estimates are due in part to a variety of technical issues. Both estimates are generated from samples and are subject to sampling error. The NCVS is a residential household survey that does not include the homeless, persons in institutional settings such as jails, prisons, mental health facilities, and certain other group quarters. Therefore, NCVS may miss injuries that involve persons who are homeless, victims who require lengthy stays in a hospital, and offenders who are incarcerated or placed in other institutional settings after the incident.



Interpret with caution. Estimate based on fewer than 20 NEISS cases (based on unweighted data), national estimates less than 1,200 (based on weighted data), or the coefficient of variation (CV) of the estimate greater than 30%. Source: Consumer Product Safety Commission, National Electronic Injury Surveillance System All Injury Program (NEISS-AIP), 2001–2011. Accessed from the National Center for Injury Prevention and Control, CDC.

The majority of firearm violence is reported to the police

In 2007-11, about 61% of nonfatal firearm violence was reported to the police, compared to 46% of nonfirearm violence (**table 10**). Among the nonfatal firearm victimizations that went unreported in 2007-11, the most common reasons victims gave for not reporting the crime was fear of reprisal (31%) and that the police could not or would not do anything to help (27%).

In 2007-11, about 1% of nonfatal violent crime victims used a firearm in self defense

In 2007-11, there were 235,700 victimizations where the victim used a firearm to threaten or attack an offender (table 11). This amounted to approximately 1% of all nonfatal violent victimizations in the 5-year period. The percentage of nonfatal violent victimizations involving firearm use in

self defense remained stable at under 2% from 1993 to 2011 (not shown in table). In 2007-11, about 44% of victims of nonfatal violent crime offered no resistance, 1% attacked or threatened the offender with another type of weapon, 22% attacked or threatened without a weapon (e.g., hit or kicked), and 26% used nonconfrontational methods (e.g., yelling, running, hiding, or arguing).

In instances where the victim was armed with a firearm, the offender was also armed with a gun in 32% of the victimizations, compared to 63% of victimizations where the offender was armed with a lesser weapon, such as a knife, or unarmed (not shown in table). A small number of property crime victims also used a firearm in self defense (103,000 victims or about 0.1% of all property victimizations); however, the majority of victims (86%) were not present during the incident. No information was available on the number of homicide victims that attempted to defend themselves with a firearm or by other means.

TABLE 10

Nonfatal firearm and nonfirearm violence reported and not reported to police, 2007–2011

	Total nonfatal violence	Firearm violence	Nonfirearm violence
Total	100%	100%	100%
Reported	46.9%	61.5%	45.7%
Not reported	51.7%	37.6%	52.9%
Reason not reported	100%	100%	100%
Dealt with it another way	35.0	12.1	36.4
Not important enough to respondent	18.4	6.2	19.1
Police could not or would not help	16.7	27.1	16.1
Fear of reprisal	6.5	31.3	5.1
Did not want to get offender in trouble advised not to report	5.1	4.3 !	5.1
Other/unknown/not one most important reason	18.2	19.0	18.2

Note: Detail may not sum to total due to rounding. Reasons for not reporting represent the reason the victim stated was most important. See appendix table 21 for standard errors.

Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%. Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2007–2011.

TABLE 11

Self-protective behaviors, by type of crime, 2007–2011

	Violen	t crime	Property	crime
Self-protective behavior	Number	Percent	Number	Percent
Total	29,618,300	100%	84,495,500	100%
Offered no resistance	12,987,300	43.8	10,162,000	12.0
Threatened or attacked with a firearm	235,700	0.8	103,000	0.1
Threatened or attacked with other weapon	391,100	1.3	38,200	
Threatened or attacked without a weapon	6,552,900	22.1	421,300	0.5
Nonconfrontational tactics ^a	7,768,700	26.2	1,187,100	1.4
Other	1,641,300	5.5	223,400	0.3
Unknown	41,300	0.1	12,200 !	
Victim was not present ^b	~	~	72,348,200	85.6

Note: See appendix table 22 for standard errors.

! Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

~Not applicable.

--Less than 0.05%.

^aIncludes yelling, running, or arguing.

^bIncludes property crime where the victim was not present.

Firearm use by offenders

In 2004, an estimated 16% of state prison inmates and 18% of federal inmates reported that they used, carried, or possessed a firearm when they committed the crime for which they were serving a prison sentence (table 12). This represented a slight change from 1997, where an estimated 18% of state prison inmates and 16% of federal inmates reported having a firearm when they committed the crime for their current sentence. During the offense that brought them to prison, 13% of state inmates and 16% of federal inmates carried a handgun. In addition, about 1% had a rifle and another 2% had a shotgun. Of inmates armed with a firearm during the offense, about 7% of state inmates and 8% of federal inmates were armed with either a single shot firearm or a conventional semiautomatic, and 2% of state inmates and 3% of federal inmates were armed with a military-style semiautomatic or fully automatic firearm (table 13).

TABLE 12

Possession of firearms by state and federal prison inmates at time of offense, by type of firearm, 1997 and 2004

	19	97	20	04
Type of firearm	State	Federal	State	Federal
Total	100%	100%	100%	100%
Firearm	18.3%	15.8%	15.8%	17.8%
Handgun	15.1	13.6	13.3	15.5
Rifle	1.3	1.4	1.3	1.5
Shotgun	2.3	2.1	1.7	2.0
Other	0.4	0.5	0.1	0.1
No firearm	81.7%	84.2%	84.2%	82.2%

Note: Includes only inmates with a current conviction. Estimates may differ from previously published BJS reports. To account for differences in the 1997 and 2004 inmate survey questionnaires, the analytical methodology used in 1997 was revised to ensure comparability with the 2004 survey. Detail may not sum to total as inmates may have had possessed more than one firearm. Source: Bureau of Justice Statistics, Survey of Inmates in State and Federal Correctional Facilities. 1997 and 2004.

TABLE 13

Possession of firearms by state and federal prison inmates at time of offense, by specific type of firearm, 1997 and 2004

	19	997	2004	
Specific type of firearm	State	Federal	State	Federal
Single shot	9.9%	7.6%	7.5%	8.2%
Conventional semiautomatic	7.8	8.3	6.6	7.9
Military-style semiautomatic or				
fully automatic	1.5	1.7	2.0	3.2
Other	0.1	0.2	0.1	0.1

Note: Includes only inmates with a current conviction. Estimates may differ from previously published BJS reports. To account for differences in the 1997 and 2004 inmate survey questionnaires, the analytical methodology used in 1997 was revised to ensure comparability with the 2004 survey.

Source: Bureau of Justice Statistics, Survey of Inmates in State and Federal Correctional Facilities, 1997 and 2004.

In 2004, among state prison inmates who possessed a gun at the time of offense, fewer than 2% bought their firearm at a flea market or gun show, about 10% purchased it from a retail store or pawnshop, 37% obtained it from family or friends, and another 40% obtained it from an illegal source (table 14). This was similar to the percentage distribution in 1997.

TABLE 14

Source of firearms possessed by state prison inmates at
time of offense, 1997 and 2004

	Percent of state	prison inmates
Source of firearm	1997	2004
Total	100%	100%
Purchased or traded from—	14.0%	11.3%
Retail store	8.2	7.3
Pawnshop	4.0	2.6
Flea market	1.0	0.6
Gun show	0.8	0.8
Family or friend	40.1%	37.4%
Purchased or traded	12.6	12.2
Rented or borrowed	18.9	14.1
Other	8.5	11.1
Street/illegal source	37.3%	40.0%
Theft or burglary	9.1	7.5
Drug dealer/off street	20.3	25.2
Fence/black market	8.0	7.4
Other	8.7%	11.2%

Note: Includes only inmates with a current conviction. Estimates may differ from previously published BJS reports. To account for differences in the 1997 and 2004 inmate survey questionnaires, the analytical methodology used in 1997 was revised to ensure comparability with the 2004 survey.

Source: Bureau of Justice Statistics, Survey of Inmates in State and Federal Correctional Facilities, 1997 and 2004.

Methodology

Estimates in this report are based primarily on data from the Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS) and the National Center for Health Statistics' (NCHS) Centers for Disease Control and Prevention Center for Disease Control's Web-based Injury Statistics Query and Reporting System (WISQARS). Additional estimates come from the School-Associated Violent Deaths Surveillance Study (SAVD), the National Electronic Injury Surveillance System All Injury Program (NEISS-AIP) data, the FBI's Supplemental Homicide Reports (SHR), the Survey of Inmates in State Correctional Facilities (SISCF), and the Survey of Inmates in Federal Correctional Facilities (SIFCF).

The National Crime Victimization Survey (NCVS)

The NCVS is an annual data collection conducted by the U.S. Census Bureau for BJS. The NCVS is a self-report survey in which interviewed persons are asked about the number and characteristics of victimizations experienced during the prior 6 months. The NCVS collects information on nonfatal personal crimes (rape or sexual assault, robbery, aggravated assault, simple assault, and personal larceny) and household property crimes (burglary, motor vehicle theft, and other theft) both reported and not reported to police. In addition to providing annual level and change estimates on criminal victimization, the NCVS is the primary source of information on the nature of criminal victimization incidents. Survey respondents provide information about themselves (such as age, sex, race and ethnicity, marital status, education level, and income) and if they experienced a victimization. For crime victims, data are collected about each victimization incident, including information about the offender (such as age, race and ethnicity, sex, and victimoffender relationship), characteristics of the crime (including time and place of occurrence, use of weapons, nature of injury, and economic consequences), whether the crime was reported to police, reasons why the crime was or was not reported, and experiences with the criminal justice system.

The NCVS is administered to persons age 12 or older from a nationally representative sample of households in the United States. In 2011, about 143,120 persons age 12 or older from 79,800 households across the country were interviewed during the year. Once selected, households remain in the sample for 3 years, and eligible persons in these households are interviewed every 6 months for a total of seven interviews. New households rotate into the sample on an ongoing basis to replace outgoing households that have been in sample for the 3-year period. The sample includes persons living in group quarters (such as dormitories, rooming houses, and religious group dwellings) and excludes persons

living in military barracks and institutional settings (such as correctional or hospital facilities) and the homeless. (For more information, see the *Survey Methodology for Criminal Victimization in the United States, 2008*, NCJ 231173, BJS website, May 2011.)

The 79,800 households that participated in the NCVS in 2011 represent a 90% household response rate. The person level response rate—the percentage of persons age 12 or older in participating households who completed an NCVS interview—was 88% in 2011.

For this report, prior to applying the weights to the data, all victimizations that occurred outside of the U.S. were excluded. From 1993 to 2011, less than 1% of the unweighted violent victimizations occurred outside of the U.S. and was excluded from the analyses.

Weighting adjustments for estimating personal victimization

Estimates in this report use data primarily from the 1993 to 2011 NCVS data files weighted to produce annual estimates for persons age 12 or older living in U.S. households. Because the NCVS relies on a sample rather than a census of the entire U.S. population, weights are designed to inflate sample point estimates to known population totals and to compensate for survey nonresponse and other aspects of the sample design.

The NCVS data files include both household and person weights. The household weight is commonly used to calculate estimates of property crimes, such as motor vehicle theft or burglary, which are identified with the household. Person weights provide an estimate of the population represented by each person in the sample. Person weights are most frequently used to compute estimates of crime victimizations of persons in the total population. Both household and person weights, after proper adjustment, are also used to form the denominator in calculations of crime rates.

The victimization weights used in this analysis account for the number of persons present during an incident and for repeat victims of series incidents. The weight counts series incidents as the actual number of incidents reported by the victim, up to a maximum of ten incidents. Series victimizations are victimizations that are similar in type but occur with such frequency that a victim is unable to recall each individual event or to describe each event in detail. Survey procedures allow NCVS interviewers to identify and classify these similar victimizations as series victimizations and collect detailed information on only the most recent incident in the series. In 2011, about 2% of all victimizations were series incidents. Weighting series incidents as the number of incidents up to a maximum of ten produces more reliable estimates of crime levels, while the cap at ten minimizes the effect of extreme outliers on the rates. Additional information on the series enumeration is detailed in *Methods for Counting High Frequency Repeat Victimizations in the National Crime Victimization Survey*, NCJ 237308, BJS website, April 2012.

Standard error computations

When national estimates are derived from a sample, as is the case with the NCVS, caution must be taken when comparing one estimate to another estimate or when comparing estimates over time. Although one estimate may be larger than another, estimates based on a sample have some degree of sampling error. The sampling error of an estimate depends on several factors, including the amount of variation in the responses, the size of the sample, and the size of the subgroup for which the estimate is computed. When the sampling error around the estimates is taken into consideration, the estimates that appear different may, in fact, not be statistically different.

One measure of the sampling error associated with an estimate is the standard error. The standard error can vary from one estimate to the next. In general, for a given metric, an estimate with a smaller standard error provides a more reliable approximation of the true value than an estimate with a larger standard error. Estimates with relatively large standard errors are associated with less precision and reliability and should be interpreted with caution.

In order to generate standard errors around estimates from the NCVS, the Census Bureau produces generalized variance function (GVF) parameters for BJS. The GVFs take into account aspects of the NCVS complex sample design and represent the curve fitted to a selection of individual standard errors based on the Jackknife Repeated Replication technique. The GVF parameters were used to generate standard errors for each point estimate (such as counts, percentages, and rates) in the report. For average annual estimates, standard errors were based on the ratio of the sums of victimizations and respondents across years.

In this report, BJS conducted tests to determine whether differences in estimated numbers and percentages were statistically significant once sampling error was taken into account. Using statistical programs developed specifically for the NCVS, all comparisons in the text were tested for significance. The primary test procedure used was Student's t-statistic, which tests the difference between two sample estimates. To ensure that the observed differences between estimates were larger than might be expected due to sampling variation, the significance level was set at the 95% confidence level. Data users can use the estimates and the standard errors of the estimates provided in this report to generate a confidence interval around the estimate as a measure of the margin of error. The following example illustrates how standard errors can be used to generate confidence intervals:

According to the NCVS, in 2011, the rate of nonfatal firearm violence was 1.8 per 1,000 (see table 1). Using the GVFs, BJS determined that the estimate has a standard error of 0.2 (see appendix table 3). A confidence interval around the estimate was generated by multiplying the standard errors by ± 1.96 (the t-score of a normal, two-tailed distribution that excludes 2.5% at either end of the distribution). Thus, the confidence interval around the 1.8 estimate from 2011 is 1.8 ± 0.2 (0.2 X 1.96) or (1.4 to 2.2). In other words, if different samples using the same procedures were taken from the U.S. population in 2011, 95% of the time the rate of nonfatal firearm violence was between 1.4 and 2.2 per 1,000.

In this report, BJS also calculated a coefficient of variation (CV) for all estimates, representing the ratio of the standard error to the estimate. CVs provide a measure of reliability and a means to compare the precision of estimates across measures with differing levels or metrics. If the CV was greater than 50%, or the unweighted sample had 10 or fewer cases, the estimate would have been noted with a "!" symbol (interpret data with caution; estimate is based on 10 or fewer sample cases, or the coefficient of variation exceeds 50%).

Many of the variables examined in this report may be related to one another and to other variables not included in the analyses. Complex relationships among variables were not fully explored in this report and warrant more extensive analysis. Readers are cautioned not to draw causal inferences based on the results presented.

Methodological changes to the NCVS in 2006

Methodological changes implemented in 2006 may have affected the crime estimates for that year to such an extent that they are not comparable to estimates from other years. Evaluation of 2007 and later data from the NCVS conducted by BJS and the Census Bureau found a high degree of confidence that estimates for 2007, 2008, 2009, and 2010 are consistent with and comparable to estimates for 2005 and previous years. The reports, *Criminal Victimization, 2006*, NCJ 219413, December 2007; *Criminal Victimization, 2007*, NCJ 224390, December 2008; *Criminal Victimization, 2008*, NCJ 227777, September 2009; *Criminal Victimization, 2009*, NCJ 231327, October 2010; *Criminal Victimization, 2010*, NCJ 235508, September 2011; and *Criminal Victimization, 2011*, NCJ 239437, October 2012, are available on the BJS website. Although caution is warranted when comparing data from 2006 to other years, the aggregation of multiple years of data in this report diminishes the potential variation between 2006 and other years. In general, findings do not change significantly if data for 2006 are excluded from the analyses.

Web-based Injury Statistics Query and Reporting System Fatal (WISQARS™ Fatal)

WISQARS Fatal provides mortality data related to injury. The mortality data reported in WISQARS Fatal come from death certificate data reported to the CDC's National Center for Health Statistics (NCHS). Data include causes of death reported by attending physicians, medical examiners, and coroners. It also includes demographic information about decedents reported by funeral directors, who obtain that information from family members and other informants. NCHS collects, compiles, verifies, and prepares these data for release to the public. The data provide information about what types of injuries are leading causes of deaths, how common they are, and who they affect. These data are intended for a broad audience—the public, the media, public health practitioners and researchers, and public health officials—to increase their knowledge of injury.

WISQARS Fatal mortality reports provide tables of the total numbers of injury-related deaths and the death rates per 100,000 U.S. population. The reports list deaths according to cause (mechanism) and intent (manner) of injury by state, race, Hispanic origin, sex, and age groupings. Data in this report are provided for homicides by firearm from 1993 to 2010, including some preliminary 2011 estimates. The injury mortality data were classified based on the International Classification of Diseases (ICD)-10 classification system from 1999 and later, and the ICD-9 system for 1998 and earlier. The comparability study showed that the comparability for homicide and firearm homicide between the two systems was very high; therefore, data are shown from both periods.³

National Electronic Injury Surveillance System All Injury Program (NEISS-AIP)

The NEISS-AIP is operated by the U.S. Consumer Product Safety Commission (CPSC). It is a collaborative effort by the National Center for Injury Prevention and Control (NCIPC) and CPSC. The NEISS is a national probability sample of hospitals in the U.S. and its territories. Data are collected about all types and external causes of nonfatal injuries and poisonings treated in U.S. hospital emergency departments, whether or not they are associated with consumer products. This report uses the estimates on nonfatal assault injuries from a firearm. This excludes injuries that were unintentional, by legal intervention, or self-harm.

School-Associated Violent Deaths Surveillance Study (SAVD)

The SAVD is an epidemiological study developed by the Centers for Disease Control and Prevention in conjunction with the U.S. Department of Education and the U.S. Department of Justice. SAVD seeks to describe the epidemiology of school-associated violent deaths, identify common features of these deaths, estimate the rate of school-associated violent death in the United States, and identify potential risk factors for these deaths. The surveillance system includes descriptive data on all schoolassociated violent deaths in the United States, including all homicides, suicides, or legal intervention in which the fatal injury occurred on the campus of a functioning elementary or secondary school; while the victim was on the way to or from regular sessions at such a school; or while attending or on the way to or from an official school-sponsored event. Victims of such incidents include nonstudents, as well as students and staff members. SAVD includes descriptive information about the school, event, victim(s), and offender(s). The SAVD Surveillance System has collected data from July 1, 1992, through the present.

SAVD uses a four-step process to identify and collect data on school-associated violent deaths. Cases are initially identified through a search of the LexisNexis newspaper and media database. Then law enforcement officials are contacted to confirm the details of the case and to determine if the event meets the case definition. Once a case is confirmed, a law enforcement official and a school official are interviewed regarding details about the school, event, victim(s), and offender(s). A copy of the full law enforcement report is also sought for each case. The information obtained on schools includes school demographics, attendance/absentee rates, suspensions/expulsions and mobility, school history of weapon-carrying incidents, security measures, violence prevention activities, school response to the event, and school policies about weapon carrying. Event information includes the location of injury, the context of injury (e.g., while classes were being held or during break), motives for injury, method of injury, and school and community events happening around the time period. Information obtained on victim(s) and offender(s) includes demographics, circumstances of the event (date/time, alcohol or drug use, and number of persons involved), types and origins of weapons, criminal history, psychological risk factors, schoolrelated problems, extracurricular activities, and family history, including structure and stressors.

For several reasons, all data from 1999 to the present are flagged as preliminary. For some recent data, the interviews with school and law enforcement officials to verify case details have not been completed. The details learned during the interviews can occasionally change the classification of a case. Also, new cases may be identified because of the expansion of the scope of the media files used for case identification. Sometimes other cases not identified during

³National Center for Health Statistics. (2001). Comparability of cause of death between ICD-9 and ICD-10: Preliminary estimates. Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_02.pdf.

earlier data years using the independent case finding efforts (which focus on nonmedia sources of information) will be discovered. Also, other cases may occasionally be identified while the law enforcement and school interviews are being conducted to verify known cases.

The FBI's Uniform Crime Reporting (UCR) Program, Supplementary Homicide Reports (SHR)

The FBI's SHR were used for information about gun type used in firearm homicides. The UCR program collects and publishes criminal offense, arrest, and law enforcement personnel statistics. Under the UCR program, law enforcement agencies submit information to the FBI monthly. Offense information is collected on the eight Part I offenses: homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. The UCR program collects data on only those crimes that come to the attention of law enforcement.

Homicide incident information—through SHR data—is submitted with details on location, victim, and offender characteristics. Homicide is defined as murder and nonnegligent manslaughter, which is the willful killing of one human being by another. The analyses excludes deaths caused by negligence, suicide, or accident; justifiable homicides; and attempts to murder. Deaths from the terrorist attacks of September 11, 2001, are not included in any of the analyses. Not all agencies that report offense information to the FBI also submit supplemental data on homicides. About 90 percent of homicides are included in the SHR. However, adjustments can be made to the weights to correct for missing victim reports. Estimates from the SHR used in this report were generated by BJS using a weight developed by BJS that reconciles the counts of SHR homicide victims with those in the UCR for the 1992 through 2011 data years.

Surveys of Inmates in State and Federal Correctional Facilities (SISCF and SIFCF)

The SISCF and the SIFCF have provided nationally representative data on state prison inmates and sentenced federal inmates held in federally owned and operated facilities. The SISCF was conducted in 1974, 1979, 1986, 1991, 1997, and 2004, and the SIFCF in 1991, 1997, and 2004. The 2004 SISCF was conducted for BJS by the U.S. Census Bureau, which also conducted the SIFCF for BJS and the Federal Bureau of Prisons. Both surveys provide information about current offense and criminal history, family background and personal characteristics, prior drug and alcohol use and treatment, gun possession, and prison treatment, programs, and services. The surveys are the only national source of detailed information on criminal offenders, particularly special populations such as drug and alcohol users and offenders who have mental health problems. Systematic random sampling was used to select the inmates, and the 2004 surveys of state and federal inmates were administered through CAPI. In 2004, 14,499 state prisoners in 287 state prisons and 3,686 federal prisoners in 39 federal prisons were interviewed.

APPENDIX TABLE 1

Numbers and rates for figure 1: Firearm homicides, 1993–2011

Year	Number	Rate per 100,000 persons
1993	18,253	7.0
1994	17,527	6.7
1995	15,551	5.8
1996	14,037	5.2
1997	13,252	4.9
1998	11,798	4.3
1999	10,828	3.9
2000	10,801	3.8
2001	11,348	4.0
2002	11,829	4.1
2003	11,920	4.1
2004	11,624	4.0
2005	12,352	4.2
2006	12,791	4.3
2007	12,632	4.2
2008	12,179	4.0
2009	11,493	3.8
2010	11,078	3.6
2011	11,101	3.6

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

APPENDIX TABLE 2

Numbers, rates, and standard errors for figure 2: Nonfatal firearm victimizations, 1993–2011

	Number	Standard error	Rate per 1,000 persons age 12 or older	Standard error
1993	1,529,700	104,582	7.3	0.5
1994	1,568,200	83,431	7.4	0.4
1995	1,193,200	70,572	5.5	0.3
1996	1,100,800	68,653	5.1	0.3
1997	1,024,100	72,643	4.7	0.3
1998	835,400	69,401	3.8	0.3
1999	640,900	54,713	2.9	0.2
2000	610,200	55,220	2.7	0.2
2001	563,100	53,309	2.5	0.2
2002	540,000	50,299	2.3	0.2
2003	467,300	47,783	2.0	0.2
2004	456,500	47,513	1.9	0.2
2005	503,500	55,594	2.1	0.2
2006	614,400	61,310	2.5	0.2
2007	554,800	55,886	2.2	0.2
2008	371,300	45,794	1.5	0.2
2009	410,100	48,765	1.6	0.2
2010	415,000	47,172	1.6	0.2
2011	467,300	53,197	1.8	0.2

APPENDIX TABLE 3 Standard errors for table 1: Criminal firearm violence, 1993–2011

		Ν	lumber		
Year	Total fatal and nonfatal firearm violence	Nonfatal firearm victimizations	Nonfatal firearm incidents	Rate of nonfatal firearm victimization	Percent of all violence involving firearms
1993	105,349	104,582	91,169	0.5	0.6%
1994	84,005	83,431	73,911	0.4	0.4
1995	71,131	70,572	64,501	0.3	0.4
1996	69,183	68,653	62,377	0.3	0.5
1997	73,220	72,643	66,331	0.3	0.5
1998	70,022	69,401	60,556	0.3	0.5
1999	55,268	54,713	48,457	0.2	0.5
2000	55,810	55,220	48,015	0.2	0.6
2001	53,967	53,309	49,987	0.2	0.7
2002	50,946	50,299	45,234	0.2	0.6
2003	48,494	47,783	42,668	0.2	0.6
2004	48,200	47,513	44,433	0.2	0.7
2005	56,378	55,594	51,864	0.2	0.8
2006	62,038	61,310	57,669	0.2	0.7
2007	56,652	55,886	49,166	0.2	0.8
2008	46,637	45,794	42,966	0.2	0.7
2009	49,561	48,765	46,881	0.2	0.8
2010	47,913	47,172	44,695	0.2	0.9
2011	53,942	53,197	49,563	0.2	0.8

~Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011.

APPENDIX TABLE 4

Standard errors for table 2: Percent of violence involving a firearm, by type of crime, 1993–2011

Year	Nonfatal violence	Robbery	Aggravated assault	
1993	0.6%	2.2%	1.9%	
1994	0.4	1.9	1.5	
1995	0.4	2.1	1.5	
1996	0.4	2.0	1.5	
1997	0.5	2.2	1.7	
1998	0.5	2.5	1.9	
1999	0.5	2.3	1.8	
2000	0.6	2.6	2.2	
2001	0.6	3.4	2.3	
2002	0.6	3.2	2.5	
2003	0.6	3.1	2.3	
2004	0.7	3.2	2.4	
2005	0.8	3.3	2.8	
2006	0.7	2.7	2.4	
2007	0.8	2.9	2.9	
2008	0.7	3.3	3.1	
2009	0.8	3.8	2.9	
2010	0.9	3.7	3.1	
2011	0.8	4.0	3.2	
Source: Bur 1993–2011	eau of Justice Statistics, Natio	onal Crime Victin	nization Survey,	

APPENDIX TABLE 5 Standard errors for table 3: Criminal firearm violence, by type of firearm, 1994–2011

	Nonfatal violence									
	Hand	Handgun		rearm	Gun type unknown					
Year	Number	Percent	Number	Percent	Number	Percent				
1994	94,313	1.8%	26,713	1.6%	6,951	0.4%				
1995	77,109	1.6	21,832	1.5	4,899	0.4				
1996	66,253	1.9	21,995	1.8	4,366	0.4				
1997	68,335	2.3	25,950	2.2	5,534	0.5				
1998	68,151	2.6	25,521	2.5	4,522	0.5				
1999	63,909	2.5	18,379	2.3	4,189	0.6				
2000	57,439	2.8	17,323	2.6	4,260	0.7				
2001	53,625	3.1	17,115	2.7	7,586	1.3				
2002	48,977	3.1	16,006	2.7	7,929	1.4				
2003	46,655	3.2	14,670	2.7	7,392	1.4				
2004	45,846	3.6	15,535	3.1	8,509	1.8				
2005	50,621	3.8	17,269	3.3	8,153	1.7				
2006	56,341	3.1	15,872	2.7	8,415	1.5				
2007	56,630	3.2	18,308	2.9	6,598	1.1				
2008	48,199	3.6	16,622	3.3	4,666	1.0				
2009	47,110	3.7	14,157	3.4	4,688	1.2				
2010	50,636	3.1	11,837	2.7	4,313	1.0				
2011	43,185	3.1	13,868	2.9	2,676	0.6				
Source: Bureau of Ju	ustice Statistics, National Cr	ime Victimization Survey	, 1993–2011.							

APPENDIX TABLE 6

Numbers and rates for figure 3: Firearm homicides, by sex, 1993–2010

					_
APP	ENI	DIX	TAE	BLE	7

Rates and standard errors for figure 4: Nonfatal firearm violence, by sex, 1994–2011

Female

Male

	Num	nber	Rate per 100,000 persons			
Year	Male	Female	Male	Female		
1993	15,228	3,025	12.0	2.3		
1994	14,766	2,761	11.5	2.1		
1995	13,021	2,530	10.0	1.9		
1996	11,735	2,302	8.9	1.7		
1997	11,147	2,105	8.4	1.5		
1998	9,771	2,027	7.2	1.4		
1999	8,944	1,884	6.5	1.3		
2000	9,006	1,795	6.5	1.3		
2001	9,532	1,816	6.8	1.3		
2002	9,899	1,930	7.0	1.3		
2003	10,126	1,794	7.1	1.2		
2004	9,921	1,703	6.9	1.1		
2005	10,561	1,791	7.3	1.2		
2006	10,886	1,905	7.4	1.3		
2007	10,767	1,865	7.3	1.2		
2008	10,361	1,818	6.9	1.2		
2009	9,615	1,878	6.4	1.2		
2010	9,340	1,738	6.2	1.1		

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

Year Rate* Standard error Rate* Standard error 1994 10.1 0.6 4.7 0.4 9.3 3.7 0.3 1995 0.5 1996 7.6 0.4 3.1 0.2 1997 6.4 0.4 3.5 0.3 1998 5.5 0.4 3.0 0.3 2.3 0.2 1999 4.4 0.4 3.7 1.9 0.2 2000 0.3 2001 3.5 0.3 1.7 0.2 2002 2.9 0.3 1.9 0.2 2003 2.7 0.2 1.6 0.2 2004 2.5 0.2 1.4 0.2 2005 2.5 0.3 1.4 0.2 2006 2.8 0.3 1.8 0.2 2007 2.8 0.3 1.9 0.2 2008 2.2 0.2 1.5 0.2 2009 2.0 0.2 1.1 0.2 2010 2.0 0.2 1.2 0.2 1.9 0.2 1.6 0.2 2011

*Per 1,000 persons age 12 or older.

APPENDIX TABLE 8 Numbers and rates for figure 5: Firearm homicides, by race, 1993–2010

			Number			Rate per	100,000 persons	
Year	White	Black	American Indian/ Alaska Native	Asian/Pacific Islander	White	Black	American Indian/ Alaska Native	Asian/Pacific Islander
1993	7,918	9,824	106	405	3.7	30.1	4.6	4.6
1994	7,774	9,302	123	328	3.6	28.0	5.2	3.6
1995	7,144	7,935	130	342	3.2	23.4	5.3	3.6
1996	6,240	7,403	90	304	2.8	21.5	3.6	3.0
997	6,025	6,841	96	290	2.7	19.5	3.7	2.8
998	5,412	6,053	99	234	2.4	17.0	3.6	2.2
999	4,918	5,577	104	229	2.2	15.4	3.7	2.0
2000	4,806	5,699	86	210	2.1	15.6	2.9	1.8
001	5,188	5,885	87	188	2.2	15.8	2.8	1.5
002	5,185	6,285	117	242	2.2	16.7	3.7	1.9
2003	5,173	6,397	109	241	2.2	16.7	3.3	1.8
004	5,119	6,201	104	200	2.2	16.0	3.0	1.4
2005	5,266	6,703	117	266	2.2	17.1	3.3	1.8
2006	5,279	7,113	119	280	2.2	17.9	3.2	1.9
2007	5,380	6,960	91	201	2.2	17.2	2.4	1.3
2008	5,305	6,569	97	208	2.2	16.0	2.4	1.3
2009	4,950	6,216	112	215	2.0	14.9	2.7	1.3
2010	4,647	6,151	113	167	1.9	14.6	2.7	1.0

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

APPENDIX TABLE 9

Numbers and rates for figure 6: Firearm homicides, by Hispanic origin, 1993–2010

	Nu	mber	Rate per 10	Rate per 100,000 persons			
Year	Hispanic	Non-Hispanic	Hispanic	Non-Hispanic			
1993	3,192	14,597	12.4	6.3			
1994	3,149	14,065	11.7	6.0			
1995	3,008	12,260	10.7	5.2			
1996	2,529	11,229	8.6	4.7			
1997	2,298	10,868	7.4	4.5			
1998	2,090	9,620	6.5	4.0			
1999	1,939	8,821	5.7	3.6			
2000	1,958	8,767	5.6	3.6			
2001	2,123	9,134	5.7	3.7			
2002	2,168	9,575	5.6	3.9			
2003	2,316	9,536	5.8	3.8			
2004	2,241	9,323	5.4	3.7			
2005	2,453	9,835	5.7	3.9			
2006	2,472	10,260	5.5	4.0			
2007	2,385	10,193	5.2	4.0			
2008	2,260	9,882	4.7	3.9			
2009	2,115	9,275	4.3	3.6			
2010	1,919	9,082	3.8	3.5			

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

APPENDIX TABLE 10 Rates and standard errors for figure 7: Nonfatal firearm violence, by race and Hispanic origin, 1994–2011

	14	/hite	P	lack	ц:,	spanic	Americ Alaska	an Indian/	Acian/Da	cific Islander	Two or	nore races
Year	N	Standard error	Rate*	Standard error	Rate*	Standard	Rate*	Standard	Rate*	Standard error	Rate*	Standard error
1994	5.2	0.3	16.3	1.3	12.7	1.4		5.3	10.3	2.0		
							15.3!	5.5 4.9			~	~
1995	4.6	0.3	14.2	1.1	12.1	1.1	16.3		4.9	1.1	~	~
1996	3.9	0.2	11.6	0.9	9.3	0.9	13.3!	4.4	3.4	0.9	~	~
1997	4.0	0.3	9.4	0.9	6.9	0.8	3.7 !	2.6	2.0	0.7	~	~
1998	3.4	0.3	7.4	0.8	5.6	0.8	20.9!	6.6	3.9	1.0	~	~
1999	2.2	0.2	7.9	0.9	5.0	0.8	25.1!	7.5	4.0	1.1	~	~
2000	1.8	0.2	7.0	0.8	4.7	0.7	4.8 !	3.2	1.9	0.7	~	~
2001	2.0	0.2	5.0	0.7	3.8	0.6	1.1 !	1.5	1.5!	0.6	~	~
2002	1.7	0.2	5.6	0.7	3.7	0.6	1.1 !	1.4	0.9!	0.4	~	~
2003	1.5	0.2	5.7	0.7	2.6	0.4		~	1.0!	0.5	~	~
2004	1.7	0.2	4.4	0.6	1.5	0.3		~	1.1!	0.5	0.9!	1.1
2005	1.6	0.2	4.2	0.7	2.2	0.4		~	1.2!	0.5	2.8 !	2.0
2006	1.7	0.2	4.4	0.7	3.4	0.6	1.8!	1.9	2.1!	0.7	4.0!	2.2
2007	1.4	0.2	7.1	0.9	3.0	0.5	3.3!	2.4	1.7!	0.6	4.7 !	2.1
2008	1.0	0.1	6.9	0.8	1.9	0.4	3.2!	2.3	1.0!	0.5	2.7 !	1.5
2009	0.9	0.1	5.1	0.7	1.7	0.4	2.9!	2.3	0.9!	0.4	1.4 !	1.2
2010	1.0	0.1	4.5	0.7	2.1	0.4	9.2 !	4.2	0.3!	0.2	5.7!	2.5
2011	1.4	0.1	2.8	0.4	2.2	0.4	8.6 !	3.4	0.6!	0.3	7.6	2.3

*Per 1,000 persons age 12 or older.

! Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

~Not applicable.

--Less than 0.05.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011.

APPENDIX TABLE 11 Numbers for table 4: Firearm homicides, by age, 1993–2011

Humbers	TOT CODIC 4	. i ii cui ii		acs, by a	ge, 1995	2011
Year	11 or younger	12–17	18–24	25-34	35–49	50 or older
1993	240	1,735	5,673	5,295	3,808	1,476
1994	176	1,736	5,435	5,059	3,700	1,399
1995	183	1,597	4,726	4,448	3,222	1,351
1996	178	1,295	4,334	3,918	3,030	1,266
1997	174	1,134	4,148	3,706	2,905	1,168
1998	157	888	3,753	3,231	2,669	1,082
1999	142	859	3,319	3,048	2,419	1,026
2000	110	709	3,371	3,074	2,488	1,037
2001	150	685	3,611	3,308	2,530	1,053
2002	151	721	3,708	3,465	2,646	1,125
2003	121	684	3,840	3,540	2,624	1,093
2004	105	763	3,485	3,503	2,533	1,214
2005	111	810	3,808	3,780	2,689	1,145
2006	142	940	4,030	3,767	2,688	1,216
2007	140	898	3,895	3,751	2,737	1,202
2008	140	844	3,662	3,612	2,655	1,264
2009	142	745	3,398	3,300	2,538	1,364
2010	127	708	3,273	3,331	2,294	1,340

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

APPENDIX TABLE 12

Standard errors for table 4: Nonfatal firearm violence, by age, 1994–2011

Year	12-17	18-24	25-34	35-49	50 or older
1994	1.2	1.4	0.8	0.6	0.2
1995	0.9	1.2	0.6	0.4	0.2
1996	0.8	1.0	0.6	0.4	0.2
1997	0.8	1.1	0.6	0.4	0.2
1998	0.8	1.1	0.5	0.4	0.2
1999	0.7	1.0	0.6	0.3	0.2
2000	0.6	0.8	0.5	0.3	0.2
2001	0.5	0.8	0.4	0.3	0.2
2002	0.5	0.8	0.4	0.3	0.1
2003	0.5	0.7	0.4	0.2	0.1
2004	0.4	0.6	0.4	0.3	0.2
2005	0.4	0.7	0.5	0.3	0.2
2006	0.5	0.8	0.5	0.3	0.2
2007	0.7	0.7	0.5	0.3	0.2
2008	0.6	0.5	0.4	0.3	0.1
2009	0.3	0.6	0.4	0.3	0.1
2010	0.2	0.8	0.4	0.2	0.1
2011	0.3	0.6	0.3	0.2	0.1

*Rate per 1,000 persons age 12 or older.

Interpret with caution. Estimate based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2011.

APPENDIX TABLE 13 Numbers and rates for figure 8: Firearm homicides, by region, 1993–2011

		Nu	mber			Rate per 100),000 persons	
Year	Northeast	South	Midwest	West	Northeast	South	Midwest	West
1993	2,918	7,863	3,365	4,107	5.6	8.7	5.5	7.3
1994	2,489	7,577	3,391	4,070	4.8	8.3	5.5	7.1
1995	2,100	6,659	2,980	3,812	4.0	7.1	4.8	6.5
1996	1,838	6,248	2,791	3,160	3.5	6.6	4.4	5.3
1997	1,641	6,020	2,661	2,930	3.1	6.3	4.2	4.9
1998	1,347	5,434	2,490	2,527	2.5	5.6	3.9	4.1
1999	1,327	4,905	2,319	2,277	2.5	5.0	3.6	3.7
2000	1,391	4,846	2,284	2,280	2.6	4.8	3.6	3.6
2001	1,407	4,989	2,477	2,475	2.6	4.9	3.8	3.8
2002	1,406	5,292	2,381	2,750	2.6	5.1	3.7	4.2
2003	1,489	5,395	2,324	2,712	2.7	5.2	3.6	4.1
2004	1,485	5,164	2,212	2,763	2.7	4.9	3.4	4.1
2005	1,554	5,536	2,387	2,875	2.9	5.2	3.6	4.2
2006	1,715	5,701	2,505	2,870	3.2	5.2	3.8	4.2
2007	1,577	6,055	2,354	2,646	2.9	5.5	3.6	3.8
2008	1,506	5,778	2,439	2,456	2.7	5.2	3.7	3.5
2009	1,440	5,438	2,359	2,256	2.6	4.8	3.5	3.2
2010	1,552	5,082	2,296	2,148	2.8	4.4	3.4	3.0

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS), 1993–2010. Retrieved March 2013 from www.cdc.gov/ncipc/wisqars.

APPENDIX TABLE 14 Rates and standard errors for figure 9: Nonfatal firearm violence, by region, 1997–2011

	N	ortheast	Ν	lidwest		South		West
Year	Rate*	Standard error						
1997	3.1	0.4	4.7	0.5	5.4	0.4	5.7	0.5
998	2.1	0.3	3.9	0.4	5.0	0.4	5.1	0.5
999	1.4	0.3	3.0	0.4	3.6	0.4	4.9	0.5
2000	1.3	0.3	2.5	0.3	2.8	0.3	4.5	0.5
2001	1.4	0.3	2.6	0.4	3.0	0.3	2.8	0.4
2002	1.3	0.3	2.2	0.3	3.3	0.3	2.0	0.3
2003	1.0	0.2	2.1	0.3	2.9	0.3	1.9	0.3
2004	0.8	0.2	2.6	0.3	1.9	0.2	2.2	0.3
2005	0.9	0.2	2.8	0.4	1.9	0.3	1.9	0.3
2006	1.2	0.3	2.6	0.4	2.7	0.3	2.2	0.3
2007	0.9	0.2	2.1	0.3	3.5	0.4	1.9	0.3
2008	0.7	0.2	2.1	0.3	2.8	0.3	1.1	0.2
2009	0.8	0.2	2.0	0.3	1.7	0.2	1.4	0.3
2010	0.9	0.2	1.9	0.3	1.7	0.2	1.8	0.3
2011	1.3	0.2	1.7	0.3	1.9	0.2	1.8	0.3

*Rate per 1,000 persons age 12 or older.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1996–2011.

APPENDIX TABLE 15 Rates and standard errors for figure 10: Nonfatal firearm violence, by urban-rural location, 1994–2011

		Urban	S	uburban	Rural		
Year	Rate*	Standard error	Rate*	Standard error	Rate*	Standard error	
1994	10.6	0.7	6.3	0.4	5.2	0.5	
1995	10.1	0.6	5.5	0.4	3.6	0.4	
1996	8.4	0.5	4.4	0.3	3.1	0.4	
1997	7.3	0.5	3.9	0.3	3.6	0.4	
1998	6.2	0.5	3.8	0.3	2.3	0.3	
1999	5.3	0.5	3.1	0.3	1.0	0.2	
2000	4.8	0.5	2.3	0.2	1.0	0.2	
2001	4.4	0.4	2.0	0.2	1.4	0.3	
2002	4.4	0.4	1.8	0.2	1.1	0.2	
2003	3.7	0.4	1.7	0.2	0.9	0.2	
2004	3.0	0.3	1.7	0.2	1.0	0.2	
2005	3.4	0.4	1.5	0.2	1.1	0.3	
2006	3.3	0.4	1.8	0.2	1.9	0.4	
2007	2.6	0.3	2.3	0.2	1.9	0.3	
2008	2.2	0.3	1.8	0.2	1.2	0.3	
2009	2.6	0.3	1.1	0.2	0.9	0.2	
2010	2.8	0.3	1.2	0.2	0.7	0.2	
2011	2.5	0.3	1.4	0.2	1.2	0.2	

*Rate per 1,000 persons age 12 or older.

APPENDIX TABLE 16	
Rates and standard errors for table 5: Nonfatal firearm violence, by population size, 1997-	-2011

	Not	a place	Under	100,000	100.00)-249,999	250.000)-499,999	500.000)-999,999	1 millio	n or more
Year	Rate*	Standard error	Rate*	Standard error	Rate*	Standard error	Rate*	Standard error	Rate*	Standard error	Rate*	Standard error
1997	3.9	0.4	3.8	0.3	7.0	0.9	10.3	1.3	7.3	1.3	7.3	1.0
1998	3.0	0.3	3.9	0.3	4.8	0.8	7.0	1.1	9.2	1.6	5.7	0.9
1999	1.9	0.3	3.1	0.3	3.1	0.6	5.5	1.0	9.0	1.6	6.4	1.0
2000	1.5	0.2	2.2	0.2	3.9	0.7	6.5	1.1	6.3	1.3	5.6	0.9
2001	1.4	0.2	2.1	0.2	4.1	0.7	6.1	1.1	5.5	1.2	5.1	0.9
2002	1.2	0.2	2.3	0.2	2.8	0.6	3.9	0.8	4.9	1.1	5.3	0.8
2003	1.4	0.2	2.0	0.2	2.8	0.5	3.3	0.7	5.1	1.1	3.6	0.7
2004	1.4	0.2	1.4	0.2	3.0	0.6	4.1	0.9	5.5	1.2	2.7	0.6
2005	1.2	0.2	1.6	0.2	2.9	0.6	3.6	0.9	4.5	1.2	4.6	0.9
2006	1.6	0.2	2.1	0.2	2.6	0.6	2.6	0.8	3.8	1.0	4.9	0.9
2007	1.5	0.2	2.6	0.3	2.7	0.5	2.4	0.7	5.4	1.1	2.1	0.5
2008	0.8	0.2	2.1	0.2	2.1	0.5	3.2	0.8	4.9	1.0	1.4	0.4
2009	0.9	0.2	1.1	0.2	2.2	0.5	3.0	0.8	4.0	1.0	3.5	0.7
2010	0.9	0.2	1.2	0.2	1.8	0.5	2.8	0.8	5.1	1.1	4.0	0.8
2011	1.4	0.2	1.2	0.2	1.3	0.3	3.9	0.8	4.6	0.9	3.2	0.6

*Rate per 1,000 persons age 12 or older.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1996–2011.

APPENDIX TABLE 17

Standard errors for table 6: Nonfatal firearm and nonfirearm violence, by victim-offender relationship, 2007–2011

Relationship		Fire	earm violence	Nonfi	rearm violence
to victim	Total nonfatal violence	Number	Percent of total violence	Number	Percent of total violence
Total	520,018	107,331	0.3%	495,683	0.4%
Nonstranger	351,653	56,980	0.3	341,349	0.4
Intimate	167,301	27,453	0.6	163,040	0.6
Other relative	105,593	24,480	1.1	100,985	1.2
Friend/acquaintance	247,394	39,620	0.4	240,775	0.5
Stranger	281,855	74,319	0.6	262,843	0.7
Unknown	126,046	34,768	1.1	118,113	1.2

APPENDIX TABLE 18 Standard errors for table 7: Nonfatal firearm and nonfirearm violence, by location of crime, 2007–2011

	Total nonfatal violence		Firearm vi	Firearm violence		Nonfirearm violence	
Location	Number	Percent	Total number	Percent	Total number	Percent	
Total	520,094	~	107,331	~	495,761	~	
√ictims home or lodging	204,185	0.6%	42,032	1.6%	195,889	0.6%	
Near victim's home	170,118	0.5	46,062	1.8	159,113	0.5	
n, at, or near a friend, neighbor, or relative's home	106,117	0.3	22,283	1.0	102,275	0.3	
Commercial place	125,178	0.4	27,429	1.2	120,070	0.4	
Parking lot or garage	91,497	0.3	37,086	1.5	80,309	0.3	
School	150,761	0.5	6,544	0.3	150,471	0.5	
Open area, on street, or public transportation	166,506	0.5	46,260	1.8	155,261	0.5	
Other location	128,572	0.4	18,853	0.8	126,101	0.4	

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2007–2011.

APPENDIX TABLE 19

Standard errors for table 9: Nonfatal firearm and nonfirearm violence, by injury and treatment received, 2007–2011

	Total nonfat	al violence	Firearm v	iolence	Nonfirearm violence	
Injury and treatment	Number	Percent	Total number	Percent	Total number	Percent
Injury	520,094	~	107,331	~	495,761	~
Not injured	435,239	0.7%	92,106	1.8%	414,216	0.7%
Injured	221,742	0.6	46,376	1.8	212,304	0.6
Serious injuries	76,874	0.2	23,654	1.0	73,196	0.3
Gun shot	12,758		12,758	0.6	~	~
Minor injuries	189,519	0.5	38,061	1.5	182,281	0.6
Rape without other injuries	39,058	0.1	4,232	0.2	38,750	0.1
Treatment for injury	221,742	~	46,376	~	212,304	~
No treatment	159,205	1.3%	22,999	3.7%	156,054	1.3%
Any treatment	130,902	1.2	38,813	3.8	121,399	1.3
Treatment setting	130,902	~	38,813	~	121,399	~
At the scene/home of victim, neighbor, or friend/ other location	70,643	1.7%	15,653	3.8%	68,065	1.9%
In doctor's office, hospital emergency room, or overnight at hospital	101,753	1.8	34,730	3.8	92,599	1.9

~Not applicable.

APPENDIX TABLE 20

Numbers and standard errors for figure 11: Nonfatal firearm injuries, 2001–2011

Veer	Number	Chan daud annau
Year	Number	Standard error
2001	41,044	10,287
2002	37,321	9,282
2003	42,505	11,558
2004	43,592	11,764
2005	50,320	14,431
2006	52,748	15,027
2007	48,676 !	15,139
2008	56,626	16,648
2009	44,466	11,767
2010	53,738	15,769
2011	55,544	15,671

! Interpret with caution. Estimate based on fewer than 20 NEISS cases (based on unweighted data), national estimates less than 1,200 (based on weighted data), or the coefficient of variation (CV) of the estimate greater than 30%.

Source: Consumer Product Safety Commission, National Electronic Injury Surveillance System All Injury Program (NEISS-AIP), 2001–2011, accessed from the National Center for Injury Prevention and Control, CDC.

APPENDIX TABLE 21

Standard errors for table 10: Nonfatal firearm and nonfirearm violence reported and not reported to police, 2007–2011

Total nonfatal violence ~ 0.7%	Firearm violence ~	Nonfirearm violence ~
	~	~
0.7%		
0.7 /0	2.1%	0.7%
0.7	2.1	0.8
~	~	~
0.9%	2.1%	0.9%
0.7	1.6	0.7
0.7	3.0	0.7
0.4	3.1	0.4
0.4	1.3	0.4
0.7	2.6	0.7
-	~ 0.9% 0.7 0.7 0.4 0.4	~ ~ 0.9% 2.1% 0.7 1.6 0.7 3.0 0.4 3.1 0.4 1.3

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2007–2011.

APPENDIX TABLE 22

Standard errors for table 11: Self-protective behaviors, by type of crime, 2007–2011

	Violent	Violent crime		
Self-protective behavior	Total number	Percent	Total number	Percent
Total	520,094	~	619,179	~
Offered no resistance	312,558	0.7%	295,645	0.3%
Threatened or attacked with a firearm	30,347	0.1	24,437	
Threatened or attacked with other weapon	40,012	0.1	14,630	
Threatened or attacked without a weapon	205,362	0.6	51,411	0.1
Nonconfrontational tactics	227,856	0.6	90,178	0.1
Other reaction	90,004	0.3	36,683	
Unknown reaction	12,068		8,176	
Victim was not present	~	~	641,196	0.4
~Not applicable.				

--Less than 0.05%.



The Bureau of Justice Statistics is the statistics agency of the U.S. Department of Justice. William J. Sabol is acting director.

This report was written by Michael Planty, PhD. and Jennifer L. Truman, PhD. Erica Smith, Tracy Snell, and Lauren Glaze provided statistical and technical assistance. Erika Harrell, Tracy Snell, Lauren Glaze, and Alexia Cooper verified the report.

Jill Thomas edited the report, and Tina Dorsey produced the report under the supervision of Doris J. James.

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DEPARTMENT OF THE TREASURY BUREAU OF ALCOHOL, TOBACCO AND FIREARMS WASHINGTON, D.C. 20226

JUL 06 1989

MEMORANDUM T0:	Director
FROM:	Associate Director (Compliance Operations)
SUBJECT:	Report and Recommendation on the Importability of Certain Semiautomatic Rifles

The working group has completed its evaluation of the semiautomatic rifles whose importation was suspended pending a determination as to whether these weapons are, as required by 18 U.S.C. § 925(d)(3), of a type "generally recognized as particularly suitable for or readily adaptable to sporting purposes".

Attached for your review and approval is the report and recommendation on the importability of these rifles.

Janie R. Black Daniel Black

Attachment Approved: Alephen E. Higgins 7/6/89 Disapprove:

REPORT AND RECOMMENDATION OF THE ATF WORKING GROUP ON THE IMPORTABILITY OF CERTAIN SEMIAUTOMATIC RIFLES

SUSPENSION OF ASSAULT-TYPE RIFLE IMPORTATIONS

On March 14, 1989, ATF announced that it was suspending, effective immediately, the importation of several makes of assault-type rifles, pending a decision as to whether these weapons meet the statutory test that they are of a type generally recognized as particularly suitable for or readily adaptable to sporting purposes. The announcement stated that ATF would not approve, until further notice, the importation of AKS-type weapons, Uzi carbines, FN/FAL-type weapons, FN/FNC-type weapons and Steyr Aug semiautomatic weapons. On April 5, 1989, the suspension was expanded to include all similar assault-type rifles.

For purposes of this suspension, assault-type rifles were rifles which generally met the following criteria:

- a. military appearance
- b. large magazine capacity
- c. semiautomatic version of a machinegun

Based on these criteria, ATF suspended action on pending applications and suspended outstanding permits covering certain firearms listed in Attachment 1. These included both centerfire and .22 rimfire caliber firearms. At that time, ATF indicated that the reexamination of these weapons would take approximately 90 days.

This ATF working group was established to conduct the reevaluation of the importability of these semiautomatic rifles. This report represents the findings and recommendations of the working group.

BACKGROUND

Section 925(d)(3) of Title 18, United States Code, as amended, provides in pertinent part that:

The Secretary shall authorize a firearm...to be imported or brought into the United States .. if the firearm ..

(3) is of a type that does not fall within the definition of a firearm as defined in section 5845(a) of the Internal Revenue Code of 1954 and is generally recognized as particularly suitable for or readily adaptable to sporting purposes, excluding surplus military firearms. . .

This provision was originally enacted by Title IV of the Omnibus Crime Control and Safe Streets Act of 1968, and was also contained in Title I of the Gun Control Act of 1968, which amended Title IV later that year. According to the Senate Report on Title IV, this provision was intended to "curb the flow of surplus military weapons and other firearms being brought into the United States which are not particularly suitable for target shooting or hunting." S. Rep. No. 1097, 90th Cong. 2d Sess. 80, 1968 U.S. Code Cong. and Admin. News 2112, 2167.

Moreover, there is legislative history which indicates that Congress intended the standard to allow the importation of traditional sporting rifles, while excluding military-type rifles. The Senate Report on the Gun Control Act observed that the importation standards ". . . are designed and intended to provide for the importation of quality made, sporting firearms, including . . . rifles such as those manufactured and imported by Browning and other such manufacturers and importers of firearms." S. Rep. No. 1501, 90th Cong. 2d Sess. 38 (1968). Significantly, the rifles being imported by Browning at that time were semiautomatic and manually operated traditional sporting rifles of high quality.¹

An explanation of the effect of this section by one of the sponsors of the bill specifically stated that military firearms would not meet the "sporting purposes" test for importation. The mere fact that a military firearm may be used in a sporting event does not make it importable as a sporting firearm².

There is a reference in the Senate Report on Title IV which notes that the importation prohibition "... would not interfere with the bringing in of currently produced firearms, such as rifles ... of recognized quality which are used for hunting and for recreational purposes, or for personal protection." S. Rep. No. 1097, 90th Cong. 2d Sess. 80, 1968 U.S. Code Cong. and Admin. News 2112, 2167. However, this language is not inconsistent with the expressed purpose of restricting importation to firearms particularly suitable for target shooting or hunting since firearms particularly suitable for target shooting or hunting such as recreational shooting and personal protection.

The determination of a weapon's suitability for sporting purposes "rest[s] directly with the Secretary of the Treasury." 114 Cong. Rec. 27465 (1968) (Statement of Sen. Murphy). While the legislative history suggests that the term "sporting purposes" refers to the traditional sports of target shooting, trap and skeet shooting, and hunting, the statute itself provides no criteria beyond the "generally recognized" language of section 925(d)(3). S. Rep. No. 1097, 90th Cong. 2d Sess. 80, 1968 U.S. Code Cong. and Admin. News 2167. The Senate Report on the Gun Control Act stated:

The difficulty of defining weapons characteristics to meet this target [of eliminating importation of weapons used in crime] without discriminating against sporting quality firearms, was a major reason why the Secretary of the Treasury has been given fairly broad discretion in defining and administering the import prohibition.

S. Rep. No. 1501, 90th Cong. 2d Sess. 38 (1968).

Following enactment of the Gun Control Act in 1968, the Secretary established a Firearms Evaluation Panel to provide guidelines for implementation of the "sporting purposes" test of section 925(d)(3). This panel was composed of representatives from the military, law enforcement, and the firearms industry. The panel focused its attention on handguns and recommended the adoption of factoring criteria to evaluate the various types of handguns. These factoring criteria are based upon such considerations as overall length of the firearm, caliber, safety features, and frame construction. An evaluation sheet (ATF Form 4590) was developed thereafter by ATF and put into use for evaluating handguns pursuant to section 925(d)(3). Attachment 2.

The 1968 Firearms Evaluation Panel did not propose criteria for evaluating rifles and shotguns under section 925(d)(3). Other than surplus military firearms which Congress addressed separately, long guns being imported prior to 1968 were generally conventional rifles and shotguns specifically intended for sporting purposes. Thus, in 1968, there was no cause to develop criteria for evaluating the sporting purposes of rifles and shotguns. Until recently, all rifles and shotguns were approved for importation so long as they were not otherwise excluded by section 925(d)(3). Only rifles and shotguns covered by the National Firearms Act (NFA), 26 U.S.C. S 5845(a) (for example, machineguns and short-barreled rifles and shotguns), and surplus military rifles and shotguns had been denied importation.

The Firearms Evaluation Panel did briefly comment on whether a model BM59 Beretta, 7.62mm NATO Caliber Sporter Version Rifle was suitable for sporting purposes. Minutes of the Firearms Advisory Panel, December 10, 1968. Attachment 3. It was the consensus of the Panel that this rifle did have a particular use in target shooting and hunting. Accordingly, it was recommended that importation of the Beretta BM59, together with the SIG-AMT 7.62mm NATO Caliber Sporting Rifle and the Cetme 7.62mm NATO Caliber Sporting Rifle, be authorized for importation. (The Beretta BM59 and the Cetme, the predecessor to the HK91, are two of the rifles whose importation has been suspended. The SIG-AMT is no longer being produced.) However, the Panel recommended that importation of these weapons should include the restriction that they not possess combination flash suppressors/grenade launchers.

The working group found the Panel's consideration of these rifles to be superficial and unpersuasive. The vast majority of the work of the 1968 Panel was devoted to handguns and the establishment of the factoring criteria for the importation of handguns. Indeed, we found compelling evidence that these rifles are not generally recognized as particularly suitable for sporting purposes.

The first time that ATF looked beyond the restrictions on NFA and surplus military rifles and shotguns and undertook a meaningful analysis under the "sporting purposes" test was in 1984. At that time, ATF was faced with a new breed of imported shotgun. It was clear that the historical assumption that all shotguns were sporting was no longer viable. Specifically, ATF was asked to determine whether the Striker-12 shotgun was suitable for sporting purposes. This shotgun is a military/law enforcement weapon initially designed and manufactured in South Africa for riot control. When the importer was asked to provide evidence of sporting purposes for the weapon, ATF was provided information that the weapon was suitable for police/combat style competitions. ATF determined that this type of competition did not constitute "sporting purposes, such as hunting, and trap and skeet shooting. Accordingly, importation was denied. Attachment 4.

Thereafter, in 1986, the Gilbert Equipment Company requested that the USAS-12 shotgun be classified as a sporting firearm under section 925(d)(3). After examination and testing of the weapon, ATF found that it was a semiautomatic version of a selective fire military-type assault shotgun. In this case, ATF determined that, due to its weight, size, bulk, designed magazine capacity, configuration, and other factors, the USAS-12 was not particularly suitable for or readily adaptable to sporting purposes. Again, ATF refused to recognize police/combat competitions as a sporting purpose under section 925(d)(3). The shotgun was reviewed on the basis of its suitability for traditional shotgun sports of hunting, and trap and skeet shooting and its importation was denied. Attachment 5. This decision was upheld by the United States District Court in <u>Gilbert Equipment Company</u>, Inc. v. Higgins, 709 F. Supp. 1071 (S.D. Ala. 1989). The case is currently on appeal to the Eleventh Circuit.

These two cases involving shotguns represent ATF's first thorough examination of the suitability of certain combat-type weapons for sporting purposes. In these cases ATF adopted an interpretation of sporting as being limited to certain traditional sports and not simply any lawful activity in which the weapons might be employed.

ANALYSIS

A. Defining the type of weapon under review.

As noted above, section 925(d)(3) expressly provides that the Secretary shall authorize the importation of a firearm that is of a <u>type</u> that is generally recognized as particularly suitable for sporting purposes. The legislative history also makes it clear that the Secretary shall scrutinize types of firearms in exercising his authority under section 925(d). Specifically, in its explanation of section 925(d)(3), the Senate Report on the Gun Control Act stated:

This subsection gives the Secretary authority to permit the importation of ammunition and certain <u>types</u> of firearms--(1) those imported for scientific or research purposes or for use in competition or training under chapter 401 of title 10 of the United States Code; (2) an unserviceable firearm other than a machinegun; (3) those firearms not coming within the purview of the National Firearms Act (26 U.S.C. 5801, <u>et seq.</u>) and suitable for sporting purposes (in the case of surplus military weapons this type is limited to shotguns and rifles) and those taken out of the United States. (Emphasis added.)

S. Rep. No. 1501, 90th Cong. 2d Sess. 38 (1968).

In light of the statutory mandate that types of firearms be scrutinized, the working group first attempted to determine whether the semiautomatic rifles suspended from importation fall within a type of firearm.

The working group determined that the semiautomatic rifles in question are generally semiautomatic versions of true selective fire military assault rifles.³ As a class or type of firearm they are often referred to as "assault rifles," "assault-type rifles," "military style rifles," or "paramilitary rifles."⁴ Since we are only concerned with semiautomatic rifles, it is somewhat of a misnomer to refer to these weapons as "assault rifles." True assault rifles are selective fire

weapons that will fire in a fully automatic mode.⁵ For the purposes of this paper, it was necessary to settle on one term that best describes the weapons under consideration, and we will refer to these weapons as "semiautomatic assault rifles." They represent a distinctive type of rifle distinguished by certain general characteristics which are common to the modern military assault rifle. The modern military assault rifle, such as the U.S. M16, German G3, Belgian FN/FAL, and Soviet AK47, is a weapon designed for killing or disabling the enemy and, as described below, has characteristics designed to accomplish this purpose.

We found that the modern military assault rifle contains a variety of physical features and characteristics designed for military applications which distinguishes it from traditional sporting rifles.⁶ These military features and characteristics (other than selective fire) are carried over to the semiautomatic versions of the original military rifle. These features and characteristics are as follows:

- 1. Military Configuration.
 - a. Ability to accept a detachable magazine. Virtually allmodern military firearms are designed to accept large, detachable magazines.⁷ This provides the soldier with a fairly large ammunition supply and the ability to rapidly reload. Thus, large capacity magazines are indicative of military firearms. While detachable magazines are not limited to military firearms, most traditional semiautomatic sporting firearms, designed to accommodate a detachable magazine, have a relatively small magazine capacity. In addition, some States have a limit on the magazine capacity allowed for hunting, usually 8 rounds or less.⁸ That a firearm is designed and sold with a large capacity magazine, <u>e.g.</u>, 20-30 rounds, is a factor to be considered in determining whether a firearm is a semiautomatic assault rifle.
 - b. Folding/telescoping stocks. Many military firearms incorporate folding or telescoping stocks.⁹ The main advantage of this item is portability, especially for airborne troops. These stocks allow the firearm to be fired from the folded position, yet it cannot be fired nearly as accurately as with an open stock. With respect to possible sporting uses of this feature, the folding stock makes it easier to carry the firearm when hiking or backpacking. However, its predominant advantage is for military purposes, and it is normally not found on the traditional sporting rifle.
 - c. Pistol grips. The vast majority of military firearms employ a well-defined pistol grip that protrudes conspicuously beneath the action of the weapon.¹⁰ In most cases, the "straight line design" of themilitary weapon dictates a grip of this type so that the shooter can hold and fire the weapon. Further, a pistol grip can be an aid in one-handed firing of the weapon in a combat situation. Further, such grips were designed to assist in controlling machineguns during automatic fire. On the other hand, the vast majority of sporting firearms employ a more traditional pistol grip built into the wrist of the stock of the firearm since one-handed shooting is not usually employed in hunting or competitive target competitions.
 - d. Ability to accept a bayonet. A bayonet has distinct military purposes.¹¹ First, it has a psychological affect on the enemy. Second, it enables soldiers to fight in close quarters

with a knife attached to their rifles. We know of no traditional sporting application for a bayonet.

- e. Flash suppressor. A flash suppressor generally serves one or two functions. First, in military firearms it disperses the muzzle flash when the firearm is fired to help conceal the shooter's position, especially at night. A second purpose of some flash suppressors is to assist in controlling the "muzzle climb" of the rifle, particularly when fired fully automatic.¹² From the standpoint of a traditional sporting firearm, there is no particular benefit in suppressing muzzle flash. Those flash suppressors which also serve to dampen "muzzle climb" have a limited benefit in sporting uses by allowing the shooter to reacquire the target for a second shot. However, the barrel of a sporting rifle can be modified by "magna-porting" to achieve the same result. There are also muzzle attachments for sporting firearms to assist in the reduction of muzzle climb. In the case of military-style weapons that have flash suppressors incorporated in their design, the mere removal of the flash suppressor may have an adverse impact on the accuracy of the firearm.
- f. Bipods. The majority of military firearms have bipods as an integral part of the firearm or contain specific mounting points to which bipods may be attached.¹³ The military utility of the bipod is primarily to provide stability and support for the weapon when fired from the prone position, especially when fired fully automatic. Bipods are available accessory items for sporting rifles and are used primarily in long-range shooting to enhance stability. However, traditional sporting rifles do not come equipped with bipods, nor are they specifically designed to accommodate them. Instead, bipods for sporting firearms are generally designed to attach to a detachable "sling swivel mount" or simply clamp onto the firearm.
- g. Grenade launcher. Grenade launchers are incorporated in the majority of military firearms as a device to facilitate the launching of explosive grenades.¹⁴ Such launchers are generally of two types. The first type is a flash suppressor designed to function as a grenade launcher. The second type attaches to the barrel of the rifle either by screws or clamps. We are not aware of any particular sporting use for grenade launchers.
- h. Night sights. Many military firearms are equipped with luminous sights to facilitate sight alignment and target acquisition in poor light or darkness.¹⁵ Their uses are generally for military and law enforcement purposes and are not usually found on sporting firearms since it is generally illegal to hunt at night.
- 2. Whether the weapon is a semiautomatic version of a machinegun.

The vast majority of modern military firearms are selective fire, <u>i.e.</u>, they can shoot either fully automatic or semiautomatic. Since machineguns are prohibited from importation (except for law enforcement use) the manufacturers of such weapons have developed semiautomatic versions of these firearms.¹⁶

3. Whether the rifle is chambered to accept a centerfire cartridge case having a length of 2.25 inches or less.

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Modern military assault rifles and submachineguns are generally chambered to accept a centerfire cartridge case of 2.25 inches or less.¹⁷ On the other hand, while many traditional sporting rifles will fire a cartridge of 2.25 inches or less, such firearms usually do not have the other military features outlined in Items 1a-h.

These features and characteristics are not usually found on traditional sporting firearms.¹⁸ This is not to say that a particular rifle having one or more of the listed features should necessarily be classified as a semiautomatic assault rifle. Indeed, many traditional sporting firearms are . semiautomatic or have detachable magazines. Thus, the criteria must be viewed in total to determine whether the overall configuration places the rifle fairly within the semiautomatic assault rifle category.

Using these criteria, we determined that, on balance, all of the firearms on the original suspension list are properly included in the semiautomatic assault rifle category, with the exception of the .22 rimfire caliber rifles and the Valmet Hunter. While the .22 rimfire caliber rifles bear a striking resemblance to the true assault rifle, these rifles employ, by and large, conventional .22 rimfire caliber semiautomatic mechanisms. Moreover, they are not semiautomatic versions of a machinegun and contain only a few of the other relevant characteristics. Further, the working group determined that, in general, .22 caliber rifles are generally recognized as suitable for small game hunting. The Valmet Hunter, while based on the operating mechanism of the AK47 assault rifle, has been substantially changed so that it is now akin to a traditional sporting rifle and does not properly fall within the semiautomatic assault rifle category. More specifically, its receiver has been modified and its pistol grips, bayonet, and flash suppressor have been removed. The trigger mechanism has been moved to the rear of the modified receiver to facilitate its use with a traditional sporting stock. Also, its military-style sights have been replaced with traditional sporting-style sights. See Attachment 6.

B. Scope of "Sporting Purposes".

The second step of our process was to determine the scope of "sporting purposes" as used in the statute. This is a critical aspect of the process. The broadest interpretation could take in virtually any lawful activity or competition which any person or groups of persons might undertake. Under this interpretation, any rifle could meet the "sporting purposes" test. A narrower interpretation which focuses on the traditional sports of hunting and organized marksmanship competition would result in a more selective importation process.²⁰

To determine the proper interpretation, we consulted the statute itself, its legislative history, applicable case law, the work of the original Firearms Evaluation Panel, and prior interpretations by ATF. In terms of the statute itself, the structure of the importation provisions would suggest a somewhat narrow interpretation. In this regard, firearms are prohibited from importation (section 922(1)) with certain specific exceptions (section 925(d)(3)). A broad interpretation which permits virtually any firearm to be imported because someone may wish to use it in some lawful shooting activity would render the statute meaningless.

As discussed earlier, the legislative history suggests a narrow meaning and indicates that the term "sporting purposes" refers to the traditional sports of target shooting, skeet and trap shooting, and hunting. Moreover, the history discussed earlier strongly suggests that Congress intended the provision to allow the importation of traditional sporting type rifles while excluding military type rifles. There is nothing in its history to indicate that it was intended to recognize every conceivable

type of activity or competition which might employ a firearm. To the contrary, the history indicates that mere use in some competition would not make the rifle a sporting rifle.

Finally, the 1968 Firearms Evaluation Panel specifically addressed at least one informal shooting activity and determined that it was not a legitimate sporting purpose under the statute. The panel addressed what is commonly referred to as "plinking" (shooting at randomly selected targets such as bottles and cans). It was the Panel's view that "while many persons participated in this type of activity and much ammunition was expended in such endeavors, it was primarily a pastime and could not be considered a sport for the purposes of importation. . ."

Based on the above, the working group determined that the term "sporting purpose" should properly be given a narrow reading. It was determined that while hunting has been a recognized rifle sport for centuries, and competitive target shooting is a recognized rifle sport, the so-called activity of plinking is not a recognized sport. Moreover, we believe that reference to sporting purposes was intended also to stand in contrast to military and law enforcement applications. Consequently, the working group does not

believe that police/combat-type competitions should be treated as sporting activities. This position is supported by the court's decision in <u>Gilbert Equipment Company</u>, Inc., v Higgins, 709 F. Supp. 1071 (S.D. Ala. 1989) and is consistent with prior interpretations of ATF as noted on pages 4 and 5 in discussing the Striker-12 shotgun and USAS-12 shotgun.

C. Suitability.

The final step in our review involved an evaluation of whether semiautomatic assault rifles are a type of rifle generally recognized as particularly suitable for or readily adaptable to the traditional sporting applications discussed above.

The criminal misuse of semiautomatic assault rifles is a matter of significant public concern and was an important factor in the decision to suspend their importation. Nevertheless, the working group did not consider criminal misuse as a factor in its analysis of the importability of this type of rifle. Instead, the working group confined its analysis to the question of whether this type of rifle meets the test provided in section 925(d)(3).

Rather than criminal misuse, our comprehensive examination of this issue focused on the legal analysis and technical assessment of these firearms discussed earlier. In addition, the working group used the information gathered under Items 1-7 outlined in the next section in determining whether this type of firearm is generally recognized as particularly suitable for sporting purposes. These items take into account technical and marketing data, expert opinions, the recommended uses of the firearms, and data on the actual uses for which the weapons are employed in this country.

In evaluating these firearms, we believe that all rifles which are fairly typed as semiautomatic assault rifles should be treated the same. Therefore, the fact that there may be some evidence that a particular rifle of this type is used or recommended for sporting purposes should not control its importability.²¹ Rather, all findings as to suitability of these rifles as a whole should govern each rifle within this type.

This is consistent with the approach taken with respect to handguns since 1968. Although certain handguns may be used or recommended for sporting purposes, they may fall within the type of easily concealable handguns barred from importation by the administrative factoring criteria used by ATF to determine the importability of handguns. Furthermore, a pistol specifically designed for target shooting, but lacking a safety as required by the factoring criteria, would be a type of handgun prohibited from importation as not particularly suitable for sporting purposes for this reason. Finally, just as ATF allows handguns to be modified so as to meet the factoring criteria, a semiautomatic assault rifle could be modified into a sporting configuration and be importable, as was done in the case of the Valmet Hunter referred to earlier.

D. Evaluation of Information from Outside Sources

As part of our comprehensive analysis as to whether semiautomatic assault rifles meet the statutory criteria for importation, the following sources of information were also considered:

- 1. How has the weapon been advertised, marketed and categorized by the manufacturer and/or importer?
- 2. How has the use of the rifle been described by firearms technical writers?
- 3. What is the rifle's reported use by importers?
- 4. Do hunting guides recommend the rifle?
- 5. Do editors of hunting magazines recommend the rifle?
- 6. Is the rifle used in target shooting competitions?
- 7. Do State game commissions allow the use of the rifle to hunt?

Items 1-6 focus upon how the rifles are marketed, advertised, and recommended for use. Item 7 addresses the legal restrictions pertaining to the use of the weapons for sporting purposes.

The working group reviewed the advertising and marketing literature concerning each of the weapons (Item 1) and reviewed evaluations of the firearms by technical writers (Item 2). In addition, the working group solicited information from the importers of the weapons and other knowledgeable sources (Items 3-6).

Questionnaires were drafted and sent out to licensed hunting guides, State game and fish commissions, local hunting associations, competitive shooting groups, and hunting/shooting magazine editors to determine the extent to which the weapons are used for sporting purposes or recommended for such use. The working group believed that the actual uses of the weapons for sporting purposes would be a factor to be considered in determining whether this type of rifle meets the sporting purposes test.

The review of advertising and marketing literature indicates that these rifles are not generally marketed for hunting or competitive shooting. The review of the technical evaluations revealed that these rifles are not regarded as suitable for these sporting activities.22

To the extent that the technical evaluations made recommendations with respect to the use of the rifles suspended from importation, the majority recommended them for law enforcement or military use or for activities such as collecting, plinking, home and self-defense, and combat target shooting. Only 5 of over 50 evaluations reviewed contained recommendations for the use of these firearms for hunting purposes.

The importers were asked to submit information concerning the sporting uses of the semiautomatic rifles they import. Thirty-nine importers were asked to submit this information and 19 responded. In general, their comments were conclusory and stated that their weapons could be used for sporting purposes. A small number of importers, <u>e.g.</u>, Gun South, Inc., and Heckler & Koch, Inc., provided more specific data showing the sporting uses made of their firearms by their customers.

Of 3 hunting associations to whom questionnaires were sent, 2 responded. They stated that they place no restrictions on the use of semiautomatic rifles by their members, on the minimum caliber of ammunition used to hunt large game, or on the number of rounds allowed in semiautomatic rifle magazines. However, over 1,800 hunting guides were sent questionnaires and, of these, 706 responded. Over 73 percent of those responding indicated that their patrons used either bolt or lever action rifles for hunting. Only 10 of the 706 guides indicated that their patrons had used any of the rifles whose importation had been temporarily suspended.

Of the 20 hunting/shooting editors to whom questionnaires were sent, 14 responded. Nine of the fourteen editors recommended semiautomatic rifles for use in hunting large game, including 5 who recommended use of any of the rifles subject to the temporary suspension. Eleven of the fourteen editors recommended semiautomatic rifles for target competitions, including 7 who recommended semiautomatic assault rifles for such use.

The recommendations of editors were contradictory. One editor pointed out that what made the assault rifle successful as a military weapon made the semiautomatic version totally unfit for any other use. On the other hand, another editor stated that semiautomatic rifles had certain advantages over conventional sporting rifles especially for the physically disabled and left-handed shooters. While this may be true, there appears to be no advantage to using a semiautomatic assault rifle as opposed to a semiautomatic sporting rifle.

A total of 54 competitive shooting groups were sent a questionnaire and 53 groups responded (some of the responses were from unsolicited groups). Fifty of these groups indicated that they sponsor high power rifle competition events. While none of the groups prohibited the use of the semiautomatic assault rifles in their competitions, none stated that any of the rifles covered by the temporary suspension were used in a specific event.

Finally, the information gathered under Item 7 reveals that most of these weapons could legally be used in most States for most hunting purposes.

The working group reviewed all of the information gathered under Items 1-6 and determined that while these weapons may legally be used for sporting purposes in most States, the evidence was compelling that, as a type of firearm, the semiautomatic assault rifle is not generally recognized as particularly suitable for sporting purposes. The working group found persuasive the technical and expert evaluations of these firearms which generally did not recommend them as particularly suitable for sporting purposes. The group was also impressed by the comments of the hunting guides which showed that these rifles were not widely used for hunting purposes. The comments of the hunting guides are consistent with the opinion of the technical experts who generally do not recommend the rifles for hunting purposes.

The opinions of the editors were fairly divided with respect to the sporting uses of these rifles. The importers generally recommended their own weapons for such uses. The competitive shooting groups indicated that the rifles could be used in certain shooting events. Thus, while there was some evidence that these rifles could be used for hunting and target shooting, there was no evidence of any widespread use for such purposes. The mere fact that they are not generally prohibited from use for sporting purposes does not mean that the rifles meet the test for importation.

CONCLUSIONS

The working group has dealt with a complex issue, the resolution of which has required the group to take into account interpretations of law, technical assessments of firearms and their physical characteristics, marketing data, the assessment of data compiled from responses to questionnaires and, finally, Bureau expertise with respect to firearms. We fully recognize that particular findings as well as the results will be controversial.

From the cross section of representation within ATF, we have brought to bear our technical, legal, and administrative expertise to resolve the issues in what we believe to be a fair manner, taking into consideration all points of view. While some of the issues were difficult to resolve, in the end we believe that the ultimate conclusion is clear and compelling. These semiautomatic assault rifles were designed and intended to be particularly suitable for combat rather than sporting applications. While these weapons can be used, and indeed may be used by some, for hunting and target shooting, we believe it is clear that they are not generally recognized as particularly suitable for these purposes.

The purpose of section 925(d)(3) was to make a limited exception to the general prohibition on the importation of firearms, to preserve the sportsman's right to sporting firearms. This decision will in no way preclude the importation of true sporting firearms. It will only prevent the importation of military-style firearms which, although popular among some gun owners for collection, self-defense, combat competitions, or plinking, simply cannot be fairly characterized as sporting rifles.

Therefore, it is the finding of the working group that the semiautomatic assault rifle is not a type of firearm generally recognized as particularly suitable for or readily adaptable to sporting purposes and that importation of these rifles should not be authorized under 18 U.S.C. \S 925(d)(3).

Based on our evaluation, we recommend that the firearms listed on Attachment 7 not be authorized for importation. For the reasons discussed in this report, we recommend that the firearms listed on Attachment 8 be authorized for importation. These are the .22 rimfire caliber rifles and the Valmet Hunter which we do not believe are properly included in the category of semiautomatic assault rifles. Attachment 9 is a compilation of the responses from the questionnaires. Attachment 10 combines the criteria for identifying semiautomatic assault rifles and the items considered in assessing suitability. Attachments 11 and 12 contain the data compiled for each of the criteria listed in Attachment 10. Finally, Attachment 13 contains the source materials used in locating persons and organizations who were sent questionnaires.

<u>NOTES</u>

1. Paul Wahl, ed., Gun Trader's Guide, 13th Edition, (South Hackensack, NJ. 1987), 155-162.

2. Although a firearm might be recognized as "suitable" for use in traditional sports, it would not meet the statutory criteria unless it were recognized as <u>particularly</u> suitable for such use. Indeed, Senator Dodd made clear that the intent of the legislation was to" [regulate] the importation of firearms by excluding surplus military handguns; and rifles and shotguns that are not <u>truly</u> suitable for sporting purposes." 114 Cong. Rec. 13325 (1968) (Statement of Sen. Dodd) [emphasis added].

Similarly, it is apparent that the drafters of the legislation did not intend for "sports" to include every conceivable type of activity or competition which might employ a firearm; otherwise a "sporting purpose" could be advanced for every firearm sought to be imported. For example, in response to Sen. Hansen's question concerning the meaning of "sporting purposes" in the bill which became section 925(d), Senators Dodd and Hansen engaged in the following colloquy:

Mr. HANSEN. Would the Olympic shooting competition be a "sporting purpose?"

Mr. DODD. I would think so.

Mr. HANSEN. What about trap and skeet shooting?

Mr. DODD. I would think so. I would think trap and skeet shooting would certainly be a sporting activity.

Mr. HANSEN. Would the Camp Perry national matches be considered a "sporting purpose?"

Mr. DODD. Yes: that would not [sic] fall in that arena. It should be described as a sporting purpose.

Mr. HANSEN. I understand the only difference is in the type of firearms used at Camp Perry which includes a wide variety of military types as well as commercial.

Would all of these firearms be classified as weapons constituting a "sporting purpose?"

Mr. DODD. No. I would not say so. I think when we get into that, we definitely get into military type of weapon for use in matches like these at Camp Perry; but I do not think it is generally described as a sporting weapon. It is a military weapon. I assume they have certain types of competition in which they use these military weapons as they would in an otherwise completely sporting event. I do not think that fact would change the nature of the weapon from a military to a sporting one.

Mr. HANSEN. Is it not true that military weapons are used in Olympic competition also?

Mr. DODD. I do not know. Perhaps the Senator can tell me. I am not well informed on that.

Mr. HANSEN. It is my understanding that they are. Would the Senator be inclined to modify his response if I say that is true? (27461)

Mr. DODD. It is not that I doubt the Senator's word. Here again I would have to say that if a military weapon is used in a special sporting event, it does not become a sporting weapon. It is a military weapon used in a special sporting event. I think the Senator would agree with that. I do not know how else we could describe it.

Mr. HANSEN. If I understand the Senator correctly, he said that despite the fact that a military weapon may be used in a sporting event it did not, by that action become a sporting rifle Is that correct?

Mr. DODD. That would seem right to me As I said previously the language says no firearms will be admitted into this country unless they are genuine sporting weapons..... I think the Senator and I know what a genuine sporting gun is.

114 Cong. Rec. 27461-62 (1968).(Emphasis added.)

- Ken Warner, ed., <u>Gun Digest 1989</u>, (Northbrook, I1. 1988), pp. 293-300; William S. Jarrett, ed., <u>Shooter's Bible, No. 80</u>, (Hackensack, NJ. 1988), pp. 345-363; Edward Clinton Ezell, <u>Small Arms of the World</u>, (Harrisburg, Pa. 1983), p. 844; Pete Dickey, "The Military Look-Alikes," <u>American Rifleman</u>, (April 1980), p. 31. Also, see generally, Ian V. Hogg, ed., <u>Jane's Infantry Weapons</u>, <u>1987-88</u>, (New York 1987); Jack Lewis, ed., <u>The Gun Digest</u> Book of Assault Weapons, (Northbrook, I1. 1986).
- 4. Art Blatt, "Tomorrow's State-of-the-Art Sporting Rifle," <u>Guns & Ammo</u>, (July 1981), p. 48; Jarrett, pp. 345-363; Warner, pp. 293-300.
- 5. Daniel D. Musgrave and Thomas B.Nelson, <u>The World's Assault Rifles</u>, (Virginia, 1967), p. 1.
- 6. See generally, Angus Laidlaw, ed., <u>Paul Wahl's Big_Gun Catalog/1</u>, (Bogota, NJ. 1988); Musgrave and Nelson; Hogg; Jarrett; and Warner.

- 7. Ibid.
- 8. Arizona, 5 rounds; Colorado, 6 rounds; Michigan 6 rounds; New Hampshire, 5 rounds; New York, 6 rounds; North Carolina, 6 rounds; North Dakota, 8 rounds; Oregon, 5 rounds; Pennsylvania, semiautomatic rifles prohibited; Vermont, 6 rounds.
- 9. See generally, Hogg; Musgave and Nelson; Ezell; Warner; Jarrett; Laidlaw; and Lewis.
- 10. Ibid.
- 11. Ibid.
- 12. Ibid.
- 13. Ibid.
- 14. Ibid.
- 15. Ibid.
- 16. Ezell, p. 844; Dickey, p. 31.
- 17. Musgrave and Nelson, pp. 11-29; and, see generally, Hogg; and Ezell.
- 18. Ezell, pp.844-866; and, see generally, Warner; Jarrett; and Laidlaw.
- See, for example, Walter Rickell, "The Plinker's AK <u>GunsMagazine</u>, (July 1986) p. 21; John Lachuk, "Bantam Battle Rifles," <u>Guns & Ammo</u>, (January 1987), p. 37; John Lachuk, ".22 Erma Carbine," <u>Guns & Ammo</u>, (May 1968), p. 58; JackLewis, "Something New: The AK in Twenty-Two," <u>Gun World</u>, (July 1985), p. 32; Roger Combs, "A Most Unique Carbine," <u>Gun World</u>, (December 1985), p. 28; Garry James, "Mitchell Arms AK-22," Guns & Ammo, (November 1985), p. 72.
- 20. See note 2, colloquy between Senators Dodd and Hansen.
- 21. Ibid.
- 22. See generally, bibliography.

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NOTE: This information was extracted from the document titled, "**Report** and **Recommendation of the ATF Working Group on the Importability of Certain Semiautomatic Rifles**", published in a memorandum to the Director, Stephen E. Higgins from the Associate Director, Daniel R. Black and approved on July 6, 1989.

Pew Research Center *****

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America's Complex Relationship With Guns

An in-depth look at the attitudes and experiences of U.S. adults

BY Kim Parker, Juliana Horowitz, Ruth Igielnik, Baxter Oliphant and Anna Brown

FOR MEDIA OR OTHER INQUIRIES:

Kim Parker, Director, Social Trends Research Juliana Horowitz, Associate Director, Research Molly Rohal, Communications Manager

Bridget Johnson, Communications Associate 202.419.4372

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Terminology

Unless otherwise specified, "guns" refers to firearms and not to airsoft guns, such as paintball, BB or pellet guns.

"Gun owners" are those who say they personally own one or more guns. "Non-owners who live in a gun-owning household" are those who say they do not personally own any guns, but someone else in their household does.

Those who did not grow up with guns in the home includes those who say, as far as they know, there were never any guns in their household when they were growing up or they are not sure if there were guns in their household when they were growing up.

Those who are said to have children in the household or at home are those who are a parent or guardian to a child younger than 18 who lives in their household.

References to college graduates or people with a college degree comprise those with a bachelor's degree or more. "Some college" refers to those with a two-year degree or those who attended college but did not obtain a degree. "High school" refers to those who have attained a high school diploma or its equivalent, such as a General Education Development (GED) certificate.

References to whites and blacks include only those who are non-Hispanic and identify as only one race. Hispanics are of any race.

All references to party affiliation, excluding one reference in chapter 1, include those who lean toward that party: Republicans include those who say they lean toward the Republican Party and Democrats include those who say they lean toward the Democratic Party.

References to adults who live in an urban, suburban or rural area are based on an analysis that takes into account the density of the area where they live based on their address or the location of their telephone number or their ZIP code if they didn't provide an address. For a more detailed explanation of how community type was coded, see the <u>Methodology</u> section of the report.

America's Complex Relationship With Guns

An in-depth look at the attitudes and experiences of U.S. adults

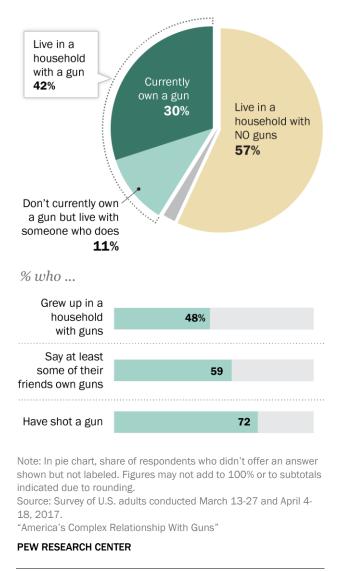
As a nation, the U.S. has a deep and enduring connection to guns. Integrated into the fabric of American society since the country's earliest days, guns remain a point of pride for many Americans. Whether for hunting, sport shooting or personal protection, most gun owners count the right to bear arms as central to their freedom. At the same time, the results of gun-related violence have shaken the nation, and debates over gun policy remain sharply polarized.

A new Pew Research Center survey attempts to better understand the complex relationship Americans have with guns and how that relationship intersects with their policy views.

The survey finds that Americans have broad exposure to guns, whether they personally own one or not. At least two-thirds have lived in a household with a gun at some point in their lives. And roughly seven-in-ten – including 55% of those who have never personally owned a gun – say they have fired a gun at some point. Today, three-in-ten U.S. adults say they own a gun, and an additional 36% say that while they don't own one now, they might be open to owning a gun in the future. A third of adults say they don't currently own a gun and can't see themselves ever doing so.

About four-in-ten U.S. adults say they live in a gun-owning household

% of all adults saying they ...



To be sure, experiences with guns aren't

always positive: 44% of U.S. adults say they personally know someone who has been shot, either accidentally or intentionally, and about a quarter (23%) say they or someone in their family have

been threatened or intimidated by someone using a gun. Half see gun violence as a very big problem in the U.S. today, although gun owners and non-owners offer divergent views on this.

Gun owners and non-owners are also deeply divided on several gun policy proposals, but there is agreement on some restrictions, such as preventing those with mental illnesses and those on federal watch lists from buying guns. Among gun owners, there is a diversity of views on gun policy, driven in large part by party affiliation.

The nationally representative survey of 3,930 U.S. adults, including 1,269 gun owners, was conducted March 13 to 27 and April 4 to 18, 2017, using the Pew Research Center's <u>American</u> <u>Trends Panel</u>.¹ Among the key findings:

The ties that bind gun owners to their firearms are often deep

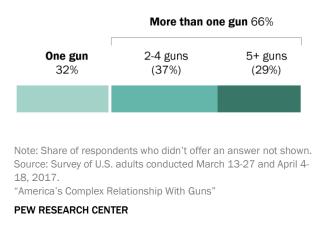
A majority of gun owners (66%) own multiple firearms, and about three-quarters (73%) say they could never see themselves *not* owning a gun.

Many American gun owners exist in a social context where gun ownership is the norm. Roughly half of all gun owners (49%) say that all or most of their friends own guns. In stark contrast, among those who don't own a gun, only one-in-ten say that all or most of their friends own guns.

Experience with guns starts relatively early particularly for those who grew up in a gunowning household. Men who grew up in a

Majority of gun owners own multiple guns

% of gun owners saying they own ...



household with guns and who have ever shot a gun report that they first fired a gun when they were, on average, 12 years old. Among women who grew up in gun-owning households and who have ever shot a gun, the average age at which they first fired a gun is 17. Men tend to become gun owners at an earlier age than women: 19 years old, on average, vs. 27 years old for women.

¹ For more details, see the <u>Methodology</u> section of the report.

For most gun owners, owning a firearm is tied to their personal freedom

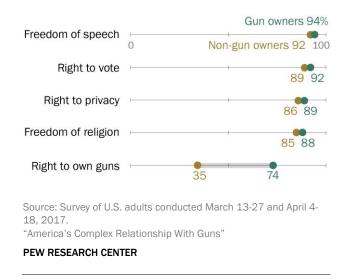
One key and defining characteristic of gun owners is the extent to which they associate the right to own guns with their own personal sense of freedom -74% of gun owners say this right is essential, compared with only 35% of non-gun owners who say the same.

While the right to own guns is highly valued by most gun owners, not all gun owners see gun ownership the same way. Half of all gun owners say owning a gun is important to their overall identity – with 25% saying this is very important and another 25% calling it somewhat important. Three-in-ten gun owners say owning a gun is not too important to their identity and 20% say it's not at all important.

White men are especially likely to be gun owners, but ownership crosses demographic boundaries

About three-quarters of gun owners say owning a gun is essential to their freedom

% saying each is essential to their own sense of freedom



About half of white men (48%) say they own a gun. By comparison, about a quarter of white women and nonwhite men (24% each) own guns, along with 16% of nonwhite women.² There is also an education gap in gun ownership and that, too, is particularly pronounced among whites: 41% of whites without a bachelor's degree are gun owners, compared with about a quarter of whites with at least a bachelor's degree (26%).

Geographically, gun ownership is less concentrated in the Northeast than in other regions in the country, and there is a vast urban-rural divide across regions. Among adults who live in rural areas, 46% say they own a gun. By comparison, 28% of adults who live in the suburbs and even fewer -19% – in urban areas own a gun.

² The sample of blacks and Hispanics in the survey is too small to analyze black and Hispanic men and black and Hispanic women separately.

The demographics of gun ownership

Gun ownership varies across demographic groups

% of U.S. adults saying they ...

	Personally own a gun	Don't own a gun but live with someone who does	NET Gun in household
All adults	30%	11%	42%
Men	39	5	44
Women	22	18	40
Ages 18-29	27	16	43
30-49	28	10	39
50-64	33	9	43
65+	33	12	45
Whites	36	13	49
Blacks	24	8	32
Hispanics	15	6	21
High school or less	31	10	41
Some college	34	13	47
Bachelor's degree+	25	12	37
Northeast	16	10	27
Midwest	32	12	44
South	36	10	45
West	31	15	46
Urban	19	9	29
Suburban	28	12	41
Rural	46	13	58
Republican	41	15	57
Democrat	16	9	25
Independent	36	12	48
Rep/lean Rep	44	12	56
Dem/lean Dem	20	10	30

Note: Figures may not add to subtotals indicated due to rounding. Whites and blacks are non-Hispanics. Hispanics are of any race. "Some college" includes those with an associate degree and those who attended college but did not obtain a degree.

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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Male gun owners tend to be more immersed in gun culture than their female counterparts

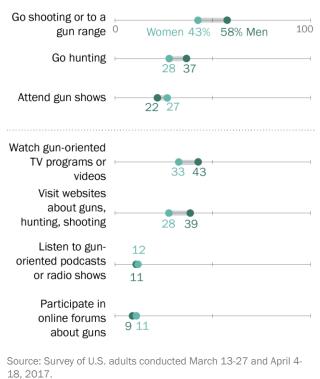
From hunting and shooting to visiting gunrelated websites and watching gun-oriented TV programs, there are many activities available to gun enthusiasts. About half of gun owners (52%) say they go shooting or to a gun range often or sometimes; 34% go hunting and 24% attend gun shows at least sometimes.

When it comes to gun-oriented media, roughly four-in-ten gun owners (39%) report that they at least sometimes watch TV shows and videos about guns, and 35% visit websites about guns, hunting or other shooting sports. Gun-related podcasts, radio shows and online discussion forums are less popular: About one-in-ten gun owners say they listen to gun-oriented podcasts or radio shows (11%) or participate in online discussion forums about guns (10%) at least sometimes.

Male gun owners are more likely than women who own guns to engage in some of these activities. For example, 58% of men who own guns say they go shooting or to a gun range at least sometimes, compared with 43% of female gun owners. Men also hunt at higher rates than women and watch more gun-oriented TV shows or videos.

Men are more likely than women to participate in some gun-oriented activities

% of gun owners saying they do each of the following often or sometimes



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Consistent with their more frequent engagement in gun-related activities, male gun owners are more socially connected to other gun owners than their female counterparts: 54% of men who own guns say all or most of their friends are also gun owners, while 40% of women say the same.

Protection tops the list of reasons for owning a gun

Two-thirds of gun owners say protection is a major reason they own a gun. By comparison, about four-in-ten (38%) cite hunting as a major reason and three-in-ten cite sport shooting, including

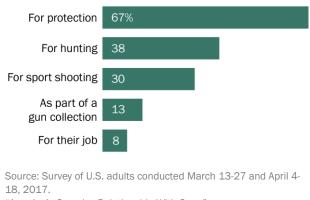
target shooting, trap and skeet. Fewer point to a gun collection (13%) or to their job (8%) as being central to why they own a gun. To be sure, for many gun owners, these reasons overlap: 44% offer more than one major reason for owning a gun.

Roughly one-in-seven adults who own or have owned a gun (15%) say they have fired or threatened to fire a gun to defend themselves, their family or their possessions.

Regardless of the reasons for owning a gun, most gun owners don't think their having a firearm is public business, but they also aren't going out of their way to hide the fact that they own a gun. Eight-in-ten gun owners say they

Most gun owners cite protection as a major reason for owning a gun

% of gun owners saying each is a major reason why they own a gun



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don't mind if other people know they own a gun, but they don't set out to tell them; 14% say they'd rather other people not know that they have a firearm, and 6% actively do want others to know.

For many gun owners, a gun is often close at hand

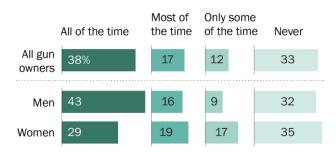
Roughly four-in-ten gun owners (38%) say there is a gun that is both loaded and easily accessible to them all of the time when they're at home. Men are especially likely to have a loaded gun at the ready: 43% of male gun owners vs. 29% of women who own guns say a loaded gun is always easily accessible.

Overall, about seven-in-ten gun owners say they own a handgun or a pistol (72%), while 62% say they own a rifle and 54% own a shotgun. Handguns are more common among those who own a gun for protection.

Among those who own a handgun, about onein-four (26%) say they carry their gun with

About four-in-ten gun owners say there is always a loaded gun within easy reach when they're at home

% of gun owners saying there is a loaded gun easily accessible to them _____ when at home



Note: Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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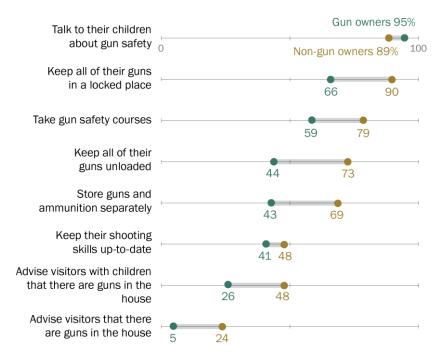
them outside of their home all or most of the time, a share that rises to 41% among those who think of their local community as unsafe.

When it comes to gun safety in homes with children, there are some areas of agreement about key precautions

Of the many possible safety precautions gun owners could take when they live with children in the home, three receive majority support from both non-owners and those who currently own a firearm. Nearly all gun owners (95%) believe that talking to children about gun safety is essential, followed by 66% who say all guns should be kept in a locked place when there are children living in the home, and 59% who say gun owners who are parents should take a gun safety course. Majorities of non-gun owners also say these are essential measures for gun owners with children in the home.

The majority of Americans who don't own guns feel it is also essential for gun owners with children living in the home to keep their guns unloaded and in a separate

Despite some agreement, gun owners and non-owners mostly differ on views of key responsibilities of gun owners



% saying it is essential for gun owners with children at home to do each of the following

Note: A random subset of respondents was asked about advising "visitors with children" that there are guns in the house and another random subset was asked about advising "visitors" that there are guns in the house. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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spot from the ammunition. Gun owners disagree. Majorities say these measures are either important but not essential or not important, even in households with children.

When asked about their own habits, roughly half of gun owners with children under 18 living at home say all of the guns in their home are kept in a locked place (54%) and all are unloaded (53%).

Still, many gun owners with children say at least some of their guns are kept unlocked and loaded. In fact, 30% of these gun owners say there is a gun that is both loaded and easily accessible to them all of the time when they're at home.

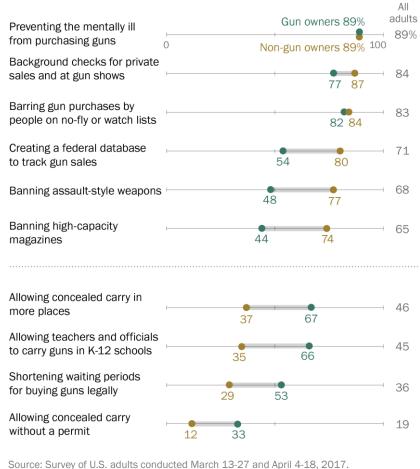
Americans who own guns largely disagree with non-owners on gun policy, but some proposals have support from both groups

Solid majorities of both gun owners and non-owners favor limiting access to guns for people with mental illnesses and individuals who are on the federal no-fly or watch lists (82% or higher favor among each group). In addition, strong majorities favor background checks for private sales and at gun shows (77% among gun owners and 87% among non-owners).

The groups are more divided when it comes to three other policy proposals: creating a federal database to track gun sales; banning assault-style weapons; and banning highcapacity magazines. Even so, significant shares of gun owners are open to these proposals. Roughly half of gun owners (54%) say they would favor creating a federal database, and 48% favor a ban on assault weapons. Some

Some agreement and many divisions between owners and non-owners on gun proposals

% who strongly or somewhat favor ...



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44% of gun owners favor banning high-capacity magazines. Support for these proposals is much higher among non-gun owners, with about three-quarters or more saying they would support each of these proposals.

At the same time, majorities of gun owners favor proposals that would *expand* gun rights, such as allowing people to carry concealed guns in more places and allowing teachers and school officials to carry guns in K-12 schools – proposals that are each supported by only about a third of non-owners.

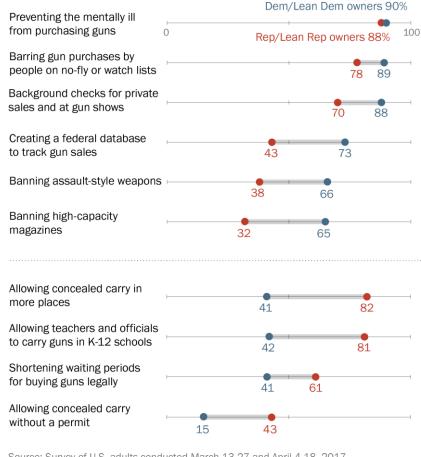
Even among gun owners, Republicans and Democrats don't see eye to eye on gun policy

There is a partisan divide in gun ownership: More than four-in-ten Republicans and Republican-leaning independents are gun owners (44%), compared with 20% of Democrats and independents who lean Democratic.

There is also a partisan divide on views of gun policy, and these differences remain even after controlling for gun ownership. For example, Republican gun owners are much more resistant than Democratic gun owners to creating a database to track gun sales and banning assault-style weapons and high-capacity magazines. On the flip side, Republicans are also more open to proposals that would expand gun rights.

Among gun owners there are large partisan gaps in opinion about restricting and expanding gun rights

% of gun owners who strongly or somewhat favor ...



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

A prime example: 82% of Republican gun owners favor expanding concealed carry laws to more places, compared with 41% of their Democratic counterparts.

Republican gun owners are about twice as likely as Democratic gun owners to say owning a gun is essential to their freedom (91% vs. 43%), and there are also behavioral differences between these two groups. For example, Republican handgun owners are more likely than their Democratic counterparts to say they carry their gun with them, even if only some of the time (63% vs. 45%). Fully 55% of Democrats who own a handgun say they *never* carry.

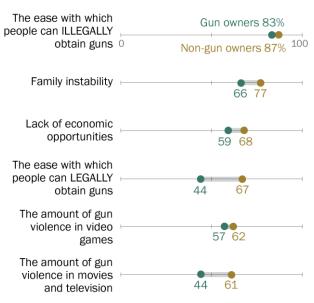
At the most basic level, gun owners and non-owners disagree on the extent to which gun violence is a problem in the U.S.

Half of Americans describe gun violence as a very big problem in the United States, but the perceptions of gun owners and those who don't own guns differ considerably. While a majority of those who do not own guns (59%) see gun violence as a major problem in the country today, a third of adults who own guns say this is a very big problem. Democrats and Republicans also offer different assessments, with Democrats far more likely to describe gun violence as a very big problem, and the partisan divide remains when controlling for gun ownership.

Americans see many factors as playing a role in gun violence in the country today. Fully 86% say the ease with which people can illegally obtain guns contributes to gun violence a great deal or a fair amount; more than half say the same about family instability (74%), lack of economic opportunities (65%), the amount of gun violence in video games (60%), the ease with which people can legally obtain guns (60%), and the amount of gun violence in movies and television (55%).

Gun owners and non-owners disagree on impact that ease of access to legal guns has on gun violence

% saying each contributes a great deal or a fair amount to gun violence in the country today



Note: A random half of respondents were asked about "family instability" and "the amount of gun violence in video games," while the other half were asked about "the amount of gun violence in movies and television" and "lack of economic opportunities." Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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Gun owners and non-owners alike point to the ease with which people can *illegally* obtain guns as a major contributor to gun violence in the U.S., but opinions diverge when it comes to guns obtained *legally*. Two-thirds of non-gun owners see the ease with which people can legally obtain guns as contributing at least a fair amount to gun violence; less than half (44%) of gun owners share this view.

It follows that non-gun owners are much more likely than gun owners to say further restricting legal gun sales would result in fewer mass shootings (56% vs. 29%); and non-gun owners are also more likely to say an increase in gun ownership would lead to more crime overall (44% vs. 13%). For their part, 54% of gun owners say there would be less crime if more people owned guns, and 33% say it wouldn't make much difference.

About a quarter of U.S. adults say they or someone in their family have been threatened or intimidated by someone using a gun

Many Americans (44%) say they personally know someone who has been shot, either accidentally or intentionally. This is particularly common among black adults, 57% of whom say they know someone who has been shot; about four-in-ten whites (43%) and Hispanics (42%) say the same.

Higher share of gun owners (51%) than non-owners (40%) report that they know someone who has been shot, either accidentally or intentionally.

Separately, about a quarter of Americans (23%) – including roughly equal shares of gun owners and non-owners – say they or someone in their family have been threatened or intimidated by someone using a gun. Again, blacks are more likely than whites to say they have had this experience: About a third of blacks (32%) say they or someone in their family have been threatened or intimidated by someone with a gun, compared with 20% of whites. About a quarter of Hispanics (24%) say this has happened to them or to someone else in their family.

Roughly one-in-five gun owners belongs to the NRA

Overall, 19% of all U.S. gun owners say they belong to the NRA. Republican and Republicanleaning gun owners are twice as likely as Democratic and Democratic-leaning gun owners to say they belong to the NRA (24% vs. 11%). And, among Republicans, conservatives have significantly higher rates of membership – 28% vs. 17% of moderate or liberal Republicans.

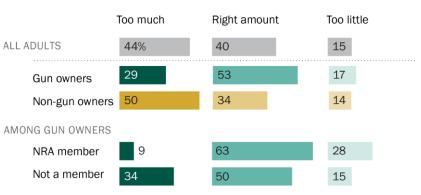
The public is divided when it comes to the amount of influence the NRA has over guns laws in the U.S. While 44% of all adults say the NRA has too much influence over gun legislation, 40% say it has the right amount of influence. Relatively few (15%) say the NRA has too little influence.

For their part, NRA members are largely satisfied with the amount of influence the organization has over gun laws in the U.S. About six-inten (63%) say the NRA has the right amount of influence and 28% say it has too little influence. Only 9% of NRA members say the organization has too much influence over gun laws. Among non-gun owners, 50% view the NRA as too influential.

Gun owners are more likely than non-gun owners to have ever contacted a public official to express their opinion on

Americans are divided between those who say the NRA has too much and the right amount of influence

% saying the National Rifle Association (NRA) has _____ influence over gun laws in this country



Note: Share of respondents who didn't offer an answer not shown. Among all gun owners, 19% say they are members of the NRA. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

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gun policy. About one-in-five gun owners (21%) say they have done this, compared with 12% of non-gun owners.

The remainder of this report examines in greater detail the public's experiences with guns as well as views on gun policies. <u>Chapter 1</u> looks at the demographics of gun ownership and the reasons people own guns. It also explores early experiences with guns, such as growing up in a gun-owning household and participating in hunting or sport shooting. <u>Chapter 2</u> focuses on the role guns have in the daily life of gun owners, including whether they carry a gun outside their home, how often they engage in gun-related activities or consume gun-oriented media, and their social ties to other gun owners. It also looks at negative experiences some people have had with guns. <u>Chapter 3</u> examines the public's views on the responsibilities of gun ownership, with an emphasis on the differences between what gun owners and non-owners consider essential safety measures for gun owners to follow. <u>Chapter 4</u> explores what Americans see as contributing factors to gun violence. <u>Chapter 5</u> focuses on the public's views on policy proposals to restrict or expand access to guns.

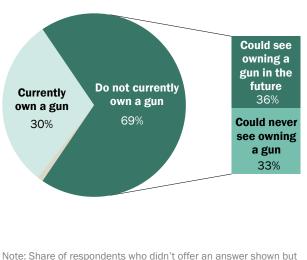
1. The demographics of gun ownership

Understanding gun ownership in America is not as simple as knowing who does and does not own a gun. Some Americans who don't personally own guns live with someone who does or may have owned a gun in the past. And many who don't currently own a gun, including those who have never owned one, may be open to doing so in the future.

Three-in-ten American adults say they currently own a gun, and another 11% say they don't personally own a gun but live with someone who does. Among those who don't currently own a gun, about half say they could see themselves owning one in the future.

Gun ownership is more common among men than women, and white men are particularly likely to be gun owners. Among those who live in rural areas, 46% say they are gun owners, compared with 28% of those who live in the suburbs and 19% in urban areas. There are also significant differences across parties, with Republican and Republican-leaning independents more than twice as likely as Democrats and those who lean Democratic to say they own a gun (44% vs. 20%). Many adults who don't currently own a gun could see themselves owning one in the future

% saying they...



not labeled. Those who don't currently own a gun but have owned one in the past were asked whether they could see themselves owning a gun *again*.

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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For many adults who own guns, exposure to guns happened at an early age. About two-thirds of current gun owners (67%) say there were guns in their household growing up, and 76% report that they first fired a gun before they were 18. While non-gun owners are less likely to have grown up in a gun-owning household, a substantial share (40%) say this is the case, and about six-in-ten (61%) say they have fired a gun.

Most gun owners cite multiple reasons for owning a gun. In fact, eight-in-ten say they have more than one reason for owning, and 44% have more than one *major* reason. Still, protection tops the list, with 67% of current gun owners saying this is a major reason they personally own a gun. About four-in-ten say the same about hunting (38%), while three-in-ten say sport shooting, including target, trap and skeet shooting is a major reason they own a gun. Fewer cite a gun collection (13%) or their job (8%) as major reasons for owning a gun.

Two-thirds of gun owners say they own more than one gun, including 29% who own five or more guns. About seven-in-ten say they own a handgun or pistol (72%), while 62% own a rifle and 54% own a shotgun. Among those who own a single gun, most (62%) say that gun is a handgun or pistol, while far fewer say they own a rifle (22%) or a shotgun (16%).

Measuring gun ownership

Measuring gun ownership comes with its own set of challenges. For example, unlike many demographic questions, there is not a definitive data source from the government or elsewhere on how many American adults own guns.

The new survey asked about gun ownership differently than previous Pew Research Center reports. It collected responses online, where people may be more willing to share sensitive information than they would be over the phone or in person. Furthermore, the survey was conducted among adults who have responded to Pew Research Center surveys in the past as part of the <u>American Trends Panel</u> and thus may be more comfortable answering the questions. Finally, it asked about gun ownership using two separate questions to measure personal and household ownership instead of collecting this information with a single question, as has been the case with previous Pew Research Center reports.

Despite these changes, the share of U.S. adults in the new survey who report that they personally own a gun or who live with someone who does is similar to what the Center found in a <u>survey</u> conducted by telephone in August 2016. Both surveys are consistent with rates of gun ownership reported by the <u>Gallup</u> <u>Organization</u>, but somewhat higher than that reported by the <u>General Social Survey</u> (GSS), which is conducted face to face.

Gun ownership is most common among men, whites

About four-in-ten adults (42%) report that there is a gun in their household, with threein-ten saying they personally own a gun and 11% saying they don't own a gun but someone else in their household does.

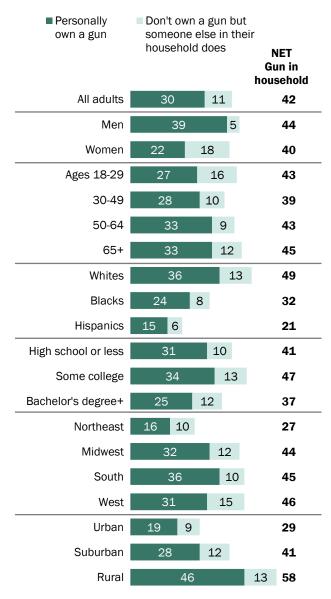
Gun ownership varies considerably across demographic groups. For example, about fourin-ten men (39%) say they personally own a gun, compared with 22% of women. And while 36% of whites report that they are gun owners, about a quarter of blacks (24%) and 15% of Hispanics say they own a gun.

White men are especially likely to be gun owners: About half (48%) say they own a gun, compared with about a quarter of white women and nonwhite men (24% each) and 16% of nonwhite women.

Like the gender gap, the education gap in gun ownership is particularly pronounced among whites. Overall, about three-in-ten adults with a high school diploma or less (31%) and 34% of those with some college education say they own a gun; a quarter of those with a bachelor's degree or more say the same. Among whites, about four-in-ten of those with a high school diploma or less (40%) or with some college (42%) are gun owners, compared with roughly a quarter of white college graduates (26%). There is no significant difference in the rate of gun ownership across educational attainment among nonwhites.

Three-in-ten adults say they own a gun

% saying they ...



Note: Figures may not add to subtotals indicated due to rounding. Whites and blacks are non-Hispanics. Hispanics are of any race. "Some college" includes those with an associate degree and those who attended college but did not obtain a degree.

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

"America's Complex Relationship With Guns"

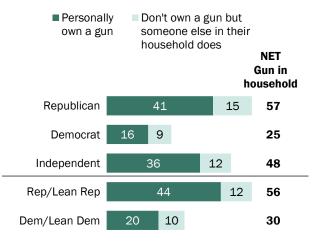
Regionally, Northeasterners stand out as the least likely to own guns: 16% of adults who live in the Northeast say they own a gun, about half the share who say this in the South (36%), Midwest (32%) and West (31%).

Across all regions, gun ownership varies considerably between those who live in rural and urban areas, with rural dwellers far more likely than those who live in urban areas to say they own a gun. Overall, 46% of Americans who live in rural parts of the country own a gun, compared with 28% of those who live in the suburbs and 19% of those in urban areas.

Besides demographic differences, clear partisan divides emerge when it comes to gun ownership. Republicans and Republicanleaning independents are more than twice as likely as Democrats and Democratic-leaning independents to say they own a gun (44% vs.

Gun ownership is far more common among Republicans than Democrats

% saying they ...



Note: Figures may not add to subtotals indicated due to rounding. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

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20%). This partisan gap remains even after controlling for demographic differences.

Among the 11% of Americans who don't personally own a gun but live in a gun-owning household, relatively few (19%) say they ever use the gun or guns in their household.

Most gun owners could never see themselves not owning a gun

Roughly three-quarters of Americans who currently own a gun (73%) say they can't see themselves ever *not* owning one, and this is the case among majorities of gun owners across demographic groups.

Perhaps not surprisingly, those who see owning a gun as central to their overall identity are particularly committed to gun ownership. For example, 89% of gun owners who see owning a gun as very or somewhat important to their overall identity say they can't see themselves ever not owning a gun, compared with 58% of those who say owning a gun is not too important or not at all important their sense of identity.

And while 85% of gun owners who say the right to own guns is essential to their sense of freedom say they can't see themselves ever not owning a gun at some point, 41% of those who don't see the right to own guns as essential say the same.

Many non-gun owners are open to owning a gun in the future

In addition to the three-in-ten adults who currently own a gun, another 10% say they have owned one in the past; 58% say they have never owned a gun.

Many adults who don't currently own a gun say they could see themselves owning one at some point. In fact, 52% of all non-gun owners – and 71% of those who have owned a gun in the past – say they could see themselves owning a gun in the future.

Consistent with patterns in gun ownership, a higher share of men than women who don't currently own guns say they could see themselves doing so at some point; 62% of men who don't own guns say this is the case, compared with 45% of women. And while 62% of non-gun owners who live in rural areas say

About half of non-gun owners could see themselves owning a gun in the future

% of those who do not own a gun who say they ... Could see owning Could never see a gun in the future owning a gun All non-gun 52 47 owners Have owned a 71 29 gun in the past Have never 49 51 owned a gun

Note: Share of respondents who didn't offer an answer not shown. Non-gun owners who have owned a gun in the past were asked whether they could see themselves owning a gun *again*. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

"America's Complex Relationship With Guns'

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they could see themselves owning a gun at some point, smaller shares of those who live in a suburban (49%) or urban (50%) areas say the same.

Two-thirds of gun owners cite protection as a major reason for owning a gun

Most gun owners cite more than one reason for owning a gun, but protection tops the list, with 67% of gun owners saying this is a major reason they personally own a gun. About four-in-ten (38%) say hunting is a major reason they own a gun, while three-in-ten cite sport shooting, including target, trap and skeet shooting. Fewer gun owners cite a gun collection (13%) or their job (8%) as major reasons.

Men and women are about equally likely to say protection is a major reason they own a gun: 65% and 71%, respectively, say this is the case. But higher shares of male than female gun owners say

hunting (43% of men vs. 31% of women) and sport shooting (34% vs. 23%) are major reasons they personally own a gun.

For the most part, gun owners in urban, suburban and rural areas offer similar reasons for owning guns. For example, about seven-inten of those who live in urban or suburban areas say protection is a major reason they own a gun (71% each), as do most gun owners in rural parts of the country (62%). And across community types, about three-in-ten cite sport shooting as a major reason.

Protection tops the list of reasons for owning a gun

% of gun owners saying each is a <u>major</u> reason they personally own a gun

	All gun owners	Urban	Suburban	Rural
For protection	67	71	71	62
For hunting	38	27	34	48
For sport shooting	30	31	30	30
As part of a gun collection	13	12	11	15
For their job	8	12	6	7

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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When it comes to hunting, however, rural gun owners are far more likely than their urban or

suburban counterparts to say it is as an important reason they own a gun; 48% of gun owners in rural areas say this, compared with 34% in the suburbs and 27% in urban parts of the country.

Interestingly, gun owners who see their local community as unsafe are not significantly more likely than those who say they live in a safe community to say protection is central to why they own a gun. About three-quarters of gun owners who say the community where they live is not too safe or not at all safe (74%) – and 66% of those who say they live in a community that is very or somewhat safe – cite protection as a major reason they own gun. There is a significant link, however, between owning a gun for protection and perceptions of whether the world, broadly speaking, has become more dangerous. While about seven-in-ten gun owners who say the world has become more dangerous cite protection as a major reason they own a gun (72%), half of those who don't see the world that way say protection is central to why they own a gun. Overall, 69% of all U.S. adults – and 75% of those who own a gun – say the world has become a more dangerous place.

About two-thirds of gun owners own more than one gun

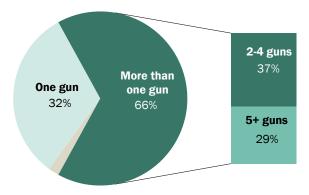
Most gun owners (66%) say they own more than one gun, with about three-in-ten (29%) saying they own five or more guns. This is, perhaps, not surprising, considering that eight-in-ten gun owners cite more than one reason for owning a gun – including 44% who say there is more than one *major* reason – and may need different types of guns for different purposes. In fact, most gun owners who cite only one reason for owning a gun say they own a single gun (65%); in contrast, 74% of those who say they own a gun for more than one reason report having at least two guns.

Men are particularly likely to own multiple guns: About three-quarters of male gun owners (74%) say they own two or more guns, compared with 53% of female gun owners. This reflects, in part, the fact that men who own guns are more likely than their female counterparts to have more than one reason for doing so. Still, even after controlling for the number of reasons they own a gun, male gun owners remain more likely than their female counterparts to own multiple guns.

Overall, about seven-in-ten gun owners say they own a handgun or pistol (72%), while 62% own a rifle and 54% own a shotgun. While similar shares of male and female gun owners own a handgun (73% and 71%, respectively), rifles and shotgun are more popular among men. Roughly seven-in-ten male gun owners (69%) say they own a rifle and 60% own a shotgun, compared with 50% and 44% of

Most gun owners own multiple guns

% of gun owners saying they own ...



Note: Share of respondents who didn't offer an answer shown but not labeled.

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

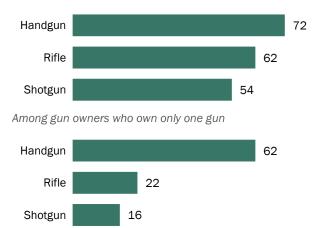
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For those with a single gun, handguns are by far the most common type

% saying they own each type of gun

Among all gun owners



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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women who own each type of gun, respectively.

Among gun owners with only one gun, handguns are by far the most common type of gun: 62% say this is the type of gun they own, while 22% own a rifle and 16% own a shotgun.

Most gun owners say there were guns in their household growing up

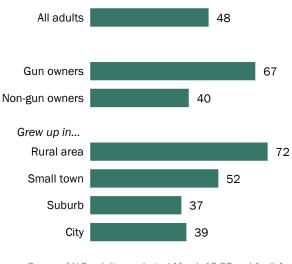
Whether they personally own a gun or not, about half of U.S. adults (48%) say they grew up in a gun-owning household; 42% say there were no guns in their household growing up and 10% are not sure. Among gun owners, 67% grew up in a gun-owning household, compared with 40% of non-gun owners.

Adults who describe the community where they grew up as rural are particularly likely to have grown up with a gun in their household: 72% in this group say this is the case. Still, a substantial share of those who grew up in a small town (52%), a suburb (37%) or a city (39%) say guns were present in their home when they were growing up.

Regardless of the type of community they lived in growing up, adults who grew up with guns in their households are far more likely than those who did not to be gun owners themselves. About four-in-ten who grew up in

About half of U.S. adults say they grew up in a gun-owning household

% saying there were guns in their household when they were growing up



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns" **PEW RESEARCH CENTER**

a gun-owning household say they currently own a gun (42%), compared with 19% of those who didn't grow up with guns in their household. While this difference is most pronounced among those who grew up in rural areas -48% of those who grew up with guns now own a gun vs. 12% of those who didn't grow up with guns in their household - it is also evident among those who grew up in small towns, suburbs or cities.

Among non-gun owners, about six-in-ten of those who grew up in a gun-owning household say they could see themselves owning a gun at some point (61%). Of those who didn't grow up with guns in their household, smaller shares say the same (46%).

Reasons for having had guns in the household growing up vary considerably across community type. For example, eight-in-ten adults who grew up in a gun-owning household in a rural area cite hunting as a reason there were guns in their household, while fewer cite protection (57%) or sport shooting (51%). In contrast, seven-in-ten of those who grew up in a gun-owning household in a city say there were guns in their household for protection; about half cite hunting (51%) or sport shooting (50%) as reasons there were guns in their household growing up.

Protection is cited far more often by adults younger than 30 than their older counterparts as a reason there were guns in their household growing up. About eight-in-ten young adults who grew up in a gun-owning household (79%) say this was a reason, compared with 66% of those ages 30 to 49, 60% of those ages 50 to 64, and just 34% of those ages 65 and older.

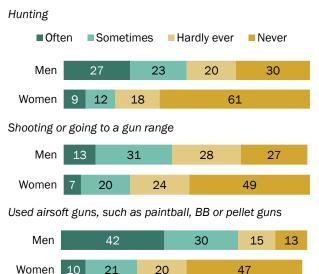
By contrast, older Americans who grew up in a gun-owning household are far more likely than younger adults who grew up with guns to point to hunting as a reason guns were present in their household. About eight-in-ten of those ages 65 and older (84%) and 73% of those ages 50 to 64 cite hunting as a reason; a narrower majority of adults ages 30 to 49 who grew up in a gun-owning household (60%) and about half of those younger than 30 (52%) cite hunting.

Higher shares of men than women who grew up with guns in the household say they participated in certain gun-related activities

While men and women are equally likely to say there were guns in their household growing up, men who grew up in a gun-owning household are far more likely than their female counterparts to say they went hunting or shooting when they were growing up. About half of men who grew up with guns in their homes say they went hunting often (27%) or sometimes (23%). Among women who grew

Among those who grew up with guns, men are far more likely than women to have participated in certain gun-related activities when they were young

% of those who grew up in a gun-owning household saying they did each of the following when they were growing up



Note: Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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up in a gun-owning household, about one-in-five (22%) say they went hunting at least sometimes when they were growing up, while most say they hardly ever (18%) or never (61%) did this.

Men who grew up in a gun-owning household are also more likely than women who grew up with guns in their homes to say they went shooting or to a gun range growing up, though relatively few men or women say they did this often (13% and 7%, respectively). About four-in-ten men who grew up in a gun-owning household (44%) say they went shooting or to a gun range at least sometimes when they were growing up, while about a quarter of women (27%) say the same.

Among adults who didn't grow up in a gun-owning household, few say they went hunting or shooting when they were growing up. But men who didn't grow up with guns are somewhat more likely than women who didn't grow up with guns to say they participated in these activities at least sometimes. One-in-ten men who didn't grow up with guns in their household say they went hunting often or sometimes, compared with 5% of women. And while 16% of men in this group went shooting or to a gun range at least sometimes when they were growing up, even smaller shares of women did so (6%).

When it comes to airsoft guns, such as paintball, BB or pellet guns, 57% of men – including 72% of those who grew up with guns in their household and 42% of those who didn't – say they used them often or sometimes when they were growing up. Just 20% of women say they used airsoft guns at least sometimes when they were growing up.

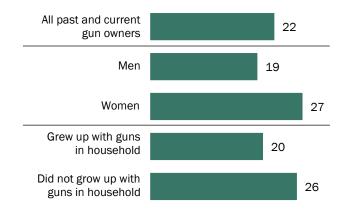
Gun ownership tends to happen at an earlier age for those who grew up with guns in their household

Among all current and past gun owners, the average age at which Americans say they first became gun owners is 22 years. Nearly fourin-ten current or past gun owners (37%) report that they were younger than 18 when they first got their own gun.

Current or past gun-owners who grew up with guns in their household report that they first became gun owners at an earlier age than

Men, on average, become gun owners at an earlier age than women

Mean age at which current or past gun owners first got their own gun



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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those who didn't grow up in a gun-owning household.

About half of those who grew up with guns (47%) say they were younger than 18 when they first got their own gun, compared with 19% of those who didn't grow up with guns in their household.

Among men who own or have owned a gun and who grew up in a gun-owning household, 61% say they personally became gun owners before they turned 18; a quarter of women in the same group say they were younger than 18 when they first got their own gun. On average, men who grew up in a gun-owning household report that they first got their own gun when they were 17, compared with an average age of 26 for women who grew up with guns in their household.

Overall, men who currently own guns or who have done so in the past report that they first became gun owners at age 19, on average; for women who own or previously owned guns, that age is 27.

Most Americans say they have fired a gun at some point

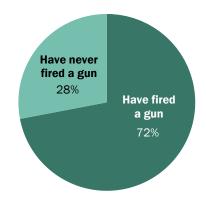
About seven-in-ten adults (72%) say they have fired a gun at some point in their lives. While this is particularly the case among those who own or have owned a gun (95%), about half of those who have never personally owned a gun say they have fired one (55%).

Large majorities of about nine-in-ten or more among current and past gun owners say they have fired a gun, and this is true across demographic groups. Among those who have never owned a gun, however, there are some significant demographic differences in the shares who say they have fired one. In many ways, these differences mirror the patterns in gun ownership.

For example, men who have never owned a gun are more likely than their female counterparts to say they have fired one (64% vs. 50%). About two-thirds (68%) of whites who have never owned a gun say they have fired one at some point, compared with 32% of blacks and 35% of Hispanics who have never owned a gun. And while 68% of those who live in rural areas who have never owned a gun say they have fired one, about half of those who live in urban (48%) or suburban (56%) areas have had this experience.

About seven-in-ten Americans say they have fired a gun

% saying they ...



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

Among adults who have never personally owned a gun, seven-in-ten of those who grew up with guns in their household say they have fired a gun at some point, compared with 47% of those who didn't grow up in a gun-owning household. Whether they have or have not personally owned a gun, the average age at which those who grew up with guns in the household say they first fired a gun is 14 years, compared with 20 years among those who didn't grow up in a gun-owning household.

Men who grew up in a gun-owning household report that they first fired a gun when they were, on average, 12 years old. Among women who grew up with guns in their household, the average age at which they first fired a gun is 17.

Most Americans say society has a negative view of gun owners, but that people in their own communities look at gun owners is a positive way

A majority of Americans say that society tends to have a negative view of gun owners, a perception that is somewhat more common among non-gun owners than among those who own a gun. About

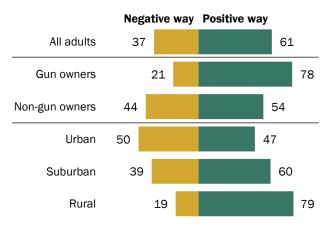
six-in-ten Americans who don't own a gun (61%) say society has a negative view of gun owners, while 38% say society's views are generally positive. Opinions are more mixed among gun owners themselves: 54% say society tends to have a negative view and 45% say it has a positive view of most gun owners.

Americans have a different assessment of how people in their own communities view gun owners. Most (61%) say people in their community generally view gun owners in a positive way, and this is particularly the case among those who live in rural communities. About eight-in-ten adults who live in a rural area (79%) say people in their community generally have a positive view of gun owners; just 47% of those in urban areas say the same about people in their community.

Gun owners are far more likely than non-gun

About six-in-ten Americans say people in their community have a positive view of most gun owners

% saying they feel people in their community tend to look at most gun owners in a ...



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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owners to say people in their community look at most gun owners in a positive way; 78% of gun

owners say this is the case, compared with 53% of non-gun owners. Assessments vary between gun owners and those who don't own guns across community types, but differences are particularly pronounced among those who live in urban or suburban areas.

For example, while 66% of urban gun owners say people in their community generally have a positive view of most gun owners, less than half of those who do not own guns in urban areas say this is the case (42%). In rural areas, gun owners are somewhat more likely than those who don't own guns to say people in their community look at gun owners in a positive way, but majorities of both groups offer this assessment (85% and 74%, respectively).

2. Guns and daily life: Identity, experiences, activities and involvement

Americans own guns for a variety of reasons, and the ways in which they use their guns differ. Gun use also varies along key demographic, social and attitudinal dimensions.

Overall, about a third of gun owners say they go hunting often (12%) or sometimes (22%), while roughly half say they go shooting or to a gun range with some frequency (13% often, 40% sometimes). Among those who own a handgun, roughly one-in-four (26%) carry their gun with them outside of their home all or most of the time, and an additional 31% say they carry some of the time.

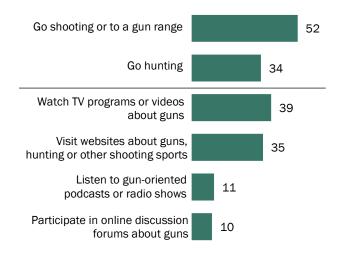
Gun owners are divided when it comes to how important owning a gun is to their overall identity. One-in-four say it is very important, while the rest view this as somewhat important or not important. Those who say being a gun owner is very important to their identity are nearly unanimous in their belief that the right to own a gun is essential to their personal freedom.

Many, but not all, gun owners exist in a social context where gun ownership is the norm. Roughly half of all gun owners say that all or most of their friends own guns. An additional 38% say some of their friends own guns and 13% say only a few do. In stark contrast, among the non-gun owning public, only onein-ten say all or most of their friends own guns. These social connections are strongly tied to gun use, as gun owners who say all or most of their friends own guns engage more frequently in hunting and sport shooting than those with fewer friends that own guns.

The broader gun culture in the U.S. extends beyond hunting and shooting to clubs, associations and media and entertainment outlets. About a third or more of gun owners say they often or sometimes watch TV programs or videos about guns or visit websites about guns, hunting or other

For many gun owners, their experiences with guns extend beyond shooting and hunting

% of gun owners saying they often or sometimes ...



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

"America's Complex Relationship With Guns"

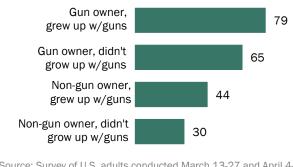
shooting sports. Younger gun owners are among the most likely to consume some types of gun-related media. Among all gun owners, about one-in-four say they often or sometimes attend gun shows.

Men and women who own guns interact with them in different ways – with male gun owners hunting and shooting more frequently than their female counterparts and consuming some forms of gun-oriented media at higher rates. There are also differences by age and educational attainment in the extent to which guns are a part of the day-to-day lives of gun owners.

Majority of gun owners say right to own guns is essential to personal freedom

Gun owners who grew up in a gunowning household most likely to view gun ownership as an essential right

% saying the right to own guns is essential to their own sense of freedom



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"



For today's gun owners, the right to own guns nearly rivals other rights laid out in the U.S. Constitution in terms of its personal salience. About three-quarters of gun owners (74%) say this right is essential to their own sense of freedom. Among those who do not own guns, only 35% view the right to own guns as an essential right.

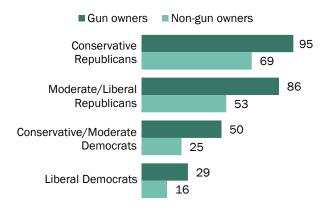
Gun owners and non-owners tend to agree on other top-tier constitutional rights. Roughly equal shares say freedom of speech, the right to vote, the right to privacy and freedom of religion are essential to their own sense of freedom.

Views on the essential nature of the right to own guns are linked both to current gun ownership and personal history. Gun owners who grew up with guns in their household are among the most likely to say the right to own guns is essential to their personal sense of freedom -79% hold this view. Gun owners who did not grow up with guns feel less strongly about this; 65% say the right to own guns is essential to their sense of freedom. Similarly, among non-gun owners, 44% of those who grew up with guns view the right to own guns as essential, compared with 30% of those who did not to grow up in a gun-owning household. Partisanship and ideology are strongly correlated with views about the importance of gun ownership as a guaranteed right. And those differences hold up among gun owners and non-owners alike. For Republican gun owners and independents that lean Republican, gun ownership is nearly on par with free speech, the right to vote, the right to privacy and freedom of religion. Among conservative Republican gun owners (and Republican leaners), 95% say the right to own guns is essential to their own sense of freedom. Somewhat fewer (86%) moderate to liberal Republican gun owners view the right to own guns as essential to their freedom.

Roughly seven-in-ten (69%) conservative Republicans who do not own guns view the right to own guns as essential. Among moderate and liberal Republicans who don't own guns fewer (53%) hold this view.

Party and ideology strongly linked to views on importance of right to own guns

% saying the right to own guns is essential to their own sense of freedom



Note: Republicans and Democrats include independents who lean toward each party. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

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Among conservative and moderate Democrats and independents that lean Democratic, gun owners are twice as likely as non-owners to say the right to own guns is essential to them (50% vs. 25%). Relatively few liberal Democrats view the right to own guns as essential to their freedom, but the gun owners among this group are significantly more likely than non-owners to hold this view (29% vs. 16%).

For one-in-four gun owners, owning a gun is very important to their identity

America's gun owners are divided over whether owning a gun is central to who they are. Some 25% say this is a very important part of their overall identity and another 25% say it is somewhat important. At the same time, fully half say being a gun owner is not too important to their overall identity (30%) or not important at all (20%).

Roughly equal shares of men and women who own guns say being a gun owner is very important to their identity. Gun owners with a high school diploma or less education are significantly more

likely than more educated gun owners to view gun ownership as central to who they are -34% of those with no formal education beyond high school say this is very important to their overall identity, compared with 20% of those who have attended or graduated from college.

Republican gun owners are nearly three times as likely as Democrats who own guns to say owning a gun is very important to their overall identity: 31% of Republicans or independents who lean Republican say this, compared with 12% of Democrats and independents who lean to the Democratic Party.

In addition, gun owners who own five or more guns see a stronger link between their gun ownership and their overall identity. Among those who own five or more firearms, 42% say being a gun owner is very important to their overall identity. Only 21% of those who own two to four guns and 15% who own one gun say the same.

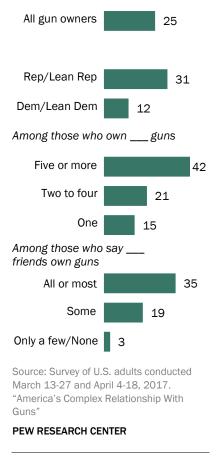
Similarly, gun owners who have strong social ties to other gun owners are more likely than those with fewer ties to see their gun ownership as important to their identity. Some 35% of those who say all or most of their friends own guns also say being a gun owner is very important to their overall identity, compared with 19% of those who say some of their friends own guns and only 3% of those who say only a few or none of their friends own guns.

More than eight-in-ten gun owners say at least some of their friends also own guns

When it comes to their social circles, about half of gun owners (49%) say that all or most of their friends also are gun owners, and another 38% say some of their friends are; just 13% of gun owners say only a few of their friends own guns and virtually no gun owners (less than 1%) say that none of their friends do. In contrast, only one-in-ten adults who don't own guns say all or most of their friends are gun owners; 37% say some of their friends own guns, while 32% say only a few do and 21% say none of their friends own guns.

Gun ownership more closely linked to overall identity for GOP gun owners

% of gun owners saying being a gun owner is <u>very</u> important to their overall identity



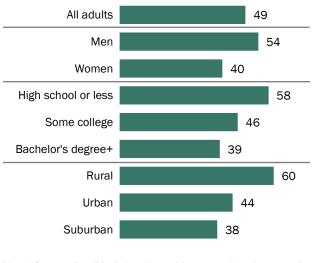
Perhaps not surprisingly, since gun ownership is more common in rural parts of the country, gun owners who live in such areas are far more likely than those who live in a suburb or urban area to say all or most of their friends also own guns. Six-in-ten gun owners in rural areas say this is the case, compared with 38% in suburban and 44% in urban areas. Non-gun owners in rural areas are

also somewhat more likely than those in other types of communities to say all or most of their friends own guns, though relatively few nongun owners in rural (16%), urban (7%) or suburban (9%) areas say this is the case.

Among male gun owners, 54% say all or most of their friends also own guns; smaller shares of women who own guns say this is the case (40%). It is also more common for lesseducated gun owners to socialize with other gun owners: 58% of those with a high school diploma or less say all or most of their friends also own guns, compared with 46% of gun

Demographic differences emerge in the shares of gun owners who say all or most of their friends also own guns

% of gun owners saying all or most of their friends own guns



Note: "Some college" includes those with an associate degree and those who attended college but did not obtain a degree. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

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owners with some college and 39% of those with at least a bachelor's degree.

Eight-in-ten gun owners say they don't mind if other people know they own a gun, but don't go out of their way to tell them; 14% say they'd rather other people not know that they own a gun and 6% want others to know. Answers to this question don't vary significantly across demographic groups or party lines.

Sport shooting is a more common activity among gun owners than hunting

About half of gun owners say they often (13%) or sometimes (40%) go shooting or to a gun range. Some 30% say they rarely go shooting and 18% say they never do. Hunting is less common: Roughly a third of gun owners say they often (12%) or sometimes (22%) go hunting. Some 22% say they rarely go hunting and 44% say they never do.

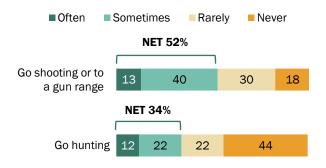
Among non-owners who say they have shot a gun at some point, 6% say they often or sometimes go shooting or to a gun range and 5% say they go hunting at least sometimes.

When it comes to hunting, there's a gap among gun owners, although it's relatively modest: 37% of male gun owners say they go hunting often or sometimes, compared with 28% of female owners.

Republican gun owners and independents that lean Republican are more likely than

About a third of U.S. gun owners hunt often or sometimes

% of gun owners saying they ...



Note: Figures may not add to subtotals indicated due to rounding. Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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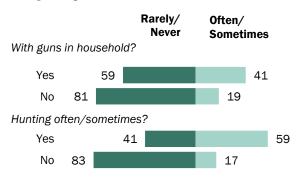
Democratic gun owners and Democratic-leaning independents to say hunting is a major reason they own a gun, and there is a similar party gap in which group hunts more frequently. Roughly

four-in-ten Republican gun owners (39%) say they hunt at least sometimes, compared with 24% of Democrats.

Gun owners who grew up with guns in their household are about twice as likely as gun owners who did not grow up with guns to say they often or sometimes hunt (41% vs. 19%). And among gun owners who say they hunted at least sometimes when they were growing up, roughly six-in-ten (59%) say they still hunt at least sometimes. Relatedly, gun owners living in rural areas – who are more likely to have hunted when they were growing up – report hunting at much higher rates than those living in urban and suburban areas. Roughly four-inten rural gun owners (42%) say they hunt often or sometimes, compared with roughly a quarter

Majority of gun owners who grew up hunting currently hunt at least sometimes

% of gun owners saying they hunt _____, among those who grew up ...



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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of those living in suburban and urban areas.

Gun owners who hunt are far more likely than those who do not hunt to have five or more guns. Roughly two-thirds (67%) of those who hunt often own at least five firearms, compared with 46% of those who hunt sometimes, 27% of those who rarely hunt and 11% who never hunt.

The gender gap in hunting can also be seen in sport shooting. Roughly six-in-ten male gun owners (58%) say they go shooting or to a range at least sometimes, compared with 43% of women who own guns. Among men and women, younger gun owners (those under age 50) are more likely than their older counterparts to say they often or sometimes go shooting.

The partisan gap is similar as well. Even though Republican and Democratic gun owners are equally likely to say sport shooting is a major reason they own a gun, Republicans report shooting

or going to a gun range more frequently than do Democrats (58% of Republicans vs. 42% of Democrats say they do this often or sometimes).

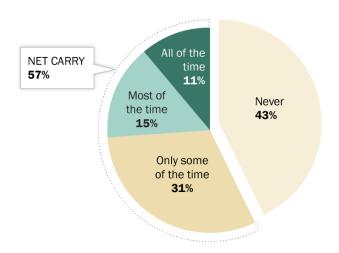
More than half of handgun owners carry outside their home at least sometimes

Every state in the U.S. allows individuals to carry concealed weapons, although most require a permit in order to do so. And the open carrying of handguns in public places is permitted in a majority of states, again with certain restrictions which vary from state to state.

About seven-in-ten gun owners (72%) say they own a handgun, and, of those, about a quarter (26%) say they carry it outside their home all or most of the time, with 11% saying they always carry a handgun. (This does not include times when they might be transporting the gun.) Roughly three-in-ten (31%) carry some of the time, and 43% say they never carry a

About one-in-ten handgun owners say they carry all of the time

% saying they carry a handgun or pistol outside of their home _____, among those who own a handgun



Note: Figures may not add to 100% or subtotals indicated due to rounding. The question asked respondents to exclude times when they are transporting their handgun. Share of respondents who didn't offer an answer not shown.

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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handgun outside of their home.

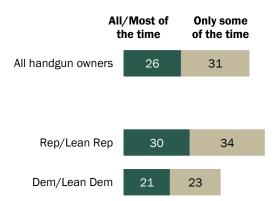
There is no gender gap in carrying a handgun – roughly equal shares of men and women who own a handgun say they carry outside of their home. And there are no significant differences by education, region or community type.

There is, however, a partisan gap: Roughly sixin-ten (63%) of Republicans or Republicanleaning independents who own a handgun or pistol say they carry a handgun outside of their home at least some of the time, compared with 45% of Democrats or Democratic-leaning independents who own a handgun.

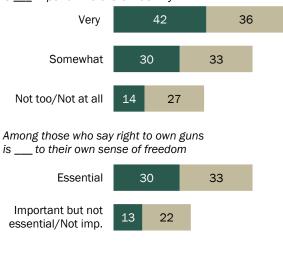
Carrying a handgun is a much more common occurrence for those who say owning a gun is at least a somewhat important part of their identity than it is for other gun owners. Among handgun owners, about three-quarters (78%) who say owning a gun is very important to their overall identity say they carry a gun outside of their home at least some of the time. This includes 42% who say they carry all or most of the time. By contrast, roughly four-inten (42%) handgun owners who say owning a gun is not too or not at all important to their overall identity say they carry at least some of the time (14% of these handgun owners carry all or most of the time).

Most Republican handgun owners carry outside their home at least sometimes

% of handgun owners who carry a handgun outside their home ...



Among those who say being a gun owner is ____ important to overall identity



Note: The question asked respondents to exclude times when they are transporting their handgun. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns" **PEW RESEARCH CENTER**

Similarly, carrying a gun outside the home at least some of the time is more prevalent among gun owners who view owning a gun as essential to their personal freedom, than it is for other gun owners (63% vs. 36%).

Handgun owners who live in communities they feel are unsafe tend to carry their guns with them more often. Among those who say their community is not too or not at all safe from crime, 41% of handgun owners carry their gun with them all or most of the time. Only about half as many (22%) of those who say their community is very or somewhat safe say they carry a handgun with the same frequency.

Republicans, Democrats have different reasons for not carrying

Among handgun owners who say they never carry a gun outside of their home, a majority (64%) say the reason they never carry is because they don't want to. Roughly a third (36%) say there is

some other reason that they don't carry. While the survey didn't specifically explore these reasons, some explanations offered by gun owners in a series of focus groups include legal restrictions in the state where they live or that haven't gotten around to fulfilling the necessary requirements to be able to carry legally.

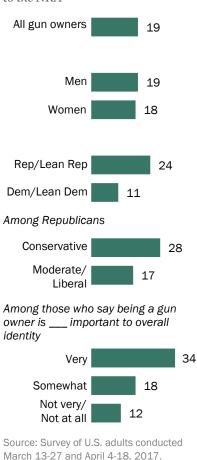
Democrats who own handguns but do not carry them outside their home are much more likely to say they don't carry because they don't want to -76% of Democrats say this, compared with 56% of Republicans. Among Republicans who don't carry outside their home, 44% say they have some other reason for not carrying; only 24% of Democrats who don't carry say the same.

About one-in-five gun owners say they are members of the NRA

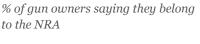
Overall, 19% of all U.S. gun owners say they belong to the NRA. Among gun owners, roughly equal shares of men and women say they are NRA members, and there are no significant differences across age groups or by educational attainment.

Across income groups, membership rates are highest among gun owners with annual household incomes of \$100,000 or more. Roughly three-in-ten (29%) of these higher-income gun owners say they belong to the NRA, compared with 17% of those earning between \$75,000 and \$99,999 and an equal share of those earning less than \$75,000.

Among gun owners, men and women equally likely to belong to NRA



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"



Republican and Republican-leaning independent gun owners are about twice as likely as gun owners who are Democrats and Democratic-leaning independents to say they belong to the NRA – 24% vs. 11%. And, among Republicans, conservatives have significantly higher rates of membership – 28% vs. 17% of moderate or liberal Republicans.

The survey findings suggest that guns owners who strongly identify with their gun ownership are more apt to join the NRA. Among those who say being a gun owner is very important to their overall identity, 34% are NRA members. The share is smaller for those who say being a gun owner is somewhat important (18% belong to the NRA) or not important (12%). In addition, gun owners who got their first gun before they turned 18 are about twice as likely as those who first acquired a gun as an adult to belong to the NRA (27% vs. 14%).

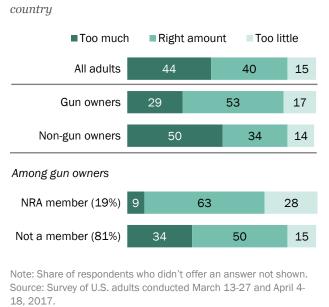
There is no clear public consensus about the

impact the NRA has on the nation's gun laws: 44% of all Americans say the NRA has too much influence, 40% say it has the right amount of influence and 15% say the NRA has too little influence. Among gun owners more say the NRA has too much influence (29%) than say it has too little (17%).

For their part, gun owners who are NRA members are largely satisfied with the amount of influence the organization has over gun laws in the U.S. About six-in-ten (63%) say the NRA has the right amount of influence and 28% would like to see it have even more influence. Only 9% of NRA members say the organization has too much influence over gun laws. Gun owners who are not members of the NRA are more likely than their counterparts who do belong to say the organization has too much influence over gun laws (34% say this).

Americans are divided between those who say the NRA has too much and the right amount of influence

% saying NRA has _____ influence over gun laws in this



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Gun ranges and hunting clubs more popular with younger gun owners

Relatively few gun owners say they are a member of a gun or shooting club or gun range (13%) or that they belong to a hunting club (5%).

Membership in these types of establishments is more common among younger gun owners. Roughly one-in-five gun owners ages 18 to 49 (18%) say they belong to a shooting club or gun range, compared with 9% among those ages 50 and older. Among gun owners ages 18 to 29, 13% belong to a hunting club; only 3% of those ages 30 and older say they belong.

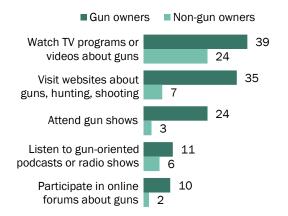
Gun owners who go shooting frequently are particularly likely to be members of a gun or shooting club or gun range: 48% of those who say they go shooting often are members of these types of establishment, compared with 15% of those who go shooting sometimes and even fewer among those who rarely or never go shooting. However, membership in hunting clubs is relatively uncommon even among those who say they go hunting often: Just 12% in this group say they belong to a hunting club.

Roughly a third of gun owners visit gun-related websites often or sometimes

Gun owners have a variety of options these days for pursuing their interest in guns – from websites devoted to guns and hunting, to podcasts, to gun shows.

About one-in-four non-gun owners say they watch gun-oriented TV programs and videos owners

% saying they do each of the following often or sometimes



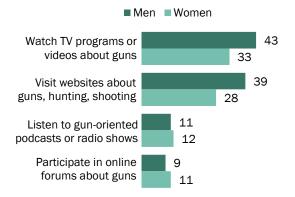
Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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Among gun owners, men consume more gun-oriented media than women

% of gun owners saying they do each of the following often or sometimes



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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About four-in-ten gun owners say they often (8%) or sometimes (31%) watch gun-oriented TV programs or videos, and a similar share say they visit websites about guns, hunting or other shooting sports (8% say they do this often and 27% sometimes).

Of course, all of these outlets are available to non-gun owners as well, and some do take advantage of them. About one-in-four non-gun owners say they watch gun-oriented TV programs or videos often (5%) or sometimes (20%). Non-gun owners are much less likely than gun owners to say they visit websites about guns, hunting or shooting (1% often, 7% sometimes).

There are significant gender gaps when it comes to consuming these types of gun-oriented media. While 43% of male gun owners say they often or sometimes watch gun-related TV shows or videos, 33% of female guns owners say the same. Similarly, when it comes to visiting websites with gunrelated content, 39% of male gun owners say they do this at least sometimes, compared with 28% of female gun owners.

There is also a significant education gap on most of these measures. For example, gun owners without a bachelor's degree are much more likely than those who do have a bachelor's degree to watch gun-oriented TV shows or videos (44% vs. 24%)

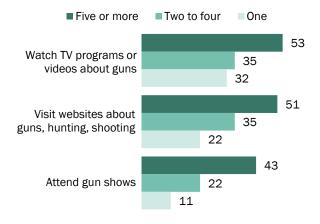
Gun owners who say all or most of their friends own guns are more likely to watch these shows and videos – 44% say they do this at least sometimes, compared with 34% of those who say some, only a few or none of their friends own guns.

About one-in-four gun owners attend gun shows often or sometimes

Overall, about a quarter of gun owners say they attend gun shows often (4%) or sometimes (20%). Roughly three-in-ten (29%) say they hardly ever attend gun shows and 47% say they never do.

Gun owners with five or more guns highly engaged in gun-oriented media, gun shows

% of gun owners with ____ guns saying they often or sometimes ...



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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Among gun owners, men and women are equally likely to say they go to gun shows at least sometimes, but the education gap that is apparent on gun-oriented media can also be seen here. While roughly three-in-ten (28%) gun owners without a bachelor's degree say they go to gun shows often or sometimes, only 14% of gun owners with a bachelor's degree say the same.

In addition, Republican gun owners are more likely than their Democratic counterparts to regularly attend gun shows – 28% of Republicans and independents that lean Republican vs. 18% of Democrats and Democratic-leaning independents say they go to gun shows often or sometimes.

When it comes to watching gun-related TV and video, visiting websites and attending gun shows, gun owners with multiple firearms are among the most likely to engage in these activities. Roughly half of gun owners with five or more guns say they watch gun-oriented TV or videos or visit websites related to guns and hunting at least sometimes. Significantly smaller shares of those with fewer guns do the same.

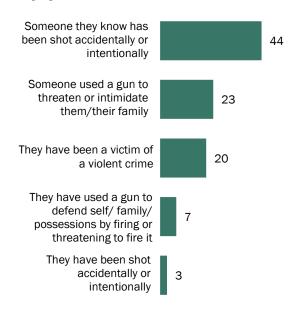
% saying ...

Owners with five or more weapons are at least twice as likely as those with fewer weapons to say they attend gun shows often or sometimes.

Relatively few gun owners listen to gunoriented podcasts or radio shows – about onein-ten listen often (2%) or sometimes (9%). Younger gun owners are more likely to listen at least sometimes: 21% of those under 30 say they do, compared with 9% among gun owners ages 30 and older.

About one-in-ten gun owners say they often (1%) or sometimes (8%) participate in online discussion forums about guns. Again, younger gun owners are more likely than their older counterparts to participate in these types of forums – 22% among those under 30 vs. 7% for 30 and older.

Roughly four-in-ten Americans say they know someone who has been shot



Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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Dangerous encounters with guns vary by gun ownership, key demographics

A significant share of Americans (44%) say that someone they know has been shot, either accidentally or intentionally. Some 3% of all adults say they have been personally shot either accidentally or intentionally.

Gun owners are significantly more likely than non-gun owners to know someone personally who has been shot (51% vs. 40% of nonowners), and they are also more likely to report that have been shot themselves (6% vs. 2%).

There are demographic differences as well. Roughly six-in-ten (57%) blacks, compared with 43% of whites and 42% of Hispanics, personally know someone who has been shot either accidentally or on purpose.

There is also a divide by educational attainment: Roughly half of adults with a high school diploma or less say they know someone who has been shot, compared with 37% of adults with a bachelor's degree or higher.

Americans living in rural parts of the country are also more likely to know someone who has been shot. Half of rural residents know someone who has been shot. By comparison, Americans living in the suburbs and in urban areas are less likely to know someone who has been shot (40% and 43%, respectively).

Experiences with being shot, or knowing someone who has been, differ along key demographic fault lines

% saying they ...

	Know someone who has been shot	
All adults	44	3
Gun owners	51	6
Non-gun owners	40	2
Whites	43	3
Blacks	57	6
Hispanics	42	2
HS or less	49	5
Some college	44	3
Bachelor's degree+	37	2
Urban	43	3
Suburban	40	3
Rural	50	5
Among gun owners		
Urban	59	4
Suburban	44	4
Rural	53	8

Note: Respondents were asked if they personally know someone who had been shot, either accidentally or intentionally. Whites and blacks include only those who are not Hispanic. Hispanics are of any race. "Some college" includes those with an associate degree and those who attended college but did not obtain a degree. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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However, these differences largely evaporate among gun owners. Among urban gun owners, 59% say they know someone who has been shot. This is roughly equal to the share of rural gun owners who know someone who has been shot (53%).

Blacks, low-income Americans more likely to have been threatened by someone with a gun

Overall, roughly one-in-four Americans (23%) say someone has used a gun to threaten or intimidate them or their family. Gun owners are no more likely to have experienced this than non-gun owners.

There is, however, a significant racial gap. Roughly a third of blacks (32%) say someone has used a gun to threaten or intimidate them or their family, compared with 20% of whites. About a quarter of Hispanics (24%) say this has happened to them or their family members.

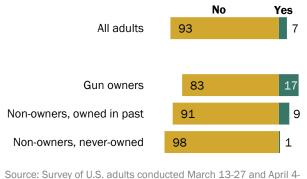
Men and women are about equally likely to say someone has threatened or intimidated them or their family. Among men, those ages 50 and older are more likely than younger men to say someone has used a gun to threaten or intimidate them (28% among older men, 21% among younger men).

Americans are much less likely to have ever fired or threatened to fire a gun to defend themselves, their families or their possessions than they are to have been threatened by a gun. Some 7% say they have had this experience.

Not surprisingly, gun owners and those who have owned a gun in the past are much more likely than those who have never owned a gun to report that they have used a gun to defend themselves, their family or their property. Only 1% of non-gun owners who have never owned a gun say they have used a gun to defend themselves. Roughly one-in-ten (9%) of those who have owned a gun in the past but no longer do, say they have done this. Among

One-in-six gun owners have used a gun to defend themselves

% saying they have used a gun to defend themselves, their families or their possessions



Source: Survey of U.S. adults conducted March 13-27 and April 4 18, 2017.

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current gun owners, 17% say they have used a gun to defend themselves.

The extent to which gun owners see owning a gun as part of their identity is strongly linked to experiences using a gun for self-defense. About one-in-five (22%) gun owners who say owning a gun is a very important part of their overall identity say they've defended themselves with a gun.

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By contrast, about half as many (12%) gun owners who say their ownership is not too important or not at all important to their identity have used a gun in self-defense.

Looking at experiences with crime more broadly, one-in-five adults say they have been the victim of a violent crime, whether a gun was used or not. And roughly equal shares of gun owners (21%) and non-owners (20%) say they have had this type of experience.

3. Views of gun safety and the key responsibilities of gun owners

Just as reasons for owning guns and using them in daily life vary, so do the ways in which gun owners store their guns and the extent to which they see certain measures – such as taking gun safety courses – as essential.

Majorities of gun owners and non-owners alike agree that it's essential for gun owners who live with children in the home to talk to their children about gun safety, to take gun safety courses, and to keep all of their guns in a locked place. Most non-gun owners also say gun owners with children in the house should keep all of their guns unloaded and store guns and ammunition separately, but this view doesn't have majority support among those who own guns.

When it comes to letting visitors know that there are guns in the home, relatively few gun owners see this as essential. In fact, just about a third (32%) say gun owners with no children at home should let visitors who bring children by know about the

Despite some areas of agreement, gun owners and non-owners offer different views of key responsibilities of gun owners

% of gun owners and non-gun owners who say

each measure is essential for gun owners ...

			-			
	with <u>children at home</u> Non-gun		with <u>no childı</u>	<u>ren at home</u> Non-gun		
	Gun owners	owners	Gun owners	owners		
Talk to their children about gun safety	95	89	-	-		
Take gun safety courses	59	79	51	77		
Keep all of their guns in a locked place	66	90	32	71		
Keep all of their guns unloaded	44	73	27	59		
Store guns and ammunition separately	43	69	26	51		
Keep their shooting skills up- to-date	41	48	44	53		
Advise visitors with children that there are guns in the house	26	48	32	53		
Advise visitors that there are guns in the house	5	24	7	23		

Note: A random half of respondents were asked about responsibilities of gun owners who have children in their home and the other half was asked about responsibilities of gun owners who have no children in their home. Within each of these groups, "advise visitors with children that there are guns in the house" and "advise visitors that there are guns in the house" were asked of separate random subsamples.

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

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presence of guns, and even fewer (7%) say gun owners should advise guests with no children that there are guns in the home. Meanwhile, about half of adults who don't own guns say gun owners should advise their guests with children about the presence of guns. About a third of gun owners (36%) say all of the guns in their own home are generally kept in a locked place, and 44% say all are kept unloaded. Roughly four-in-ten gun owners – including 30% of those with children under

18 at home – say there is a gun that is both loaded and easily accessible to them all of the time when they are at home.

As might be expected, most gun owners (75%) say they feel safer with a gun in their household than they would without a gun. Views are more divided among those who don't own a gun but live in a gun-owning household: About as many say having a gun makes them feel safer than they would feel if there wasn't a gun in their household (50%) as say they feel no more or less safe with a gun in their household (44%). Among those who neither own a gun nor live with someone who does, slightly more say they would feel safer if they had a gun in their household (28%) than say a gun would make them feel less safe (20%); 52% say they wouldn't feel more or less safe with a gun in their household.

Americans have widely different views of how gun owners should store their guns and ammunition depending on whether there are children in the home

Americans' opinions of how gun owners should store their guns and ammunition vary significantly when they are asked to consider gun owners who do and do not have children in their home. For example, about eight-in-ten say it's essential for gun owners with children in their home to keep all of their guns in a locked place (83%); about six-in-ten (58%) say the same about gun owners who don't have children in their home. And while around six-in-ten or more say it's essential for gun owners with children at home to keep all of their guns unloaded (65%) and to store their guns and ammunition separately (61%), far smaller shares say it's essential for those with no children in their home to take these measures (48% and 43%, respectively).

Gun owners and non-owners alike are more likely to view each of these measures as essential if there are children in the home. But whether they are asked to consider gun owners with or without children in the home, far higher shares of those who don't own guns than those who do own them say it's essential for gun owners to keep all of their guns in a locked place, keep all of their guns unloaded, and store their guns and ammunition separately. In each case, a difference of 24 percentage points or more separates the views of gun owners and non-gun owners, with the widest gap on views of whether it's essential for gun owners with no children in their home to keep their guns in a locked place – about seven-in-ten of those who do not own guns (71%) say it is, while just 32% of gun owners agree.

When asked if gun owners should advise visitors that there are guns in the house, far higher shares say it's essential for gun owners to do this when they are asked about visitors with children than when the question does not specifically mention children. Roughly half of adults (47%) say it's

essential for gun owners who don't have children at home to let visitors with children know about the presence of guns; just 17% said it would be essential for gun owners to advise visitors that this is the case when it is not mentioned that the visitors include children. In each case, those who don't own guns are more likely than those who do own them to say it's essential to advise visitors that there are guns in the house.

Overwhelming majorities of those who do and don't own guns consider it essential for gun owners with children in their home to talk to their children about gun safety; 95% of gun owners and 89% of non-gun owners say this is essential.

When it comes to views on training on gun safety and shooting skills, the presence of children in the home is less significant

Americans don't distinguish between the essential responsibilities of gun owners with and without children in their home when it comes to taking gun safety courses or keeping shooting skills up-todate. For example, similar shares say it's essential for gun owners with children in the home and those with no children in their home to take gun safety courses (73% and 68%, respectively). And about half say it's essential for gun owners to keep their shooting skills up-to-date, whether they do or don't have children in their home (46% and 50%).

Those who do not own guns are about one and a half times more likely than those who own guns to say it's essential for gun owners to take gun safety courses. About three-quarters of non-gun owners (77%) say this is essential for gun owners with no children in their home; 51% of gun owners say the same. The pattern is similar when gun owners and non-owners are asked about those who have children in their home.

Most gun owners say there is at least one gun in their home that is not kept in a locked place

About a third of gun owners (36%) say they generally keep all of the guns in their home in a locked place, while 63% say there is at least one gun that is not kept locked. When asked whether they keep their guns loaded or unloaded, 44% of gun owners say there are no loaded guns in their home, while 55% say there is at least one gun that is kept loaded. Among gun owners who have children younger than 18 at home, 54% say all of the guns in their home are kept locked, compared with 30% of those with no children living in their home. And while 53% of gun owners with children at home say none of the guns in the home are kept loaded, 40% of those with no children say the same.

For the most part, the way gun owners keep their guns is consistent with how they say other gun owners should behave. For example, 63% of gun owners with no children at home who say it's essential for gun owners in their situation to keep all of their guns locked say that all of their guns are, in fact, kept locked, compared with 14% of those who don't see this as essential. And while fully 91% of those who say all guns should be kept unloaded say this is how they keep all of the guns in their home, just 20% of those who don't consider this essential say all of their guns are kept unloaded.³

Most gun owners have taken a safety course

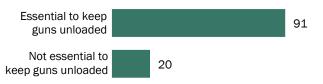
Seven-in-ten gun owners say they have taken a gun safety course such as weapons training, hunter safety or firearm safety. While this is particularly the case among those who consider it essential for gun owners to take such courses – 83% of gun owners with no

Most gun owners follow the practices they say are essential when it comes to how they store their guns

% saying all of the guns in their home are generally kept **locked,** among gun owners who say it is ...

Essential to keep guns locked		63
Not essential to keep guns locked	14	

% saying all of the guns in their home are generally kept **unloaded**, among gun owners who say it is ...



Note: Shares are among gun owners who do not have children at home and who said it was essential/not essential for gun owners who do not have children at home to keep their guns locked/ unloaded. "Not essential" is a combination of those who say it is important but not essential, not important, or should not be done. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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children in the house who say it is essential also say they have done this – about half of those who don't consider this essential (55%) also say they have taken a gun safety course.

Gun owners with multiple guns are more likely than those who own only one gun to report taking a gun safety course. About three-quarters of those who own two or more guns (77%) say they have done so, compared with 55% of those who own a single gun.

Majorities of gun owners across demographic groups say they have taken a gun safety course, but some differences emerge. For example, male gun owners are more likely than their female counterparts to say they have done this (76% vs. 60%). And while about three-quarters of those younger than 50 (77%) say they have taken a gun safety course, somewhat smaller shares of older gun owners (63%) say the same. Among gun owners with at least a bachelor's degree, 78% say they

³ The number of gun owners with children in their home who were asked whether it's essential for other gun owners with children in their home to do each of these things is too small to analyze separately.

have taken a gun safety course, compared with 63% of those with a high school diploma or less education.

Among those who don't personally own a gun, similar shares of those who currently live in a gun-owning household and those who don't say they have taken a gun safety course (22% and 19%, respectively).

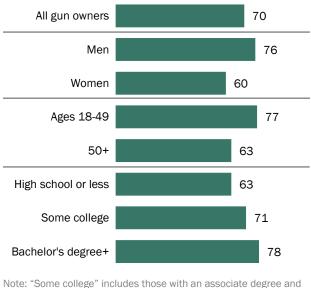
Legal requirements regarding gun safety courses vary widely by state. Many states require hunter education training or safety courses in order to obtain a hunting permit or permit to carry a handgun, and some states require a course or exam in order to own or purchase a gun.

Majority of American parents – including half of non-gun owners – say they have talked with their children about gun safety

About six-in-ten parents (60%) say they have talked with their children under the age of 18

Seven-in-ten gun owners say they have taken a gun safety course

% of gun owners saying they have taken a gun safety course



Note: "Some college" includes those with an associate degree and those who attended college but did not obtain a degree. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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about gun safety. This includes 82% of gun owners and about half of non-owners (51%).

Among non-owners, women are more likely than men to say they have talked with their children about this (58% vs. 37%). Those who live in the Midwest (64%) or South (59%) are more likely than those in the Northeast (31%) or West (40%) to say they have done this. There are no notable demographic differences among gun owners in the shares who say they have talked with their children about gun safety.

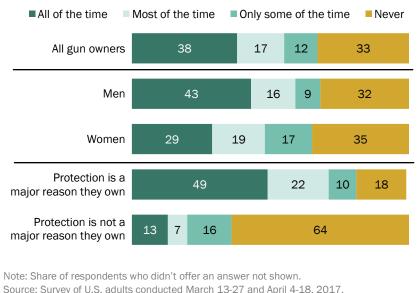
About four-in-ten gun owners have a loaded gun easily accessible to them at all times when at home

Some four-in-ten gun owners (38%) report that there is a gun that is both loaded and easily accessible to them all of the time when they are at home, and another 17% say this is the case most of the time; 12% of gun owners say they have easy access to a loaded gun only some of the time when they're at home, and a third say they never do.

Male gun owners are far more likely than their female counterparts to say there is a gun that is both loaded and easily accessible to them all of the time when they are at home; 43% of men who own guns say this is the case, compared with 29% of women. This gender gap is

Male gun owners are far more likely than female gun owners to say there is always a gun that is easily accessible and loaded when they're at home

% of gun owners saying there is a loaded gun easily accessible to them _____ when at home



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particularly pronounced among gun owners younger than 50. Among this group, 41% of men and just 17% of women say they have easy access to a loaded gun all of the time when they're at home. Among those 50 and older, similar shares of men and women say this is the case (44% and 40%, respectively).

Among gun owners with a high school education or less, 45% say they have a gun that is both loaded and easily accessible all of the time when they're at home. Somewhat smaller shares of those with some college or with a bachelor's degree say the same (33% of each).

Perhaps not surprisingly, gun owners who say protection is a major reason they own a gun are more likely than those who say it is a minor reason or not a reason they own a gun to report that there is a gun that is both loaded and easily accessible all of the time when they're at home (49%

vs. 13% of those who say protection is a minor reason or not a reason they own a gun). In fact, 64% of those who do not consider protection a major reason they own a gun say they *never* have a gun that is loaded and easily accessible when they're at home. (For more on reasons for owning guns, see <u>Chapter 1</u>)

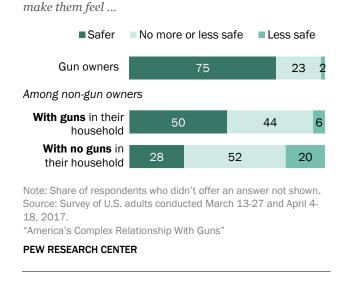
Similarly, gun owners who say their local community is not too safe or not at all safe from crime are somewhat more likely than those who describe their community as very or somewhat safe to say they have easy access to a loaded gun all of the time when they're at home (46% vs. 35%).

Gun owners and non-owners who live with someone who owns a gun offer different views on whether having a gun in the household makes them feel safer

Three-quarters of gun owners say they feel safer with a gun in their household than they would without a gun; about a quarter (23%) say having a gun doesn't make them feel any more or less safe than they would if there wasn't a gun in their household (just 2% of gun owners say a gun makes them feel less safe). Among non-owners who say someone else in their household owns a gun, similar shares say having a gun in their household makes them feel safer (50%) as say having a gun doesn't make them feel any more or less safe (44%); 6% of non-owners who live in a gun-owning household say they feel less safe than they would without a gun in the household.

Wide range of views on whether a gun in the home increase feelings of safety

% saying having a gun in their household does or would



Among those who do not own guns but live in

a gun-owning household, 57% of those who grew up with a gun in their household say having a gun at home makes them feel safer than they would without a gun; 40% of those who didn't grow up in a gun-owning household say the same.

Meanwhile, about half of non-owners who don't live in a gun-owning household (52%) say having a gun wouldn't make them feel safer or less safe, with slightly more saying they would feel safer (28%) than saying they would feel less safe (20%) if there was a gun in their household.

Among this group, about half of those who say they could see themselves owning a gun (47%) say having a gun in the household would make them feel safer than they do without a gun; just 9% of those who say they could never own a gun say a gun would make them feel safer. About a third of those who can't see themselves ever owning a gun (32%) say they would feel less safe with a gun in their home, while 59% say they would feel no more or less safe.

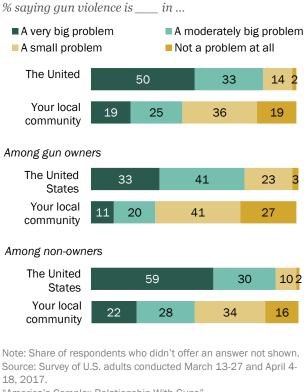
4. Views of guns and gun violence

Most Americans say gun violence is a problem in the U.S., but fewer see this as a problem in their local community. Overall, half of all U.S adults say gun violence is a very big problem in this country, and an additional 33% say it is a moderately big problem. By comparison, less than half (44%) say gun violence is a very big problem (19%) or moderately big (25%) problem in their community. Views on the severity of gun violence, nationally and locally, differ dramatically between gun owners and those who do not own guns.

When asked about the underlying reasons for gun violence in the U.S., many Americans point to the ease with which people can illegally obtain guns. About half of adults (53%) say this contributes a great deal to gun violence and roughly a third (32%) say this contributes a fair amount.

While gun owners and non-owners share similar views on the extent to which access to illegal guns has a great deal of impact on gun violence, there is much less agreement when it

More see gun violence as a problem nationally than in their local communities



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comes to the ease with which people can *legally* obtain guns, with non-gun owners far more likely than those who own guns to say this contributes to gun violence a great deal or a fair amount.

There also is less agreement between those who do and do not own guns on the extent to which other factors – family instability, a lack of economic opportunities and gun-related media– contribute to gun violence in the U.S.

On the whole, the public is divided over the potential impact having more guns in the U.S. would have on overall crime rates. Roughly a third (35%) say that if more Americans owned guns there would be *more* crime; a similar share (33%) says if more people owned guns there would be *less* crime, and another third (32%) say there would be little effect. Gun owners and non-gun owners

have differing views on this. On balance, gun owners say having more people with guns would lead to less crime, while a plurality of non-gun owners say more guns would lead to higher crime rates.

About half of the public (47%) says that if it were harder for people to legally obtain guns, there would be fewer mass shootings in the U.S. Roughly four-in-ten (39%) say making it harder for people to legally buy guns would not impact the number of mass shootings, and 13% say this would result in more shootings. Non-gun owners are much more likely than gun owners to say further restricting legal gun sales would result in fewer mass shootings (56% vs. 29%). For their part, 53% of gun owners say increasing restrictions wouldn't make any difference.

Whether or not gun sales are regulated, most adults see little link between access to guns and likelihood of committing a crime. Large majorities of gun owners and non-gun owners say that if someone wants to commit a crime, they will find a way to do it whether they have access to a gun or not.

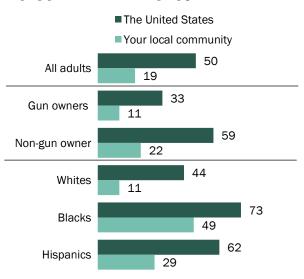
Gun owners and non-gun owners are divided on how they see violence in the U.S., local communities

There is a stark divide in views about the severity of gun violence between gun owners and those who do not own a gun, with nonowners roughly twice as likely to say gun violence is a very big problem – both in the nation and in their local community. Nearly six-in-ten (59%) non-owners say gun violence is a very big problem in the U.S., while just one-third (33%) of gun owners say the same. Similarly, among those who do not own guns, 22% say gun violence is a very big problem in their community; only 11% of gun owners say the same.

Concerns about gun violence, particularly in local communities, vary greatly by race. Nearly half (49%) of blacks and 29% of Hispanics say gun violence is a very big problem in their

Blacks more likely to have concerns about gun violence in their local community

% saying gun violence is a very big problem in ...



Note: Whites and blacks are non-Hispanics. Hispanics are of any race.

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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local community; just 11% of whites rate this as a very big problem.

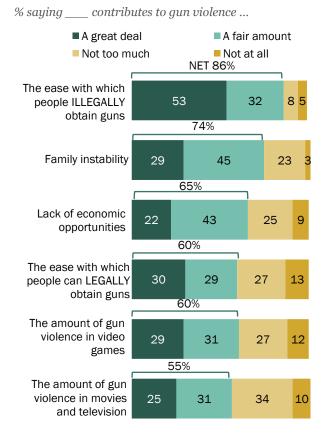
Americans living in rural areas are, on the whole, less concerned about violence in their local communities. Just 8% of rural Americans say gun violence is a very big problem in their local area.

Americans living closer to cities, either in the suburbs (19%) or in urban areas (28%), are more likely to say gun violence is a big problem near them. Among gun owners, rural residents are much less likely to see gun violence as a problem in their community; just 5% say this is a very big problem while 16% of suburban gun owners say the same.

When it comes to assessments of the extent to which gun violence is a problem in the country more generally, large partisan differences emerge. One-third (32%) of Republicans and Republican-leaning independents say they think gun violence is a very big problem nationally; two times as many (65%) Democrats and independents who lean toward the Democratic Party share the same view. This difference persists among gun owners. Half (50%) of Democratic gun owners say they think gun violence is a very big problem in the U.S., compared with 22% of Republican gun owners.

Women also express more concern about gun violence in the United States. More than half of women (56%) say this is a very big problem, compared with 44% of men. A similar pattern is seen when women and men are asked about gun violence in their own communities.

About half of adults say ease of access to illegal guns contributes a great deal to gun violence



Note: Figures may not add to subtotals indicated due to rounding. Share of respondents who didn't offer an answer not shown. A random half of respondents were asked about "family instability" and "the amount of gun violence in video games," while the other half were asked about "the amount of gun violence in movies and television" and "lack of economic opportunities."

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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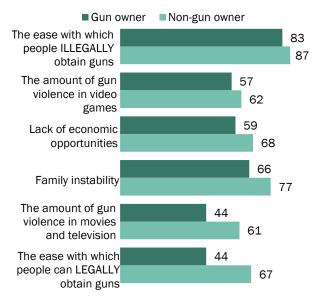
Ease of access to illegal guns seen as the biggest contributor to gun violence

When asked about the factors that may be contributing to gun violence in the U.S. today, many Americans point to the ease with which people can *illegally* obtain guns. Fully 86% cite this as contributing a great deal or a fair amount to gun violence. Some 14% say it doesn't contribute much or at all. Far fewer adults say *legal* access to guns contributes to gun violence: 60% say this contributes a great deal or a fair amount to gun violence in this country, while four-in-ten say it is not a contributing factor.

Many Americans point to forces beyond gun access as contributing factors in gun violence in the U.S. For example, roughly threequarters (74%) of Americans say family instability contributes a great deal or fair amount to gun violence. Fewer cite a lack of economic opportunities (65%) and the amount of gun violence in video games (60%) and movies and TV (55%) as contributing factors.

Eight-in-ten or more gun owners and nonowners both cite ease of access to illegal guns as contributing a great deal or fair amount to gun violence (83% of gun owners, 87% of non-

Eight-in-ten or more gun owners and non-owners point to impact ease of access to illegal guns has on gun violence



% saying ___ contributes a great deal or a fair amount to gun violence

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gun owners). The two groups further diverge, however, when thinking about the ease with which people can legally obtain guns: 44% of gun owners, compared with 67% of non-gun owners, say this contributes a great deal or fair amount to gun violence. Gun owners and non-owners also disagree about the role of family instability and violence in the media, with more non-gun owners than gun owners consistently citing these factors as contributing to gun violence.

While adults of all ages list access to illegal guns as the top contributor to gun violence, those ages 65 and older are nearly two times more likely than younger adults to cite violence in video games

Note: A random half of respondents were asked about "family instability" and "the amount of gun violence in video games," while the other half were asked about "the amount of gun violence in movies and television" and "lack of economic opportunities." Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

(82% say this contributes a great deal or fair amount to gun violence) and violence in movies and television (77%); by contrast, 42% of adults ages 18 to 29 point to violence in video games and 39% point to violence in television and movies as major contributors to gun violence.

There also are large differences by race. Fully 73% of blacks cite access to legal guns as contributing at least a fair amount to gun violence, compared with 54% of whites. Blacks are also more likely than whites to cite violence in video games (72% of blacks say this contributes a great deal vs. 59% of whites) as a driver of gun violence.

While men and women both list access to illegal guns as a top contributor to gun violence in the U.S., gender differences are particularly evident when looking at violence in the media. Women are 18 percentage points more likely than men to cite violence in television and movies as contributing at least a fair amount to gun violence (64% vs 46%) and 21 points more likely to cite violence in video games as a contributing factor (70% among women vs 49% among men).

Clear partisan differences emerge when looking at the underlying factors that contribute to gun violence. While Democrats and Democratic-leaning independents are slightly more likely than Republicans and Republican-leaning independents to say ease of access to illegal guns contribute a great deal or a fair amount to gun violence (88% vs 84%), Democrats are nearly two times more likely to say access to *legal* guns contributes to gun violence (76% vs 39%). This gap persists when controlling for gun ownership: 72% of Democratic and Democratic-leaning gun owners say access to *legal* guns contributes a great deal to gun violence, compared with 28% of Republican and Republican-leaning gun owners.

Mixed views on the impact more guns would have on crime rates

The public is evenly split when it comes to the potential impact that more Americans owning guns would have on crime in the U.S. Roughly equal shares say that if more Americans owned guns there would be less crime (33%), more crime (35%) and that there would be no difference in the amount of crime (32%).

Gun owners and non-owners are deeply divided on whether more guns would lead to more or less crime. About half (54%) of gun owners say they think more Americans owning guns would reduce crime, while 23% of non-gun owners say the same. A 44% plurality of non-gun owners expect that more guns would lead to an uptick in crime.

Wide partisan differences also emerge on views of whether more guns would lead to more or less crime, and these differences persist when controlling for gun ownership. For example, 71% of

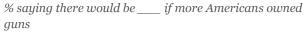
Republican or Republican-leaning gun owners say there would be less crime if more Americans owned guns; just about a quarter of Democratic or Democratic-leaning gun owners (24%) agree.

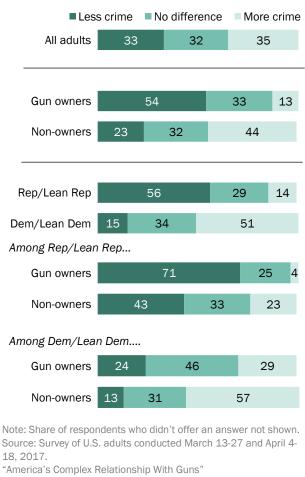
Within party, owners are more likely than non-owners to say more guns would lead to less crime. Among Republicans the gap between gun owners and non-owners is particularly wide. Seven-in-ten (71%) Republican gun owners say more guns would lead to less crime, compared with fewer than half (43%) of non-gun owning Republicans. Among Democrats, one-quarter of gun owners say they think there would be less crime if more Americans owned guns (24%), while 13% of Democratic non-gun owners expect the same.

There is a stark divide in attitudes of whites and blacks on the effect more guns would have on crime. While 45% of blacks say if more Americans owned guns, there would be more crime, only 29% of whites agree (39% of whites say there would be less crime).

Most non-gun owners say making it harder to obtain guns would reduce mass shootings

Seven-in-ten Republican gun owners say more guns would mean less crime





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Nearly half (47%) of Americans say that if it was harder for people to legally obtain guns in the United States, there would be fewer mass shootings in this country. About four-in-ten (39%) say it would make no difference in the number of these incidents and 13% say it would result in more mass shootings.

Mirroring their differing views on the impact of more guns on crime, gun owners and non-owners are divided on the impact increased legal hurdles would have on mass shootings. Fully 56% of

non-gun owners expect that if it were harder to obtain guns, the number of mass shootings would decline; 32% expect it would stay the same. Meanwhile, about half of gun owners (53%) expect that this would have no impact on the number of mass shootings.

Democrats and Democratic-leaning independents are more than two times as likely to say limitations on legal access to guns would result in fewer mass shootings (64%) than Republicans and Republican-leaning independents (27%). This pattern holds even when controlling for gun ownership.

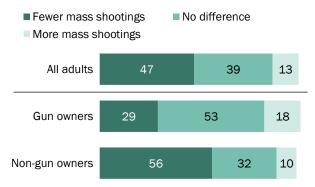
When it comes to the role guns play in violent crime, three-quarters (75%) of Americans say that people who want to kill or harm others would find a way to do so whether or not they had access to a gun. Just 24% say they think someone is less likely to kill or harm others without access to a gun.

The pattern is nearly identical when it comes to people who want to kill or harm themselves: 73% say they would find a way to do this regardless of whether they had access to a gun, while 27% say those who want to kill or harm themselves would be less likely to do it if they didn't have access.

Gun owners are more likely to say those who want to kill or harm others would find a way to do so without a gun, but majorities of gun owners and non-owners alike say this is the case (84% vs. 70%, respectively).

A majority of gun owners say stricter access to guns would not decrease mass shootings

% saying that if it was harder for people to legally obtain guns in the United States, there would be ...



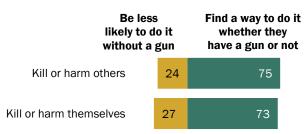
Note: Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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Most see little link between access to guns and likelihood of committing crime

% saying that people who want to kill or harm others/ themselves will ...



Note: Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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There are partisan differences among gun owners. Democratic gun owners are roughly six times more likely to say someone who wanted to kill or harm others would be less likely to do so without access to a gun: 31% of Democrats or independents who lean Democratic say this, compared with 5% of Republicans and independents who lean to the Republican Party.

5. Views on gun policy

The public is divided in overall views of gun policy in the United States. Yet large majorities of Americans continue to support a number of specific gun policy proposals, including restrictions on gun sales to the mentally ill and expanded gun background checks.

Attitudes about guns and gun policies divide gun owners and non-owners, Republicans and Democrats, and urban, suburban and rural residents.

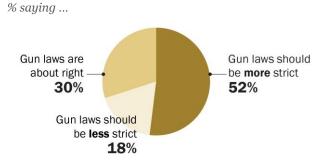
Overall, 52% of Americans say gun laws should be stricter than they are today, while nearly as many say they are about right (30%) or should be less strict than they are today (18%).

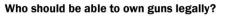
Americans also differ about who should be able to own guns, where guns should be legally permitted and what types of guns should be legally available.

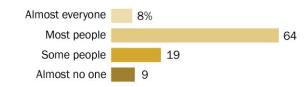
A majority of Americans (64%) say most people should be able to legally own guns, but some people should not. There is less agreement on the places that guns should be legally permitted and the types of guns that should be legally available.

Most people take a middle-ground approach on both questions: 35% say guns should be permitted in *most* places, while *some* places should be off-limits; another 28% say guns should be allowed in some places but not most places.

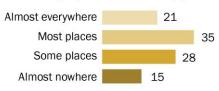
About half of all adults say U.S. guns laws should be stricter



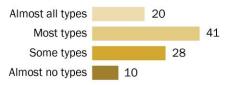




Where should people be able to carry guns?



What types of guns should be available?



Note: Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

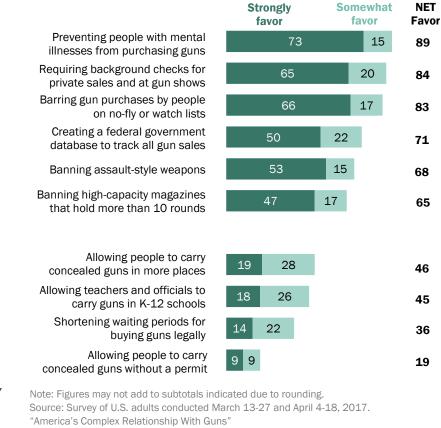
"America's Complex Relationship With Guns"

Similarly, a majority (70%) says that most or some types of guns should be legally available for sale in the U.S.; just 20% say almost all types of guns should be legally available, while only 10% say almost no types should be available.

As in the past, a number of specific gun policy proposals draw extensive public support. About nine-in-ten Americans (89%) favor preventing people with mental illnesses from purchasing guns. Nearly as many favor requiring background checks for private gun sales and at gun shows (84%) and barring gun purchases by people on no-fly or watch lists (83%). Roughly two-thirds or more *strongly* favor all of these proposals.

Broad public support for banning gun sales to the mentally ill, people on federal no-fly or watch lists

% saying they _____ each proposal about gun policy...



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Substantial majorities also favor creating a federal government database to track all gun sales (71%), banning assault-style weapons (68%), and banning high-capacity magazines that hold more than 10 rounds of ammunition (65%).

Proposals for easing gun laws draw much less support. About half say they favor allowing people to carry concealed guns in more places (46%) and allowing teachers and school officials to carry guns in K-12 schools (45%). Even fewer Americans support shortening waiting periods for buying guns legally (36%).

The public is broadly opposed to allowing people to carry concealed guns without a permit: 81% oppose this proposal, with two-thirds *strongly* opposed. Just 19% favor allowing people to carry concealed guns without a permit.

Gun owners, non-gun owners differ on most policies

Large majorities of gun owners and non-gun owners favor banning gun sales to the mentally ill, expanded background checks on gun sales and barring gun purchases by people on federal no-fly or watch lists. But there is less agreement on other policy proposals, including those that would make it easier to purchase and carry a gun.

Among those who don't own guns, 80% favor creation of a federal database to track gun sales, 77% back an assault-weapons ban and 74% support a ban on high-capacity ammunition magazines. No more than about half of gun owners support any of these policies.

The differences are just as stark regarding proposals for easing gun restrictions. Twothirds of gun owners favor allowing people to carry concealed guns in more places (67%) and allowing teachers and school officials to carry guns in elementary and secondary schools (66%). These proposals draw support from less than 40% of people who do not own guns.

Other proposals draw less support from both groups, though about half of gun owners

Most gun owners favor some limits on gun sales, as well as more 'concealed carry'

% who strongly or somewhat favor ...

	Gun owners	Non-owners		
Preventing the mentally ill fr purchasing guns	om	89 🌒 89		
Background checks for priva sales and at gun shows	ite	77 • • 87		
Barring gun purchases by people on no-fly or watch list	ts	82 🜑 84		
Creating a federal database track gun sales	to 54	• • 80		
Banning assault-style weapo	ons 48	• 77		
Banning high-capacity magazines	44 ●	• 74		
Allowing concealed carry in more places	37 ●	• 67		
Allowing teachers and officia to carry guns in K-12 school		• 66		
Shortening waiting periods f buying guns legally	or 29 ●	• 53		
Allowing concealed carry without a permit	12 • 33	3		
Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.				
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(53%) favor shorter waiting periods on gun sales, compared with 29% of non-gun owners. Just a third of gun owners and only 12% of non-gun owners support allowing people to carry guns without a permit.

Partisanship and gun ownership are factors in views of gun policies

Partisan views on gun policy proposals fall along similar lines as the opinions of gun owners and non-gun owners. Large majorities in both parties favor preventing the mentally ill from buying guns (89% each), background checks for private gun sales and gun shows (90% of Democrats, 77% of Republicans), and barring people on federal watch lists from buying guns (85% of Democrats, 82% of Republicans).

Other proposals are much more divisive. For instance, only about a quarter of Democrats and Democraticleaning independents (26%) support allowing people to carry concealed guns in more places, compared with 72% of Republicans and Republican

Wide differences between Republican gun owners, non-gun owners on several policies

% who strongly or somewhat favor each proposal

	Gun owners Rep/ Dem/ Lean Rep Lean Dem		Non-gun owners Rep/ Dem/ Lean Rep Lean Dem		
Preventing the mentally ill from purchasing guns	88	90	90	89	
Background checks for private sales and at gun shows	70	88	83	90	
Barring gun purchases by people on no-fly or watch lists	78	89	86	85	
Creating a federal database to track gun sales	43	73	68	87	
Banning assault-style weapons	38	66	67	83	
Banning high-capacity magazines	32	65	60	82	
Allowing concealed carry in more places	82	41	64	22	
Allowing teachers and officials to carry guns in K-12 schools	81	42	60	23	
Shortening waiting periods for buying guns legally	61	41	43	21	
Allowing concealed carry without a permit	43	15	18	9	

Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017. "America's Complex Relationship With Guns"

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leaners. The gap is nearly as wide in support for allowing teachers and school officials to carry guns in schools (26% of Democrats, 69% of Republicans).

Both partisanship and gun ownership are key factors in attitudes about gun policies. On several issues, there are wide differences between Republican and Democratic gun owners – and even larger differences between members of both parties who *do not* own guns.

Republicans generally are more likely than Democrats to own guns: 44% of Republicans and Republican leaners say they own at least one gun, compared with 20% of Democrats and Democratic leaners. (For more on who owns guns, see <u>Chapter 1</u>.)

There is broad support among gun owners and non-gun owners in both parties for the bans on gun sales to the mentally ill and people on no-fly or watch lists, as well as for background checks on private gun sales.

But Republican gun owners stand out for their low levels of support for a federal gun database and bans on assault-style weapons and high-capacity ammunition magazines. Just 43% of Republican gun owners back a federal gun database, 38% favor a ban on assault-style weapons and 32% support banning sales of high-capacity ammunition magazines.

Among Republicans who do not own guns – and Democratic gun owners and non-gun owners – each of these proposals draws majority support.

Overall, more Republicans than Democrats favor proposals to loosen gun control laws; however, this support is significantly stronger among Republican gun owners than among non-owners. Similarly, Democrats are less supportive overall, but Democratic gun owners give these proposals somewhat more support than Democrats who don't own guns.

A larger share of Republican gun owners support each of the proposals to loosen gun laws than any other group. About eight-in-ten favor allowing concealed carry in more places (82%) and allowing teachers to carry in schools (81%). A smaller majority backs shortening waiting periods to buy guns (61%), and about two-in-five favor concealed carry without a permit (43%).

Majorities of both Democratic gun owners and Republican non-owners have similar attitudes about shortening waiting periods and allowing concealed carry without a permit. These groups are divided on expanding concealed carry to more places and allowing teachers to carry guns in schools: about three-in-five Republicans non-owners favor them, compared with two-in-five Democratic owners – a gap of about 20 percentage points on each.

Democrats who do not own guns are strongly opposed to all of these proposals that would make gun laws less strict: Only about one-in-five support expanding conceal carry, carrying by teachers and shortening waiting periods, and just 9% support concealed carry without a permit.

Rural and urban residents diverge in views of many gun policies

Views on gun policies also vary widely by the types of communities in which people live. Rural residents are generally more skeptical of proposals to toughen gun laws than are people who live in suburban and urban areas. Rural residents also tend to be more supportive of proposals to loosen gun restrictions.

In part, these gaps reflect differences in partisanship and gun ownership in these communities. Rural residents are more likely than urban and suburban residents to identify as Republicans or lean Republican; people who live in rural areas also are more likely to own guns than those in other communities.

Still, majorities of rural, suburban and urban residents favor a federal gun database, expanded background checks and some restrictions on gun sales.

However, 57% of rural residents support allowing people to carry concealed guns in more places. Less than half of those in suburbs (45%) and urban areas (38%) support increased concealed carry. There are similar differences

Urban and rural residents back federal gun database, ban on assault-style weapons

% who strongly or somewhat favor...

	Urban	Sub- urban	Rural	Diff. urban- rural
Preventing people with mental illnesses from purchasing guns	88	90	88	0
Requiring background checks for private sales and at gun shows	87	86	78	U+9
Barring gun purchases by people on no-fly or watch lists	81	86	84	R+3
Creating a federal database to track gun sales	78	73	61	U+17
Banning assault-style weapons	74	69	61	U+13
Banning high-capacity magazines	68	68	57	U+11
Allowing people to carry concealed guns in more places	38	45	57	R+19
Allowing teachers and officials to carry guns in K-12 schools	37	45	53	R+16
Shortening waiting periods for buying guns legally	33	32	45	R+12
Allowing people to carry concealed guns without a permit	15	16	26	R+11
Source: Survey of U.S. adults conducted March 13-27 and April 4- 18, 2017. "America's Complex Relationship With Guns"				

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among people in different types of communities in views of allowing teachers and school officials to carry guns in K-12 schools.

About half of Americans favor stricter gun laws

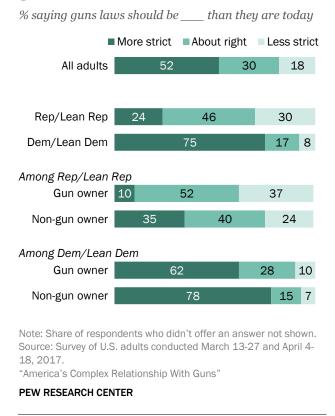
As with views of specific gun policy proposals, opinions about whether gun laws in the U.S. generally should be stricter or less strict are divided by partisanship, gun ownership and community type.

Democrats broadly favor making gun laws stricter than they are today. Three-quarters of Democrats and Democratic leaners – including 78% of non-gun owners and 62% of gun owners – say gun laws in this country should be stricter than they are today.

Republicans and Republican leaners are divided: 46% say current gun laws are "about right," while 30% say they should be less strict and 24% say they should be stricter.

About half of Republican gun owners (52%) and 40% of Republican non-gun owners say gun laws are about right. More than a third of Republicans who do not own guns (35%) support stricter gun laws in the U.S., compared with just 10% of Republican gun owners. And

Majorities of Democrats who don't own guns – and those who do – favor stricter gun laws



while 37% of Republican gun owners say gun laws should be less strict, only 24% of Republican non-gun owners say the same.

Another factor in attitudes about the nation's gun laws is how gun owners and people who do not own guns feel about the prospect of their own future gun ownership. Most people who own guns say they can never see themselves *not* owning a gun: Among this group, just 18% say gun laws should be stricter. Among the smaller share of gun owners who say at some point they could see themselves no owning a gun, 59% favor stricter gun laws.

Among those who do not currently own guns, about as many say they could see themselves owning a gun at some point as say they could never see themselves owning a gun.

Among non-gun owners who are open to the possibility of owning a gun in the future, 51% favor stricter gun laws. By contrast, 75% of non-gun owners who say they can *never* see themselves owning a gun back stricter gun laws.

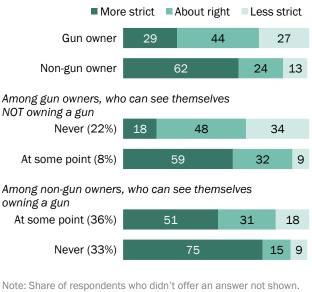
Majority says most people should be able to own guns

Gun owners and non-gun owners hold different views about who should be able to legally own guns, where guns should legally be permitted, and what types of guns should be legally available.

A majority of the public (64%) says that most people, but not all, should be able to legally own guns; however, there is a 24-percentagepoint gap between owners and non-owners on this question. Fully 80% of gun owners say most people should be able to own guns, plus another 9% who say almost everyone should

Views of stricter gun laws vary by feelings about future personal gun ownership

% saying gun laws should be ____ than they are today



Note: Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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be able to. A majority of non-owners say most people should be able to own guns (56%), but about one-third either say that some, but not most, people should be able to own guns (24%) or say that almost no one should be able to own guns (12%).

Some respondents who said most, but not all, people should be able to own guns legally were asked to describe in their own words "what should disqualify someone from being able to legally own guns." Many gun owners and non-owners said people with mental health issues should be disqualified, as well as those who have felony convictions or histories of violent behavior.

Greater differences emerge between owners and non-owners on the places guns should be allowed and what types of guns should be available.

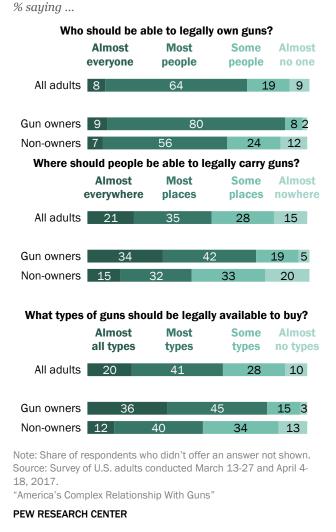
A majority of gun owners say people should be able to carry guns at least most places, while nonowners are more divided on the issue. About twice as many gun owners (34%) than non-owners (15%) say people should be able to carry guns almost everywhere. Conversely, four times more non-owners (20%) than gun owners(5%) say people should be able to carry almost nowhere.

Some who said people should be able to carry guns most, but not all, places were asked "what are some of the places ... people should not be able to legally carry guns?" Many mentioned crowded public places, schools, movie theaters and places that serve alcohol.

The share saying almost all types of guns should be legally available (36%) is higher among gun owners as well. Far fewer nonowners say this (12%). About twice as many non-gun owners (34%) as gun owners (15%) say some, but not most, types of guns should be available.

Those who said most, but not all, types of guns should be legally available were asked to share, in their own words, "What are some of the types of guns you think should not be legally available to buy?" These respondents frequently mentioned military-style weapons – though definitions of what constitutes "military style" differed considerably. Some

Few say 'almost everyone' or 'almost no one' should be able to legally own guns



people mentioned semiautomatic or automatic rifles, such as AK-47s, while others mentioned more powerful military equipment such as missiles, explosives, tanks and fighter aircraft.

Supporters of less strict gun laws more likely to contact elected officials

While relatively few people have ever contacted public officials about guns (15%) or given money to organizations taking positions on the issue (16%), gun owners are more politically engaged on gun issues than other Americans.

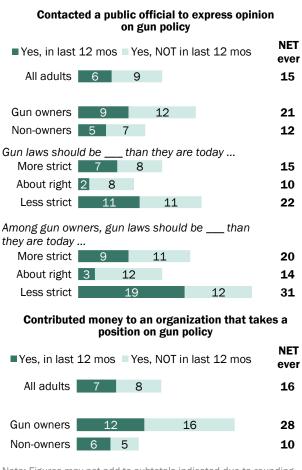
Gun owners are more likely than non-gun owners to say they have ever contacted public officials to express their opinion on gun policy: 21% of owners say they have done this, including 9% who say they did so in the past 12 months, while only 12% of non-owners say they have ever done this.

Furthermore, those who think gun laws should be less strict are more likely to contact public officials on the issue (22% have ever done so), compared with those who think gun laws should be stricter (15%) or are about right (10%). This gap increases further among gun owners: About as many gun owners who want less strict laws (19%) have contacted officials in the *last year* as owners who want stricter laws have *ever* contacted officials (20%).

A larger share of gun owners contribute money to organizations that take positions on gun policy (28% have ever done so and 12% have in the last year) than non-owners (10% ever and 6% in the last year).

Gun owners more likely than non-gun owners to contact officials on gun policy

% saying they have ever ...



Note: Figures may not add to subtotals indicated due to rounding. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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Public split over protecting right to own guns or controlling gun ownership

The public is closely divided over whether it is more important to protect the right of Americans to own guns or to control gun ownership. In a nationally representative Pew Research Center survey conducted April 5 to 11, 2017, among 1,501 adults over 18, 51% said it was more important to control gun ownership and 47% said protecting the right to own guns is more important.

These attitudes have been mostly stable over the past eight years – with the public about evenly divided between protecting gun rights and controlling ownership.

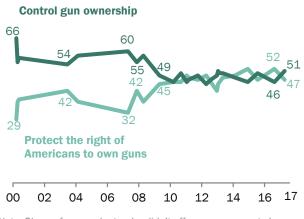
Attitudes on which is more important have shifted about 5 points since last August, however. Then, 52% said it was more important to protect gun rights, compared with 46% who said it was more important to control gun ownership.

Republicans and Democrats remain widely divided over the importance of protecting the right of Americans to own guns. About threequarters of Republicans and Republican leaners (76%) say protecting gun rights is more important, compared with about a quarter of Democrats and Democratic leaners (22%).

The gap between the two parties has increased significantly since 2000, when there was an

Public remains closely divided on controlling guns and protecting rights

% saying it is more important to ...



Note: Share of respondents who didn't offer an answer not shown Source: Survey of U.S. adults conducted April 5-11, 2017. "America's Complex Relationship With Guns"

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Americans to own guns

Republicans say protecting right to own guns is more important

% saying it is more important to protect the right of

81 **Republican/Lean Republican** 76 66 56 56 47 38 30 22 29 28 20 22 **Democrat/Lean Democrat** 06 08 10 17 00 02 04 12 14 16

Source: Survey of U.S. adults conducted April 5-11, 2017. "America's Complex Relationship With Guns"

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18-percentage-point gap between Republicans and Democrats. Today there is a 54-point gap.

Public divided over the National Rifle Association's influence on gun laws

The public is divided over whether the National Rifle Association (NRA) has too much influence or

the right amount when it comes to gun laws in this country: 44% say it has too much and 40% say the right amount. Another 15% say it has too little influence.

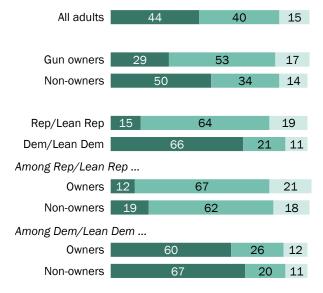
Compared with gun owners, adults who do not own guns are more likely to say the NRA has too much influence. Half of non-owners say the NRA has too much influence and just 34% say the right amount. About half of gun owners (53%) say the NRA has the right amount of influence and 29% say it has too much. Few in either group say it has too little (17% among gun owners and 14% among nonowners).

There are bigger differences in the way the NRA is viewed among Republicans and Democrats. Two-thirds of Democrats and Democratic leaners say the NRA has too much influence; only 15% of Republicans and Republican leaners say the same. About twothirds of Republicans say it has the right amount of influence, compared with 21% of Democrats.

Partisan gap in views of NRA is wider than divide between gun owners, nongun owners

% saying the NRA has _____ when it comes to gun laws in this country

Too much influence Right amount Too little influence



Note: Share of respondents who didn't offer an answer not shown. Source: Survey of U.S. adults conducted March 13-27 and April 4-18, 2017.

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A similar share of Republican gun owners and non-owners say the NRA has the right amount of influence (67% of owners and 62% of non-owners). Democrats tend to see the NRA similarly, regardless of whether they personally own a gun: 60% of Democratic gun owners say the NRA has too much influence; 67% of Democrats without a gun say the same.

Acknowledgments

Pew Research Center received invaluable advice on the development of the questionnaire from Mary Zeiss Stange, professor emeritus of women's studies and religion at Skidmore College, and David Yamane, professor of sociology at Wake Forest University. A series of focus groups with gun owners in Roanoke and Alexandria, Virginia, and Baltimore, Maryland, also helped inform the design of the survey questionnaire.

This report is a collaborative effort based on the input and analysis of the following individuals. Find related reports online at <u>pewresearch.org/socialtrends</u>.

Kim Parker, Director, Social Trends Research Juliana Horowitz, Associate Director, Social Trends Research Ruth Igielnik, Research Associate Baxter Oliphant, Research Associate Anna Brown, Research Analyst Jocelyn Kiley, Associate Director, Political Research Claudia Deane, Vice President, Research Carroll Doherty, Director, Political Research Hannah Fingerhut, Research Assistant Nick Bertoni, Panel Manager Andrew Mercer, Senior Research Methodologist Renee Stepler, Research Analyst Nikki Graf, Research Associate Anthony Cilluffo, Research Assistant Samantha Smith, Research Assistant Rich Morin, Senior Editor Molly Rohal, Communications Manager Bridget Johnson, Communications Associate Michael Keegan, Information Graphics Designer Aleksandra Sandstrom, Copy Editor Travis Mitchell, Digital Producer

Methodology

Surveys conducted March 13-27, 2017, and April 4-18, 2017

The American Trends Panel (ATP), created by the Pew Research Center, is a nationally representative panel of randomly selected U.S. adults recruited from landline and cellphone random-digit dial (RDD) surveys. Panelists participate via monthly self-administered web surveys. Panelists who do not have internet access are provided with a tablet and wireless internet connection. The panel is being managed by Abt Associates.

Most of the data in this report are based on 3,930 respondents who participated in both the March 13 to 27, 2017, and April 4 to 18, 2017, waves of the panel. The margin of sampling error for the full sample of 3,930 respondents is plus or minus 2.8 percentage points.

Members of the American Trends Panel were recruited from two large, national landline and cellphone random-digit dial surveys conducted in English and Spanish. At the end of each survey, respondents were invited to join the panel. The first group of panelists was recruited from the 2014 Political Polarization and Typology Survey, conducted January 23 to March 16, 2014. Of the 10,013 adults interviewed, 9,809 were invited to take part in the panel and a total of 5,338 agreed to participate.⁴ The second group of panelists was recruited from the 2015 Survey on Government, conducted Aug. 27 to Oct. 4, 2015. Of the 6,004 adults interviewed, all were invited to join the panel, and 2,976 agreed to participate.⁵

The ATP data were weighted in a multistep process that begins with a base weight incorporating the respondents' original survey selection probability and the fact that in 2014 some panelists were subsampled for invitation to the panel. Next, an adjustment was made for the fact that the propensity to join the panel and remain an active panelist varied across different groups in the sample. The final step in the weighting uses an iterative technique that aligns the sample to population benchmarks on a number of dimensions. Gender, age, education, race, Hispanic origin and region parameters come from the U.S. Census Bureau's 2015 American Community Survey. The county-level population density parameter (deciles) comes from the 2010 U.S. decennial census. The telephone service benchmark is comes from the January-June 2016 National Health Interview Survey and is projected to 2017. The volunteerism benchmark comes from the 2015

⁴ When data collection for the 2014 Political Polarization and Typology Survey began, non-internet users were subsampled at a rate of 25%, but a decision was made shortly thereafter to invite all non-internet users to join. In total, 83% of non-internet users were invited to join the panel.

⁵ Respondents to the 2014 Political Polarization and Typology Survey who indicated that they are internet users but refused to provide an email address were initially permitted to participate in the American Trends Panel by mail, but were no longer permitted to join the panel after February 6, 2014. Internet users from the 2015 Survey on Government who refused to provide an email address were not permitted to join the panel.

Current Population Survey Volunteer Supplement. The party affiliation benchmark is the average of the three most recent Pew Research Center general public telephone surveys. The internet access benchmark comes from the 2015 Pew Research Center Survey on Government. Respondents who did not previously have internet access are treated as not having internet access for weighting purposes. Sampling errors and statistical tests of significance take into account the effect of weighting. Interviews are conducted in both English and Spanish, but the Hispanic sample in the American Trends Panel is predominantly native born and English speaking.

The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey:

Surveys conducted March 13-27, 2017, and April 4-18, 2017			
Group	Unweighted sample size	Plus or minus	
Total sample	3,930	2.8 percentage points	
Gun owners	1,269	4.8 percentage points	
Non-gun owners	2,608	3.4 percentage points	

Sample sizes and sampling errors for other subgroups are available upon request.

In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

The combined two waves had a response rate of 76% (3,930 responses among 5,155 individuals in the panel). Taking account of the combined, weighted response rate for the recruitment surveys (10.0%) and attrition from panel members who were removed at their request or for inactivity, the cumulative response rate for the combined two ATP waves is 2.6%.⁶

Survey conducted April 5-11, 2017

Some of the analysis in this report is based on telephone interviews conducted April 5 to 11, 2017, among a national sample of 1,501 adults, 18 years of age or older, living in all 50 U.S. states and the District of Columbia (375 respondents were interviewed on a landline telephone, and 1,126 were interviewed on a cellphone, including 693 who had no landline telephone). The survey was conducted by interviewers at Princeton Data Source under the direction of Princeton Survey Research Associates International. A combination of landline and cellphone random-digit dial samples were used; both samples were provided by Survey Sampling International. Interviews

⁶ Approximately once per year, panelists who have not participated in multiple consecutive waves are removed from the panel. These cases are counted in the denominator of cumulative response rates.

were conducted in English and Spanish. Respondents in the landline sample were selected by randomly asking for the youngest adult male or female who is now at home. Interviews in the cell sample were conducted with the person who answered the phone, if that person was an adult 18 years of age or older. For detailed information about our survey methodology, see http://www.pewresearch.org/methodology/u-s-survey-research/

The combined landline and cellphone samples are weighted using an iterative technique that matches gender, age, education, race, Hispanic origin and nativity, and region to parameters from the 2015 Census Bureau's American Community Survey and population density to parameters from the decennial census. The sample also is weighted to match current patterns of telephone status (landline only, cellphone only, or both landline and cellphone), based on extrapolations from the 2016 National Health Interview Survey. The weighting procedure also accounts for the fact that respondents with both landline and cellphones have a greater probability of being included in the combined sample and adjusts for household size among respondents with a landline phone. The margins of error reported and statistical tests of significance are adjusted to account for the survey's design effect, a measure of how much efficiency is lost from the weighting procedures.

The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey:

Survey conducted April 5-11, 201	7	
Group	Unweighted sample size	Plus or minus
Total sample	1,501	2.9 percentage points
Republican/Lean Rep	630	4.5 percentage points
Democrat/Lean Dem	771	4.1 percentage points

Sample sizes and sampling errors for other subgroups are available upon request.

In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

Pew Research Center undertakes all polling activity, including calls to mobile telephone numbers, in compliance with the Telephone Consumer Protection Act and other applicable laws.

Community type coding

Data

Data for each census tract were obtained from the Census Bureau. Tract population was taken from <u>American FactFinder</u>, table ID B01003 ("Total Population"), 2015 ACS five-year estimates. Land area for each tract was taken from the <u>2015 U.S. Gazetteer</u> files. Population density in people per square mile is calculated as follows:

population density = population/(land area)

The share of the tract population living in a <u>census-designated rural place</u> is calculated from American FactFinder, table ID P2 ("Urban and Rural"), 2010 census SF1 100% data. Since the Census Bureau's urban and rural definitions are complete and opposites (i.e. the shares living in rural and urban areas add to 100%), only the share living in a rural area is kept in the dataset. This information was last calculated after the 2010 decennial census. Besides being slightly outdated, these data do not reflect changes to census tracts since 2010. This issue affects only a small number of tracts.

Metropolitan area status in 2015 is based on the Office of Management and Budget (OMB) definitions and <u>available from the Census Bureau</u>. Metropolitan areas are determined at the county level. In order to match tracts with counties, the first five digits of the tract ID code (which correspond to the county FIPS codes) are used.

To merge individual census tracts to American Trends Panelists, longitude and latitude were geocoded based on address provided by the panelist. An 81% majority of respondents to waves 25 and 26 of the panel were able to be matched to their census tract using this method.

Calculating density groupings

First, the tracts are ordered by population density, least dense to most dense. All tracts with no population are discarded for the purposes of calculating the percentile breaks.

Upper bound population densities are provided for the breaks in the table below. These values correspond to respective percentile rankings. For example, the upper bound of the first tercile, 784.43 people/sq. mile, is the 33rd percentile of the data.

	Density upper bound (pop/sq. mi)	2015 population (actual)	Share of panelists
Group		%	%
Rural	784.43	33	31
Suburban	4078.54	35	38
Urban	N/A	33	31
Note: Zero population tracts	omitted in creation of	terciles.	

Distribution of tract-based density codes

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Respondents who did not provide an address and therefore were not able to be geocoded (19% of respondents to waves 25 and 26 of the panel) were instead assigned a community designation based on the location of their telephone number or provided ZIP code in a community of a specific size. For landline numbers, urban/suburban/rural designations are based on OMB definitions and are appended to each number in the sample by the survey sample vendor. OMB defines an urban area as the central portion of a metropolitan statistical area (MSA) while suburban is non-central portions of the MSA and rural encompasses all areas of the country that are not within an MSA. For cellphone numbers, respondents are asked the ZIP code in which they live and then those cellphone respondents are matched to known community type designations based on landlines in the same ZIP code.

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America's Experience with the Federal Assault Weapons Ban, 1994–2004

Key Findings and Implications

Christopher S. Koper

In 1994, the federal government imposed a ten-year ban on military-style semi-automatic firearms and ammunition-feeding devices holding more than ten rounds of ammunition. This legislation, commonly known as the federal assault weapons ban, was intended in the broadest sense to reduce gunshot victimizations by limiting the national stock of semi-automatic firearms with large ammunition capacities and other features conducive to criminal uses. Reflecting America's general political divisions over the issue of gun control, the debate over the law was highly contentious. Ten years later, Congress allowed the ban to expire.

More recently, there have been growing calls for a reexamination of the assault weapons issue. This debate has been fueled by a series of mass shooting incidents involving previously banned firearms or magazines. Since 2007, for example, there have been at least 11 incidents in which offenders using

Christopher S. Koper, PhD, is an associate professor in the Department of Criminology, Law and Society at George Mason University and a senior fellow and co-director of the Research Program on Evidence-Based Policing at George Mason's Center for Evidence-Based Crime Policy.

assault weapons or other semi-automatics with magazines larger than 10 rounds have wounded or killed eight or more people (Violence Policy Center 2012). Some of the most notorious of these incidents have been a 2007 shooting on the college campus of Virginia Tech that left 33 dead and 17 wounded; a 2011 shooting in an Arizona parking lot that killed 6 and wounded 13, including Congresswoman Gabrielle Giffords; a 2012 shooting in an Aurora, Colorado, movie theatre that left 12 dead and 58 wounded; and, most recently, a shooting in a Newtown, Connecticut, elementary school that left 26 victims dead, 20 of whom were children (an additional victim was killed elsewhere).

To help inform the new dialogue on this issue, this essay examines America's experience with the 1994 assault weapons law. During the course of the ban, the National Institute of Justice (NIJ) funded a series of studies on the law's impacts for the U.S. Department of Justice and the U.S. Congress (Koper 2004; Koper and Roth 2001, 2002; Roth and Koper 1997, 1999). I present highlights from those studies, with an emphasis on findings from the final evaluation reported in 2004 (Koper 2004). These studies sought to assess the law's impacts on (1) the availability of assault weapons (AWs) and largecapacity magazines (LCMs) as measured by price and production (or importation) indices in legal markets; (2) trends in criminal uses of AWs and LCMs; and (3) trends in the types of gun crimes that seemed most likely to be affected by changes in the use of AWs and LCMs. (The latter two issues are emphasized in this summary.) Finally, the research team examined studies of gun attacks more generally in order to estimate the ban's potential to produce longer-term reductions in shootings.

In summary, the ban had mixed effects in reducing crimes with the banned weaponry because of various exemptions and loopholes in the legislation. The ban did not appear to affect gun crime during the time it was in effect, but some evidence suggests it may have modestly reduced gunshot victimizations had it remained in place for a longer period. The ban's most important provision was arguably its prohibition on ammunition magazines holding more than 10 rounds. Policymakers considering a new version of the ban might particularly focus on this aspect of the previous legislation and reconsider the exemptions and loopholes that undermined the effectiveness of the original ban.

Provisions of the Assault Weapons Ban

Enacted on September 13, 1994, Title XI, Subtitle A of the Violent Crime Control and Law Enforcement Act of 1994 imposed a ten-year ban on the "manufacture, transfer, and possession" of certain semi-automatic firearms designated as assault weapons. The AW ban did not prohibit all semi-automatics; rather, it was directed at semi-automatics having features that appear to be useful in military and criminal applications but unnecessary in shooting sports or self-defense. Examples of such features include pistol grips on rifles, flash hiders, folding rifle stocks, threaded barrels for attaching silencers, and the ability to accept ammunition magazines holding large numbers of bullets. The law specifically prohibited 18 models and variations by name (e.g., the Intratec TEC-9 pistol and the Colt AR-15 rifle), as well as revolving cylinder shotguns (see Koper 2004, 5). This list included a number of foreign rifles that the federal government had banned from importation into the country beginning in 1989 (e.g., Avtomat Kalashnikov models). In addition, the ban contained a generic "features test" provision that generally prohibited other semi-automatic firearms having two or more military-style features, as described in Table 12.1. In total, the federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) identified 118 model and caliber variations that met the AW criteria established by the ban.

The law also banned "copies or duplicates" of the named gun makes and models, but federal authorities emphasized exact copies. Relatively cosmetic changes, such as removing a flash hider or bayonet mount, were thus sufficient to transform a banned weapon into a legal substitute. In this sense, the law is perhaps best understood not as a gun ban but as a law that restricted weapon accessories. A number of gun manufacturers began producing modified, legal versions of some of the banned guns, though not all of these substitute weapons proved as popular as the banned versions.¹ In other respects (e.g., type of firing mechanism, ammunition fired, and the ability to accept a detachable magazine), the banned AWs did not differ from other legal semi-automatic weapons.

The other major component of the assault weapons legislation was a ban on most ammunition-feeding devices holding more than 10 rounds of ammunition (referred to as large-capacity magazines).² The LCM ban was arguably the most important part of the assault weapons law for two reasons. First, an LCM is the most functionally important feature of an AW-type firearm. As noted by the U.S. House of Representatives, most prohibited AWs came equipped with magazines holding 30 rounds and could accept magazines holding as

	Military-style features (2 or more qualified a firearm		
Weapon category	 as an assault weapon) 1) ammunition magazine that attaches outside the pistol grip 2) threaded barrel capable of accepting a barrel extender, flash hider, forward handgrip, or silencer 3) heat shroud attached to or encircling the barrel 4) weight of more than 50 ounces unloaded 5) semiautomatic version of a fully automatic weapon 		
Semi-automatic pistols accepting detachable magazines			
Semi-automatic rifles accepting detachable magazines	 folding or telescoping stock pistol grip that protrudes beneath the firing action bayonet mount flash hider or a threaded barrel designed to accommodate one grenade launcher 		
Semi-automatic shotguns	 folding or telescoping stock pistol grip that protrudes beneath the firing action fixed magazine capacity over 5 rounds ability to accept a detachable ammunition magazine 		

Table 12.1 Features test of the federal assault weapons ban

many as 50 or 100 rounds (United States Department of the Treasury 1998, 14). Removing LCMs from these weapons thus greatly limits their firepower.

Second, the reach of the LCM ban was much broader than that of the AW ban because many semi-automatics that were not banned by the AW provision could accept LCMs. Approximately 40 percent of the semi-automatic handgun models and a majority of the semi-automatic rifle models that were being manufactured and advertised prior to the ban were sold with LCMs or had a variation that was sold with an LCM (calculated from Murtz and the Editors of Gun Digest 1994). Still others could accept LCMs made for other firearms and/or by other manufacturers. A national survey of gun owners in 1994 found that 18% of all civilian-owned firearms and 21% of civilian-owned handguns were equipped with magazines having 10 or more rounds (Cook and Ludwig 1996, 17). The AW provision did not affect most LCM-compatible guns, but the LCM provision limited the capacities of their magazines to 10 rounds.

The AW ban also contained important exemptions. AWs and LCMs manufactured before the effective date of the ban were "grandfathered" and thus legal to own and transfer. Though not precise, estimates suggest there were upward of 1.5 million privately owned AWs in the United States when the ban took effect (American Medical Association Council on Scientific Affairs 1992; Cox Newspapers 1989, 1; Koper 2004, 10). Gun owners in America possessed an estimated 25 million guns that were equipped with LCMs or 10-round magazines in 1994 (Cook and Ludwig 1996, 17), and gun industry sources estimated that, including aftermarket items for repairing and extending magazines, there were at least 25 million LCMs available in the United States as of 1995 (Gun Tests 1995, 30). Moreover, an additional 4.8 million pre-ban LCMs were imported into the country from 1994 through 2000 under the grandfathering exemption, with the largest number arriving in 1999. During this same period, importers were also authorized to import another 42 million pre-ban LCMs that may have arrived after 2000.

Criminal Use of Assault Weapons and Large-Capacity Magazines Prior to the Ban

During the 1980s and early 1990s, AWs and other semi-automatic firearms equipped with LCMs were involved in a number of highly publicized mass shootings that raised public concern about the accessibility of high-powered, military-style weaponry and other guns capable of rapidly discharging high numbers of bullets (Cox Newspapers 1989; Kleck 1997, 124-126, 144; Lenett 1995; Violence Policy Center 2012). Perhaps most notably, AWs or other semiautomatics with LCMs were used in 6, or 40%, of 15 particularly severe mass shooting incidents between 1984 and 1993 that resulted in at least 6 deaths or at least 12 killed or wounded (Kleck, 1997, 124–126, 144). Early studies of AWs, though sometimes based on limited and potentially unrepresentative data, also suggested that AWs recovered by police were often associated with drug trafficking and organized crime (Cox Newspapers 1989, 4; also see Roth and Koper 1997, chap. 5), fueling a perception that AWs were guns of choice among drug dealers and other particularly violent groups. These events intensified concern over AWs and other semi-automatics with LCMs and helped spur the 1989 federal import ban on selected semi-automatic rifles (implemented by executive order) and the passage of the 1994 federal AW ban (the states of California, New Jersey, Connecticut, Hawaii, and Maryland also passed AW legislation between 1989 and 1994).

Looking at the nation's gun crime problem more broadly, numerous studies of AW-type weapons conducted prior to the federal ban found that AWs typically accounted for up to 8% of guns used in crime, depending on the specific AW definition and data source used (e.g., see Beck et al. 1993; Hargarten et al. 1996; Hutson, Anglin, and Pratts 1994; Hutson et al. 1995; McGonigal et al. 1993; New York State Division of Criminal Justice Services 1994; Roth and Koper 1997, chap. 2; Zawitz 1995). A compilation of 38 sources indicated that AWs accounted for about 2% of crime guns on average (Kleck 1997, 112, 141–143). Similarly, the most common AWs prohibited by the 1994 federal ban accounted for between 1% and 6% of guns used in crime according to most of several national and local data sources examined for the NIJ-funded studies summarized here (Koper 2004, 15).

As with crime guns in general, the majority of AWs used in crime were assault pistols rather than assault rifles. Among AWs reported by police to ATF during 1992 and 1993, for example, assault pistols outnumbered assault rifles by a ratio of three to one.

The relative rarity of AW use in crime can be attributed to a number of factors. Many of these models are long guns, which are used in crime much less often than handguns. Also, as noted, a number of the rifles named in the 1994 law were banned from importation into the United States in 1989. Further, AWs in general are more expensive and more difficult to conceal than the types of handguns that are used most frequently in crime.

Criminal use of guns equipped with LCMs had not been studied as extensively as criminal use of AWs at the time of the ban. However, the overall use of guns with LCMs, which is based on the combined use of AWs and nonbanned guns with LCMs, is much greater than the use of AWs alone. Based on data examined for this and a few prior studies, guns with LCMs were used in roughly 13% to 26% of most gun crimes prior to the ban, though they appeared to be used in 31% to 41% of gun murders of police (see summary in Koper 2004, 18; also see Adler et al. 1995; Fallis 2011; New York Division of Criminal Justice Services 1994).

The Ban's Effects on Crimes with Assault Weapons and Large-Capacity Magazines

Although there was a surge in production of AW-type weapons as Congress debated the ban in 1994, the law's restriction of the new AW supply and the interest of collectors and speculators in these weapons helped to drive prices higher for many AWs (notably assault pistols) through the end of the 1990s

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City	Pre-ban	Post-ban	% change
Baltimore, MD	1.88% (1992–1993)	1.25% (1995–2000)	-34%
Boston, MA	2.16% (1991–1993)	0.6% (2000–2002)	-72%
Miami, FL	2.53% (1990–1993)	1.71% (1995–2000)	-32%
St. Louis, MO	1.33% (1992–1993)	0.91% (1995–2003)	-32%
Anchorage, AK	3.57% (1987–1993)	2.13% (1995–2000)	-40%
Milwaukee, WI	5.91% (1991–1993)	4.91% (1995–1998)	-17%

Table 12.2 Assault weapons as a percentage of guns recovered by police

Note: Figures for Baltimore, Boston, Miami, and St. Louis are based on all recovered guns. Figures for Anchorage and Milwaukee are based on, respectively, guns tested for evidence and guns recovered in murder cases. Changes in Baltimore, Boston, Miami, and St. Louis were statistically significant at p<.05. See Koper (2004) for further details about the data and analyses.

and appeared to make them less accessible and/or affordable to criminal users.³ Analyses of several national and local databases on guns recovered by police indicated that crimes with AWs declined following the ban.

To illustrate, the share of gun crimes involving the most commonly used AWs declined by 17% to 72% across six major cities examined for this study (Baltimore, Miami, Milwaukee, Boston, St. Louis, and Anchorage), based on data covering all or portions of the 1995–2003 post-ban period (Table 12.2). (The number of AW recoveries also declined by 28% to 82% across these locations and time periods; the discussion here focuses on changes in AWs as a share of crime guns in order to control for general trends in gun crime and gun seizures.) Similar patterns were found in a national analysis of recovered guns reported by law enforcement agencies around the country to ATF for investigative gun tracing.⁴ The percentage of gun traces that were for AWs fell 70% between 1992–1993 and 2001–2002 (from 5.4% to 1.6%), though the interpretation of these data was complicated by changes that occurred during this time in gun tracing practices (see Koper 2004 for further discussion).

The decline in crimes with AWs was due primarily to a reduction in the use of assault pistols. Assessment of trends in the use of assault rifles was complicated by the rarity of crimes with such rifles and by the substitution in some cases of post-ban rifles that were very similar to the banned models. In general, however, the decline in AW use was only partially offset by substitution of post-ban AW-type models. Even counting the post-ban models as AWs, the share of crime guns that were AWs fell 24% to 60% across most of the local jurisdictions studied. Patterns in the local data sources also suggested that crimes with AWs were becoming increasingly rare as the years passed.

The decline in crimes with AWs appeared to have been offset throughout at least the late 1990s by steady or rising use of other semi-automatics equipped with LCMs. Assessing trends in LCM use was difficult because there is no national data source on crimes with LCMs and few contacted jurisdictions maintained such information. It was possible, nonetheless, to examine trends in the use of guns with LCMs in four jurisdictions: Baltimore, Milwaukee, Anchorage, and Louisville (KY). Across the different samples analyzed from these cities (some databases included all recovered guns and some included only guns associated with particular crimes), the share of guns with an LCM generally varied from 14% to 26% prior to the ban. In all four jurisdictions, the share of crime guns equipped with LCMs rose or remained steady through the late 1990s (Table 12.3). These trends were driven primarily by handguns with LCMs, which were used in crime roughly three times as often as rifles with LCMs (though crimes with rifles having LCMs also showed no general decline). Generalizing from such a small number of jurisdictions must be done very cautiously, but the consistency of the findings across these geographically diverse locations strengthens the inference that they reflected a national pattern.

Failure to reduce LCM use for at least several years after the ban was likely because of the immense stock of exempted pre-ban magazines, which, as noted, was enhanced by post-ban imports. The trend in crimes with LCMs may have been changing by the early 2000s, but the available data were too limited and inconsistent to draw clear inferences (post-2000 data were available for only two of the four study sites).

City	Pre-ban	Late 1990s	Early 2000s	
Baltimore, MD	14.0% (1993)	15.5% (1998)	15.7% (2003)	
Anchorage, AK	26.2% (1992–1993)	30.0% (1999–2000)	19.2% (2001–2002)	
Milwaukee, WI	22.4% (1993)	36.4% (1998)	N/A	
Louisville, KY	N/A	20.9 (1996)	19.0% (2000)	

Table 12.3 Guns with large-capacity magazines as a percentage of guns recovered by police (selected years)

Note: Figures for Baltimore and Milwaukee are based on, respectively, guns associated with violent crimes and with murders. Figures for Anchorage and Louisville are based on guns submitted for evidentiary testing. The Anchorage figures are based on handguns only. See Koper (2004) for further details about the data and analyses.

A later media investigation of LCM use in Richmond, Virginia, suggests that the ban may have had a more substantial impact on the supply of LCMs to criminal users by the time it expired in 2004. In that city, the share of recovered guns with LCMs generally varied between 18% and 20% from 1994 through 2000 but fell to 10% by 2004 (Fallis 2011). It is not clear whether the Richmond results represented a wider national or even regional trend. (The data from this study also show that after the ban was lifted, the share of Richmond crime guns with an LCM rose to 22% by 2008.)

The Ban's Impacts on Gun Violence

Because offenders could substitute non-banned guns and small magazines for banned AWs and LCMs, there was not a clear rationale for expecting the ban to reduce assaults and robberies with guns. But by forcing this weapon substitution, it was conceivable that the ban would reduce the number and severity of shooting deaths and injuries by reducing the number of shots fired in gun attacks (thus reducing the number of victims per gunfire incident and the share of gunshot victims sustaining multiple wounds). Based on this logic, the research team examined several indicators of trends in the lethality and injuriousness of gun violence for different portions of the 1995–2002 post-ban period. These included national-level analyses of gun murders, the percentage of violent gun crimes resulting in death, the share of gunfire cases resulting in wounded victims, the percentage of gunshot victimizations resulting in death, and the average number of victims per gun homicide incident. For selected localities, the team also examined trends in wounds per gunshot victim or the percentage of gunshot victims sustaining multiple wounds.

On balance, these analyses showed no discernible reduction in the lethality or injuriousness of gun violence during the post-ban years (see Koper 2004, Koper and Roth 2001, and Roth and Koper 1997). Nationally, for example, the percentage of violent gun crimes resulting in death (based on gun homicides, gun assaults, and gun robberies reported to the Uniform Crime Reports) was the same for the period 2001–2002 (2.9%) as it was for the immediate pre-ban period 1992–1993 (Koper 2004, 82, 92). Accordingly, it was difficult to credit the ban with contributing to the general decline in gun crime and gun homicide that occurred during the 1990s.

However, the ban's exemption of millions of pre-ban AWs and LCMs meant that the effects of the law would occur only gradually. Those effects were still unfolding when the ban was lifted and may not have been fully realized until several years beyond that, particularly if importation of foreign, pre-ban LCMs had continued in large numbers. In light of this, it was impossible to make definitive assessments of the ban's impact on gun violence.

It was also difficult to judge the ban's effects on the more specific problem of mass shootings. The research team attempted to assess changes in mass shootings during the first few years of the ban, but this effort was hampered by the difficulty of counting these incidents (results can be sensitive to the definitions and data sources used) and identifying the specific types of guns and magazines used in them (Roth and Koper 1997, app. A). There is no national data source that provides detailed information on the types of guns and magazines used in shooting incidents or that provides full counts of victims killed and wounded in these attacks. Studying mass shootings in particular poses a number of challenges with regard to defining these events, establishing the validity and reliability of methods for measuring their frequency and characteristics (particularly if done through media searches, as is often necessary), and modeling their trends, as they are particularly rare events (e.g., see Duwe 2000; Roth and Koper 1997, app. A).

Nonetheless, the issue of mass shootings continues to be a catalyst to the debate surrounding AW legislation. A recent media compilation of 62 mass shooting incidents that involved the death of four or more people over the period 1982–2012, for instance, suggests that 25% of the guns used in these attacks were AW-type weapons (these were not precisely defined) and another 48% were other types of semi-automatic handguns (Follman, Aronsen, and Pan 2012). Continuing improvements in media search tools and greater attention to the types of guns and magazines used in multiple-victim attacks may improve prospects for examining this issue more rigorously in future studies.

Assessing the Potential Long-Term Effects of Banning Assault Weapons and Large-Capacity Magazines

Although available evidence is too limited to make firm projections, it suggests that the ban may have reduced shootings slightly had it remained in place long enough to substantially reduce crimes with both LCMs and AWs. A small number of studies suggest that gun attacks with semi-automatics including AWs and other guns equipped with LCMs—tend to result in more shots fired, more persons wounded, and more wounds inflicted per victim than do attacks with other firearms (see reviews in Koper 2004; Koper and Roth 2001; also see McGonigal et al. 1993; Richmond et al. 2003; Reedy and Koper 2003; Roth and Koper 1997). For example, in mass shooting incidents that resulted in at least 6 deaths or at least 12 total gunshot victims from 1984 through 1993, offenders who clearly possessed AWs or other semi-automatics with LCMs (sometimes in addition to other guns) wounded or killed an average of 29 victims in comparison to an average of 13 victims wounded or killed by other offenders (see Koper and Roth's [2001] analysis of data compiled by Kleck [1997, 144]).

Similarly, a study of handgun attacks in Jersey City, New Jersey, during the 1990s found that the average number of victims wounded in gunfire incidents involving semi-automatic pistols was in general 15% higher than in those involving revolvers (Reedy and Koper 2003). The study also found that attackers using semi-automatics to fire more than 10 shots were responsible for nearly 5% of the gunshot victims in the sample. Used as a tentative guide, this implies that the LCM ban could have eventually produced a small reduction in shootings overall, perhaps up to 5%, even if some gun attackers had the foresight to carry more than one small magazine (or more than one firearm) and the time and poise to reload during an attack.

Effects of this magnitude might be difficult to measure reliably, but they could nonetheless yield significant societal benefits. Consider that in 2010 there were 11,078 gun homicides in the United States and another 53,738 nonfatal assault-related shootings according to the federal Centers for Disease Control and Prevention (see the CDC's web-based injury statistics query and reporting system at http://www.cdc.gov/injury/wisqars/index.html). At these levels, reducing shootings by just 1% (arguably a reasonable ballpark estimate for the long-term impact of substantially reducing AW and LCM use) would amount to preventing about 650 shootings annually. The lifetime medical costs of assault-related gunshot injuries (fatal and nonfatal) were estimated to be about \$18,600 per injury in 1994 (Cook et al. 1999). Adjusting for inflation, this amounts to \$28,894 in today's dollars. Moreover, some estimates suggest that the full societal costs of gun violence-including medical, criminal justice, and other government and private costs (both tangible and intangible)could be as high as \$1 million per shooting (Cook and Ludwig 2000). Hence, reducing shootings by even a very small margin could produce substantial long-term savings for society, especially as the shootings prevented accrue over many years.

Lessons and Implications from the 1994 Ban

Studies of America's previous assault weapons ban provide a number of lessons that can inform future policymaking. A new law similar to the old ban will have little impact on most gun crimes, but it may prevent some shootings, particularly those involving high numbers of shots and victims. It may thus help to reduce the number and severity of mass shooting incidents as well as produce a small reduction in shootings overall.

The most important feature of the previous ban was the prohibition on large-capacity ammunition magazines. A large magazine is arguably the most critical feature of an assault weapon, and restrictions on magazines have the potential to affect many more gun crimes than do those on military-style weapons. Restrictions focused on magazine capacity may also have a greater chance of gaining sufficient public and political support for passage than would new restrictions on assault weapons, though current polling suggests that both measures are supported by three-quarters of non-gun owners and nearly half of gun owners (Barry et al., in this volume). To enhance the potential impact of magazine restrictions, policymakers might also consider limiting magazine capacity to fewer than 10 rounds for all or selected weapons (for example, lower limits might be set for magazines made for semi-automatic rifles).⁵ It is unknown whether further restrictions on the outward features of semi-automatic weapons, such as banning weapons having any military-style features, will produce measurable benefits beyond those of restricting magazine capacity.

Policymakers must also consider the implications of any grandfathering provisions in new legislation. Assessing the political and practical difficulties of registering all assault weapons and large magazines or establishing turn-in or buyback programs for them is beyond the scope of this essay. Policymakers should note, however, that it may take many years to attain substantial reductions in crimes with banned weapons and/or magazines if a new law exempts the existing stock (which has likely grown considerably since the time of the original ban). Policies regarding exemptions must also explicitly address the status of imported guns and magazines.

Past experience further suggests that public debate on reinstating the ban or crafting a new one will raise prices and production of the guns and magazines likely to be affected. This could temporarily saturate the market for the guns and magazines in question (particularly if close substitutes emerge) and delay desired reductions in crimes with some categories of the banned weaponry (this appeared to happen with assault rifles that were banned by the 1994 law and may have contributed as well to the observed trends in use of large magazines).

A new ban on assault weapons and/or large-capacity magazines will certainly not be a panacea for America's gun violence problem nor will it stop all mass shootings. However, it is one modest measure that, like federal restrictions on fully automatic weapons and armor-piercing ammunition, can help to prevent the further spread of particularly dangerous weaponry.

NOTES

1. In general, the AW ban did not apply to semi-automatics possessing no more than one military-style feature listed under the ban's features test provision. Note, however, that firearms imported into the country still had to meet the "sporting purposes test" established under the federal Gun Control Act of 1968. In 1989, ATF determined that foreign semi-automatic rifles having any one of a number of named military features (including those listed in the features test of the 1994 AW ban) fail the sporting purposes test and cannot be imported into the country. In 1998, the ability to accept an LCM made for a military rifle was added to the list of disqualifying features. Consequently, it was possible for foreign rifles to pass the features test of the federal AW ban but not meet the sporting purposes test for imports (U.S. Department of the Treasury 1998).

2. Technically, the ban prohibited any magazine, belt, drum, feed strip, or similar device that has the capacity to accept more than 10 rounds of ammunition or which can be readily converted or restored to accept more than 10 rounds of ammunition. The ban exempted attached tubular devices capable of operating only with .22 caliber rimfire (i.e., low velocity) ammunition.

3. See Koper (2004), Koper and Roth (2002), and Roth and Koper (1997) for more extensive discussions of the ban's impacts on prices and production of AWs, non-banned firearms, and LCMs.

4. A gun trace is an investigation into the sales history of a firearm (e.g., see ATF 2000).

5. To support the formulation and evaluation of policy in this area, there are also a number of research needs worth noting. For one, it is important to develop better data on crimes with guns having LCMs. Policymakers should thus encourage police agencies to record information about magazines recovered with crime guns. Likewise, ATF should consider integrating ammunition magazine data into its national gun tracing system and encourage reporting of magazine data by police agencies that trace firearms. Second, there is a need for more studies that contrast the outcomes of attacks with different types of guns and magazines. Such studies would help to refine predictions of the change in gun deaths and injuries that would follow reductions in attacks with firearms having large-capacity magazines.

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Tab 5

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Gun control

US mass shootings prompt surge in weapons sales

Fears that killings could prompt tighter arms laws lead to higher demand for weapons



© AFP

Gina Chon and Shannon Bond in Washington OCTOBER 4, 2015

Business has been brisk for Larry Hyatt, owner of Hyatt Guns in North Carolina, since the Oregon community college <u>shooting</u> last week that left 10 people dead, including the 26-year-old suspect.

Mr Hyatt saw an even bigger surge in customers after the 2012 massacre at Sandy Hook Elementary School in Connecticut that left 26 people dead, including 20 children, before the gunman killed himself.

After that incident, President Barack Obama made his first major push for stricter gun laws. In the wake of the Oregon shooting, Mr Obama on Friday again urged Americans to challenge the powerful <u>gun lobby</u>, saying he could not do it alone.

However, the calls for tighter gun laws lead to an increase in weapons sales. "Once the public hears the president on the news say we need more gun controls, it tends to drive sales," said Mr Hyatt, who owns one of the largest gun retailers in the US. "People think, if I don't get a gun now. it might be difficult to get one in the future. The store is crowded."

The shooting last Thursday, when a gunman killed nine people at Umpqua Community College before the suspect fatally shot himself, comes less than three months after a 21-year-old man shot nine people dead at a historic black church in South Carolina.

Since the <u>Sandy Hook</u> shootings, some retirement funds and university endowments have sold their stakes in gun companies. In May, Cerberus announced its investors could sell their stake in portfolio company and gun manufacturer Remington Outdoor after failing to find a buyer for the company. Remington made a rifle used in the Sandy Hook shooting.

But given the increased demand for guns, other investors have quickly swooped in. Gun sales this year could surpass the record set in 2013, when gun purchases surged after the December 2012 Sandy Hook murders.

In the first nine months of this year, 15.6m of the background checks needed to purchase guns from federally licensed sellers have been processed, compared with the 15.5m applications in the same period in 2013, according to the National Instant Criminal Background Check System.

We don't want our business to be based on tragedy but we have to deal with what we have no control over. And after these shootings and then the calls for tougher gun laws, we see a buying rush The strong sales have had a positive impact on earnings for <u>Smith & Wesson</u> and <u>Sturm, Ruger &</u> <u>Co</u>, the two largest publicly traded gun manufacturers in the US. The companies have significantly outperformed the S&P 500 and the Dow Jones Industrial Average, with Smith & Wesson's stock up by more than 73 per cent this year; Sturm has increased by 63 per cent.

In North California, Mr Hyatt has also seen increased competition from new retailers because the rise in demand for guns has pushed new sellers into the market, especially since Sandy Hook.

Larry Hyatt, gun shop owner

"We don't want our business to be based on tragedy but we have to deal with what we have no control over," Mr Hyatt said. "And after these shootings and then the calls for tougher gun laws, we see a buying rush."

The industry is also normalising after the post-Sandy Hook surge in sales, which soaked up about a two years' worth of demand in nine months and caused a lull in purchases in 2014, according to RBC Capital Markets analyst Steven Cahall.

"Now we're looking at a more normalised level of growth," Mr Cahall said. "But the industry is

often times reactive to a perceived heightened risk of increased <u>gun control</u>. The question is does what happened [in Oregon] increase that perception of risk."

Next year could be an even bigger one for the gun industry because of some new handgun products that are expected to come to market. The US military has asked firearms manufacturers to submit designs for a new handgun by next January to replace the M9 pistol.

The scramble for the lucrative contract is expected to produce similar commercial products, after a dearth of new offerings in the last few years.

"2016 could see unusually strong growth, said Rommel Dionisio, an analyst for Wunderlich Securities. "Over the next few months, we'll see a flood of new products and a customer base that is eager for them."

The gun laws have nothing to do with this. This isn't guns. This is about, really, mental illness

Donald Trump

Republican presidential candidates continued to caution against making changes to gun laws in the wake of tragedies like the Oregon shootings.

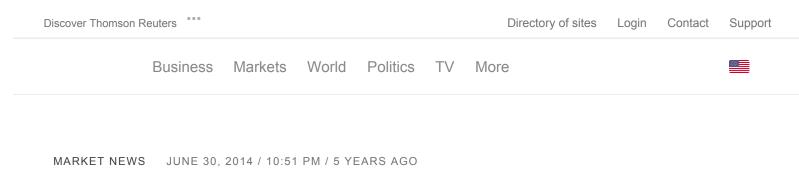
Donald Trump, the frontrunner for the party's nomination, told ABC's This Week on Sunday that the issue was not gun control but the mental health of a small number of people. "The gun laws have nothing to do with this. This isn't guns, This is about, really, mental illness," he said.

He suggested such events were inevitable, saying "you have to show great vigilance, and watch and be careful and security and everything else. But no matter what you do, you will have problems and that's the way the world goes."

His comments echoed Jeb Bush, the former governor of Florida, who was castigated on Friday for saying that "stuff happens" in response to a question about mass shootings.

At a rally on Saturday, Mr Trump told the crowd he was "a big second amendment person" and said he held a permit to carry a gun in New York.

Copyright The Financial Times Limited 2019. All rights reserved. Firearms makers moving to more gun-friendly U.S. southern states - Reuters



Firearms makers moving to more gun-friendly U.S. southern states

Harriet McLeod

4 MIN READ

CHARLESTON, S.C., June 30 (Reuters) - The first gun manufacturer to leave Connecticut after it enacted tough new gun control laws last year in the wake of the Newtown school shootings presented a commemorative rifle on Monday to the governor of South Carolina, its new home.

PTR Industries Inc is among a wave of firearms makers moving or expanding away from the industry's traditional base in the U.S. Northeast to the more gun-friendly South.

Gun sales in the United States have grown steadily over the past 30 years and spiked last year after the Newtown shootings because of fear of coming restrictions, analysts said.

"Everybody who is looking to expand in new factory space is looking outside the Northeast. The reasons are taxes, labor and laws," said Brian Ruttenbur, an analyst with CRT Capital Group.

A maker of expensive target rifles, PTR announced an \$8 million investment in South Carolina, and moved about 45 jobs to a factory near Myrtle Beach in January.

PTR's limited edition commemorative rifle, which sells for \$1,200, is stamped with the South Carolina logo and the words: "We the people shall not be infringed."

Alabama announced in February that Remington Outdoor Co Inc was moving some production lines from Ilion, New York, where it has been based since 1816, to Huntsville, Alabama, with a \$110 million investment that promises to bring 2,000 jobs to the Southern state.

Connecticut-based Sturm Ruger & Co Inc is building a 220,000-square-foot facility in North Carolina, the company's first major expansion in more than 25 years, it said.

Colt's Manufacturing Co, also based in Connecticut, moved its Colt Competition rifle manufacturer to Texas last year.

Beretta USA, based for decades in Accokeek, Maryland, is building a \$45 million firearms research and manufacturing plant in Gallatin, Tennessee, after Maryland banned sales of specific types of assault weapons last year.

Courted by several states, Beretta made a list of "traditional true blood Second Amendment states" for consideration, general counsel and vice-general manager Jeff Reh told The Sportsman Channel.

Gun company relocation and expansion to better locations are in protest against new gun control laws, firearm industry analyst Rommel Dionisio of Wedbush Securities told Reuters.

The gun makers' aging northeastern factories are also a factor, according to Ruttenbur.

The 150-year-old gun industry started in the Northeast as companies such as Smith and Wesson Holding Corp, Remington Arms Co Inc and Colt took advantage of the availability of cheap steel.

Attitudes toward gun ownership are now polarized and geographically separated, said Ruttenbur.

"The demand for guns is not in the Northeast. It's not on the coasts. Gun ownership is dramatically going higher in the heartland," he said.

Firearms makers are having an "awakening," said PTR vice president John McNamara.

"When folks in the northeast are approached by states like South Carolina, Texas and Georgia and shown what they can be doing, there's no competition," he said. "Connecticut banned the product we make." (Editing by David Adams and Andre Grenon)

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A breakdown of gun terminology to help you in discussions on mass shootings and debates over gun control



John Haltiwanger, Business Insider • August 12, 2019

- The language surrounding firearms can be tricky, and the gun lobby sometimes seeks to discredit gun control advocates by pointing to incorrect use of gun-related terminology.
- "Assault weapons," for example, is among the most divisive phrases in debates over gun control.
- There's been a renewed discussion over gun control following <u>several mass shootings</u> in the past few weeks that took place in California, Texas, and Ohio.
- Visit Business Insider's homepage for more stories.

Given ongoing and divisive debate over gun control in the US, it's helpful to understand the breakdown of some of the most important terms that frequently come up after mass shootings.

Some of these terms might appear inconsequential, but relate strongly to discussions on what type of guns and firearm accessories should be regulated more strictly or even banned. (And some in the pro-Second Amendment camp have been known to <u>mock people calling for new gun laws when they use</u> <u>incorrect terminology</u> in reference to firearms.)

Semi-automatic vs. automatic



Gene Blevins/Reuters

A semi-automatic firearm refers to a gun that fires a single round or bullet each time the trigger is squeezed or pulled, and then automatically reloads the chamber between shots.

An automatic firearm is essentially what many Americans likely think of as a machine gun, or a firearm that continuously fires while the trigger is squeezed or pulled and reloads the chamber automatically.

The vast majority of firearms in the US are semi-automatic, and include rifles and handguns. Semiautomatic firearms are available across the US with few restrictions. Automatic weapons are heavily regulated and expensive.

The manufacture and importation of new automatic firearms has been prohibited since <u>the Firearm</u> <u>Owners' Protection Act of 1986.</u> But this still allows for the purchase of automatic firearms made before a certain date in 1986, meaning automatics are technically legal in certain circumstances.

Magazine vs. clip



Connecticut State Police/Reuters

"Magazine" and "clip" are often used interchangeably, though they aren't the same thing.

A magazine is a container that holds cartridges or rounds of ammunition and feeds them into the firing chamber of a gun. Some magazines are internal, while others are detachable.

A clip holds multiple rounds of ammunition together, often on a metal strip, to be fed into a magazine. Most guns have magazines (<u>revolvers</u> and some types of shotguns do not have magazines), but not all firearms use clips.

Assault weapons



Brian Witte/Associated Press

"Assault weapons" is among the most contentious phrases in discussions on gun control.

There's not a universal definition to what an assault weapon is, which is part of the reason this subject tends to antagonize the gun lobby or pro-gun advocates.

But in 1994, after the now-expired <u>assault weapons ban</u> passed, <u>the Justice Department said</u>, "In general, assault weapons are semiautomatic firearms with a large magazine of ammunition that were designed and configured for rapid fire and combat use."

The gun industry often defines an assault rifle as a firearm with "select fire capabilities," or the ability to adjust or switch the firearm between semi-automatic and automatic settings or modes.

In short, pro-Second Amendment groups typically say a firearm should only be called an assault weapon when it's capable of fully automatic fire — or they reject the terminology altogether.

"None of the so-called 'assault rifles' legally owned by US civilians are assault rifles as the term is used in military contexts," Florida State University criminal justice professor emeritus Gary Kleck, told PolitiFact.

Kleck added, "Assault rifles used by members of the military can all fire full automatic, like machine guns, as well as one shot at a time, whereas none of the so-called 'assault rifles' legally owned by US civilians can fire full automatic."

Based on the idiosyncrasies of this issue and the broader debate surrounding it, many gun control advocates tend to refer to semi-automatic firearms that have been used in mass shootings as <u>"assault-style"</u> or <u>"military-style"</u> weapons.

A recent POLITICO/Morning Consult poll found <u>70% of Americans</u> would support an assault weapons ban, including 86% of Democrats and 55% of Republicans.

AR-15



Joshua Roberts/Reuters

The AR-15 is a semi-automatic rifle and has been referred to by the National Rifle Association as <u>"America's most popular rifle."</u>

The "AR" in AR-15 does not stand for "assault rifle," but is linked to the original manufacturer of the firearm: ArmaLite, Inc. The name stands for ArmaLite Rifle.

The AR-15 was originally <u>developed by ArmaLite to be a military rifle</u>, designing it for fast reloading in combat situations, but the company hit financial troubles. <u>By 1959</u>, ArmaLite sold the design of the AR-15 to Colt, which had success in pitching it to the US military.

The rifle's automatic version, the M-16, was used during the Vietnam War. Meanwhile, Colt sold the semiautomatic version, the AR-15, to the public and police.

"If you're a hunter, camper, or collector, you'll want the AR-15 Sporter," <u>a 1963 advertisement for the</u> <u>firearm said.</u>

Colt's patent on the rifle's operating system expired in 1977, opening the door for other manufacturers to copy the technology and make their own models.

The AR-15 was prohibited from 1994 to 2004 via the assault weapons ban. Gun manufacturers promptly reintroduced the AR-15 after the ban expired, and sales went way up.

There are "well over 11 million" AR-15 style rifles in the hands of Americans, according to investigation by CBS News's "60 Minutes," which also notes handguns kill "far more people."

But AR-15 style rifles have frequently been used in mass shootings, placing the firearm at the center of the debate over gun control — particularly in relation to whether an assault weapons ban should be reimposed.

High-capacity magazines



Andrew Harnik/Associated Press

High or large-capacity magazines are typically defined as <u>ammunition-feeding devices holding more than</u> <u>10 rounds</u>. Nine states <u>currently ban high-capacity magazines</u>. High-capacity magazines are capable of holding up to 100 rounds of ammunition, allowing for dozens of shots to be fired off before reloading. The rifle used in the recent mass shooting in Dayton, Ohio, was affixed with a 100-round drum magazine.

This is what a 100-round drum magazine looks like from the Dayton shooting. Authorities say he had a .223-cal rifle with this attached:



Bump stock



George Frey/Reuters

A bump stock is an attachment that allows a semi-automatic weapon to fire at a more rapid rate.

It replaces the standard stock of a rifle, or the part of the firearm that rests against the shoulder. A bump stock uses the recoil effect to bounce the rifle off of the shoulder of the shooter, which in turn causes the trigger to continuously bump back into the shooter's trigger finger.

In effect, bump stocks allow semi-automatic weapons to fire like machine guns.

Bump stocks were banned by the Trump administration in a large part due to the Las Vegas shooting in 2017, which was the deadliest mass shooting in US history.

Red flag law



Reuters

Red flag laws allow judges to temporarily confiscate a person's firearms if they're considered a danger to themselves or others.

Over a dozen states have implemented red flag laws, <u>according to CBS News</u>, including:

- California
- Colorado
- Connecticut
- Delaware
- Washington, DC
- Florida
- Hawaii (effective Jan. 1, 2020)
- Illinois
- Indiana
- Maryland
- Massachusetts
- Nevada (effective Jan. 1, 2020)
- New Jersey
- New York
- Oregon
- Rhode Island
- Vermont
- Washington state

Gun show loophole



Associated Press/Philip Kamrass

The so-called "gun show loophole" is among the most discussed topics in relation to calls for gun reform advocates for expanded background checks.

"Gun show loophole" is a catch-all phrase referring to the sale of firearms by unlicensed, private sellers at gun shows and other venues — including the internet — without the involvement of background checks.

Federally licensed gun dealers are required to run background checks, <u>but not all sellers are required to</u> <u>be licensed</u> — laws vary from state to state. In this sense, there is a "loophole" that allows private sellers to sell firearms without conducting background checks.

The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) is the federal agency that licenses gun dealers.

"As a general rule, you will need a license if you repetitively buy and sell firearms with the principal motive of making a profit," <u>the ATF states.</u> "In contrast, if you only make occasional sales of firearms from your personal collection, you do not need to be licensed."

The implementation of a federal law requiring universal background checks, or background checks for all gun sales, has been at the top of the wish list for gun control advocates for years.

It's also a policy that the vast majority of Americans support. According to polling conducted by Pew Research Center in late 2018, 91% of Democrats and 79% of Republicans favor <u>background checks for</u> <u>private gun sales and sales at gun shows.</u>

Article at: https://www.yahoo.com/news/breakdown-gun-terminology-help-discussions-140600679.html?.tsrc=fauxdal

Tab 6

Industry, Trade and Association Material

FIREARMS AND AMMUNITION INDUSTRY **ECONOMIC IMPACT** REPORT | 2019



Who is the National Shooting Sports Foundation?

The National Shooting Sports Foundation (NSSF) is the trade association for the firearms industry. Its mission is to promote, protect and preserve hunting and the shooting sports. Formed in 1961, NSSF has a membership of about 10,000 manufacturers, distributors, firearms retailers, shooting ranges, sportsmen's organizations and publishers.

For more than 200 years, America's firearms and ammunition industry has made products that have been part of our country's tradition of freedom, self-reliance and enjoyment of the outdoors. NSSF has led the way in promoting responsible ownership of firearms. NSSF concentrates its efforts on measurably advancing



participation in and understanding of hunting and the shooting sports; reaffirming and strengthening our members' commitment to the safe and responsible use of their products, and promoting a political climate supportive of America's traditional firearms rights.

NSSF's expanding government relations program responds to the ever-changing political environment that threatens the lawful commerce in our industry's products, the future of hunting, recreational shooting and our firearms freedoms. NSSF works on both state and federal issues, along with working with many state and federal regulatory agencies, to protect the firearms industry and make sure their business interests are appropriately represented.

The Firearms and Ammunition Industry Economic Impact Report

This report details the significant economic impact the firearms and ammunition industry has on the nation's and each state's economy. The economic growth America's firearms and ammunition industry has experienced in recent years has been nothing short

of remarkable. Over the past decade, the industry's growth has been driven by an unprecedented number of Americans choosing to exercise their fundamental right to keep and bear arms and purchase a firearm and ammunition.

NSSF, representing America's firearms and ammunition



manufacturers, takes great pride in supporting wildlife conservation efforts. Noted in the economic impact report is the significant taxes paid by our industry to federal and state governments and the Pittman-Robertson excise tax the industry pays on the products it sells – this tax is the major source of wildlife conservation funding in America.

Regardless of economic conditions across the country, our industry has grown and created about 146,000 new, well-paying jobs over the past decade. Our industry is proud to be one of the bright spots in this economy.

Take a look for yourself and see the impact we have nationally and on your home state. (See center spread.)

THE FIREARMS INDUSTRY CREATES

United States companies that manufacture, distribute, and sell sporting firearms, ammunition, and supplies are an important part of the country's economy. Manufacturers of firearms, ammunition, and supplies, along with the companies that sell and distribute these products, provide well paying jobs in America and pay significant amounts in tax to the state and Federal governments.

Economic Impact of the Sporting Arms and Ammunition Industry in the United States

	Direct	Supplier	Induced	Total	
Jobs (FTE)	149,146	62,827	100,018	311,991	
Wages	\$6,227,108,200	\$4,342,966,200	\$5,161,711,300	\$15,731,785,700	
Economic Impact	\$21,361,163,600	\$14,320,977,800	\$16,405,365,000	\$52,087,506,400	

The Firearms & Ammunition Industry is an Important Part of America's Economy

Companies in the United States that manufacture, distribute, and sell firearms, ammunition, and hunting equipment employ as many as 149,146 people in the country and generate an additional 162,845 jobs in supplier and ancillary industries. These include jobs in supplying goods and services to manufacturers, distributors, and retailers, and those that depend on sales to workers in the firearms and ammunition industry.¹

These are good jobs paying an average of \$50,400 in wages and benefits. And today, every job is important. The United States currently has an unemployment rate of 3.77 percent. This means that there are already 6,132,000 people trying to find jobs in the nation and collecting unemployment benefits.²

The Economic Benefit of the Industry Spreads Throughout the Country

Not only does the manufacture and sale of firearms and hunting supplies create good jobs in the United States, but the industry also contributes to the economy as a whole. In fact, in 2018 the firearms and ammunition industry was responsible for as much as \$52.09 billion in total economic activity in the country.

The broader economic impact flows throughout the economy, generating business for firms seemingly unrelated to firearms. Real people, with real jobs, working in industries as varied as banking, retail, accounting, metal working, even in printing, all depend on the firearms and ammunition industry for their livelihood.

The Country Also Benefits From the Taxes Paid By The Industry

Not only does the industry create jobs, it also generates sizeable tax revenues. In the United States, the industry and its employees pay over \$6.82 billion in taxes including property, income, and sales based levies.³

Taxes Generated in the United States

Tax Impact	Business Taxes	Excise Taxes
Federal Taxes	\$3,965,700,800	\$653,764,800
State Taxes	\$2,855,813,500	
Total Taxes	\$6,821,514,300	\$653,764,800







¹ John Dunham & Associates, New York, December 2018. Direct impacts include those jobs in firearms and ammunition manufacturers, as well as companies that manufacture products such as ammunition holders and magazines, cases, decoys, game calls, holsters, hunting equipment, scopes, clay pigeons and targets. Direct impacts also include those resulting from the wholesale distribution and retailing of these products.

² The Bureau of Labor Statistics. Available online at: www.bls.gov/lau/home.htm. Data for November-18 .

³ This is in addition to over \$653.76 million in federal excise taxes.

ECONOMIC CONTRIBUTION OF ARMS AND AMMUNITION INDUSTRIES, 2018

		Direct			Suppliers	
	Jobs	Wages	Output	Jobs	Wages	Output
Alabama	3,105	\$109,636,200	\$384,359,200	1,137	\$64,133,300	\$240,912,100
Alaska	717	\$20,023,200	\$45,430,900	197	\$10,700,600	\$36,316,100
Arizona	3,476	\$180,699,200	\$643,856,700	1,635	\$108,168,000	\$353,318,100
Arkansas	3,101	\$127,077,000	\$640,237,000	1,408	\$78,964,100	\$313,450,300
California	9,196	\$419,042,200	\$1,185,500,300	4,056	\$331,934,200	\$1,032,530,300
Colorado	2,471	\$90,281,000	\$273,144,800	1,109	\$78,764,200	\$244,616,200
Connecticut	2,289	\$172,328,300	\$597,457,600	972	\$96,066,700	\$256,595,200
District of Columbia	4	\$117,800	\$276,600	6	\$819,000	\$2,431,400
Delaware	163	\$3,935,300	\$8,630,300	58	\$4,107,400	\$14,465,800
Florida	7,107	\$265,748,000	\$1,036,599,600	3,528	\$213,474,900	\$777,254,000
Georgia	4,519	\$163,820,400	\$684,618,900	1,940	\$128,475,100	\$439,534,400
Hawaii	178	\$5,966,100	\$14,753,900	60	\$2,970,400	\$12,006,600
Idaho	3,610	\$147,785,900	\$581,482,600	1,611	\$83,098,900	\$323,545,100
Illinois	5,286	\$305,673,000	\$1,104,282,600	2,751	\$212,471,000	\$664,539,600
Indiana	3,037	\$78,166,900	\$212,649,900	962	\$65,969,300	\$224,519,100
lowa	1,171	\$31,958,200	\$84,556,900	385	\$24,223,700	\$87,116,300
Kansas	2,713	\$74,149,500	\$282,072,200	1,053	\$63,262,300	\$221,155,800
Kentucky	2,069	\$64,633,400	\$185,720,900	689	\$42,996,300	\$156,296,600
Louisiana	2,437	\$72,335,000	\$226,730,800	799	\$46,086,100	\$157,098,700
Maine	1,376	\$42,552,600	\$142,666,600	463	\$24,803,400	\$91,955,600
Maryland	1,599	\$92,440,100	\$328,527,500	640	\$47,845,400	\$144,733,300
Massachusetts	3,676	\$269,994,500	\$1,292,773,700	1,794	\$162,960,600	\$459,436,200
Michigan	4,230	\$142,655,900	\$404,035,000	1,609	\$106,386,800	\$357,404,600
Minnesota	4,757	\$311,105,300	\$1,117,393,900	2,741	\$212,950,500	\$655,626,400
Mississippi	2,324	\$96,581,800	\$405,025,100	1,080	\$52,945,500	\$223,689,700
Missouri	5,513	\$162,723,800	\$511,027,300	2,035	\$131,476,400	\$459,369,700
Montana	1,427	\$43,826,200	\$171,271,500	534	\$25,770,400	\$96,703,600
Nebraska	1,831	\$69,451,200	\$274,769,500	762	\$56,506,800	\$177,307,300
Nevada	1,405	\$39,219,500	\$130,238,800	501	\$29,467,900	\$104,443,500
New Hampshire	2,551	\$197,303,700	\$743,438,700	1,214	\$89,369,900	\$261,343,500
New Jersey	1,145	\$71,305,400	\$222,521,200	529	\$45,982,600	\$130,782,000
New Mexico	733	\$15,013,500	\$49,287,000	232	\$10,740,600	\$47,875,400
New York	3,745	\$252,328,200	\$855,783,100	1,837	\$176,202,700	\$485,636,100
North Carolina	5,146	\$188,586,000	\$639,672,600	2,173	\$131,956,300	\$462,943,800
North Dakota	529	\$14,984,700	\$33,473,200	160	\$8,805,500	\$29,419,300
Ohio	6,407	\$194,015,800	\$508,055,300	2,215	\$146,179,500	\$520,897,300
Oklahoma	2,216	\$56,343,000	\$162,730,000	804	\$52,066,700	\$173,332,000
Oregon	2,885	\$195,063,800	\$642,840,300	1,646	\$105,358,500	\$335,808,500
Pennsylvania	6,107	\$236,627,500	\$719,860,200	2,424	\$193,684,000	\$588,827,900
Rhode Island	197	\$17,275,200	\$43,815,700	102	\$6,479,400	\$19,036,200
South Carolina	2,957	\$124,263,400	\$444,007,100	1,259	\$71,002,100	\$254,082,100
South Dakota	1,028	\$33,370,000	\$129,924,300	367	\$22,815,300	\$74,805,900
Tennessee	3,175	\$110,217,100	\$293,773,200	1,139	\$73,610,800	\$255,571,300
Texas	11,467	\$413,027,400	\$1,234,838,800	4,825	\$355,015,000	\$1,145,366,400
Utah	3,108	\$138,663,900	\$411,757,500	1,385	\$78,322,600	\$285,830,400
Vermont	357	\$16,838,100	\$61,658,100	125	\$6,994,600	\$24,123,000
Virginia	2,806	\$98,632,800	\$395,998,700	1,076	\$77,403,500	\$256,776,700
Washington	3,688	\$121,338,200	\$381,589,600	1,299	\$92,783,100	\$314,654,400
West Virginia	817	\$17,942,900	\$61,034,000	267	\$14,587,100	\$59,892,400
Wisconsin	2,619	\$89,429,400	\$279,630,800	1,010	\$63,371,200	\$219,889,400
Wyoming	676	\$20,610,700	\$75,383,600	224	\$12,436,000	\$45,712,200
United States	149,146	\$6,227,108,200	\$21,361,163,600	62,827	\$4,342,966,200	\$14,320,977,800

STATE BY STATE ECONOMIC IMPACT REPORT

	Induced			Total		Average	Federal
Jobs	Wages	Output	Jobs	Wages	Output	Wages	Excise Tax
1,628	\$69,077,900	\$249,073,000	5,870	\$242,847,400	\$874,344,300	\$41,400	\$14,609,200
241	\$12,724,400	\$40,154,600	1,155	\$43,448,200	\$121,901,600	\$37,600	\$4,074,500
2,932	\$138,687,100	\$428,734,800	8,043	\$427,554,300	\$1,425,909,600	\$53,200	\$11,520,700
1,946	\$78,840,800	\$278,411,700	6,455	\$284,881,900	\$1,232,099,000	\$44,100	\$9,976,200
6,910	\$430,413,100	\$1,316,689,500	20,162	\$1,181,389,500	\$3,534,720,100	\$58,600	\$53,334,600
1,604	\$83,610,200	\$250,997,500	5,184	\$252,655,400	\$768,758,500	\$48,700	\$12,639,200
2,216	\$145,529,800	\$369,334,100	5,477	\$413,924,800	\$1,223,386,900	\$75,600	\$5,895,900
6	\$435,800	\$1,171,400	16	\$1,372,600	\$3,879,400	\$85,800	\$32,400
72	\$4,066,300	\$16,674,300	293	\$12,109,000	\$39,770,400	\$41,300	\$949,000
5,056	\$234,973,600	\$746,876,400	15,691	\$714,196,500	\$2,560,730,000	\$45,500	\$30,110,700
2,915	\$140,206,600	\$475,158,300	9,374	\$432,502,100	\$1,599,311,600	\$46,100	\$18,417,500
90	\$4,193,200	\$15,097,800	328	\$13,129,700	\$41,858,300	\$40,000	\$1,334,000
2,215	\$88,876,800	\$290,508,200	7,436	\$319,761,600	\$1,195,535,900	\$43,000	\$11,829,000
5,149	\$285,586,900	\$883,866,200	13,186	\$803,730,900	\$2,652,688,400	\$61,000	\$15,509,500
1,431	\$71,725,300	\$279,660,500	5,430	\$215,861,500	\$716,829,500	\$39,800	\$16,349,900
587	\$28,246,900	\$120,050,100	2,143	\$84,428,800	\$291,723,300	\$39,400	\$6,327,300
		\$203,996,400					\$13,383,900
1,249	\$56,935,600		5,015 3,779	\$194,347,400	\$707,224,400	\$38,800	\$10,871,900
1,021	\$45,733,900	\$178,962,200	4,256	\$153,363,600	\$520,979,700	\$40,600	
1,020 654	\$47,129,800	\$182,279,500 \$92,472,200	2,493	\$165,550,900	\$566,109,000	\$38,900	\$12,932,900
	\$27,910,200			\$95,266,200	\$327,094,400	\$38,200	\$7,055,700
1,245	\$68,516,100	\$202,240,400	3,484	\$208,801,600	\$675,501,200	\$59,900	\$5,406,800
3,818	\$245,622,900	\$642,540,400	9,288	\$678,578,000	\$2,394,750,300	\$73,100	\$4,629,200
2,434	\$120,051,200	\$417,705,500	8,273	\$369,093,900	\$1,179,145,100	\$44,600	\$23,039,200
5,262	\$272,807,500	\$793,328,600	12,760	\$796,863,300	\$2,566,348,900	\$62,500	\$13,030,100
1,430	\$53,115,500	\$201,611,800	4,834	\$202,642,800	\$830,326,600	\$41,900	\$6,708,100
2,833	\$131,357,800	\$437,597,500	10,381	\$425,558,000	\$1,407,994,500	\$41,000	\$26,064,100
661	\$26,650,200	\$87,143,300	2,622	\$96,246,800	\$355,118,400	\$36,700	\$5,110,300
1,175	\$55,849,400	\$191,279,500	3,768	\$181,807,400	\$643,356,300	\$48,300	\$7,186,200
586	\$28,474,300	\$92,812,200	2,492	\$97,161,700	\$327,494,500	\$39,000	\$8,317,700
2,705	\$143,111,400	\$399,700,400	6,470	\$429,785,000	\$1,404,482,600	\$66,400	\$2,988,900
1,069	\$68,374,000	\$206,338,200	2,743	\$185,662,000	\$559,641,400	\$67,700	\$5,276,800
245	\$10,115,900	\$38,595,900	1,210	\$35,870,000	\$135,758,300	\$29,600	\$3,805,200
3,404	\$226,637,500	\$653,852,900	8,986	\$655,168,400	\$1,995,272,100	\$72,900	\$10,323,000
3,190	\$148,995,600	\$519,704,600	10,509	\$469,537,900	\$1,622,321,000	\$44,700	\$19,605,500
212	\$9,717,600	\$35,020,800	901	\$33,507,800	\$97,913,300	\$37,200	\$3,373,700
3,359	\$159,697,500	\$570,729,900	11,981	\$499,892,800	\$1,599,682,500	\$41,700	\$37,312,200
986	\$45,910,700	\$149,775,700	4,006	\$154,320,400	\$485,837,700	\$38,500	\$11,482,200
2,811	\$135,690,200	\$409,864,100	7,342	\$436,112,500	\$1,388,512,900	\$59,400	\$8,544,200
4,044	\$224,996,600	\$683,404,100	12,575	\$655,308,100	\$1,992,092,200	\$52,100	\$28,667,900
215	\$11,024,600	\$34,510,500	514	\$34,779,200	\$97,362,400	\$67,700	\$553,700
1,848	\$79,437,100	\$274,454,100	6,064	\$274,702,600	\$972,543,300	\$45,300	\$10,924,800
510	\$23,240,000	\$77,816,300	1,905	\$79,425,300	\$282,546,500	\$41,700	\$4,358,000
1,811	\$94,302,100	\$303,520,200	6,125	\$278,130,000	\$852,864,700	\$45,400	\$17,560,800
7,313	\$399,395,200	\$1,271,005,500	23,605	\$1,167,437,600	\$3,651,210,700	\$49,500	\$60,854,300
2,176	\$94,173,800	\$319,655,600	6,669	\$311,160,300	\$1,017,243,500	\$46,700	\$16,631,100
235	\$10,436,800	\$34,935,600	717	\$34,269,500	\$120,716,700	\$47,800	\$1,420,100
1,549	\$78,454,700	\$260,605,300	5,431	\$254,491,000	\$913,380,700	\$46,900	\$11,589,200
1,846	\$103,266,800	\$318,483,900	6,833	\$317,388,100	\$1,014,727,900	\$46,400	\$23,125,900
294	\$12,422,600	\$49,396,800	1,378	\$44,952,600	\$170,323,200	\$32,600	\$4,084,800
1,558	\$74,139,700	\$267,685,100	5,187	\$226,940,300	\$767,205,300	\$43,800	\$11,580,500
252	\$10,821,800	\$39,881,600	1,152	\$43,868,500	\$160,977,400	\$38,100	\$3,056,400
100,018	\$5,161,711,300	\$16,405,365,000	311,991	\$15,731,785,700	\$52,087,506,400	\$50,400	\$653,764,900



Economic Output: Top Ten States

Total Economic Output, dollars	Total Economic Output, per capita	Growth in Economic Output
Texas	New Hampshire	Minnesota
California	Idaho	Oregon
Illinois	Minnesota	Illinois
Minnesota	Arkansas	North Carolina
Florida	Massachusetts	Nebraska
Massachusetts	Connecticut	Pennsylvania
New York	Montana	Georgia
Pennsylvania	Nebraska	Idaho
North Carolina	Oregon	Massachusetts
Ohio	Utah	New Hampshire



Jobs: Top Ten States

Total Jobs, number	Total Jobs, per capita	Growth in Jobs
Texas	New Hampshire	Minnesota
California	Idaho	Illinois
Florida	Montana	Idaho
Illinois	Minnesota	North Carolina
Minnesota	South Dakota	Oregon
Pennsylvania	Arkansas	Nebraska
Ohio	Utah	New Hampshire
North Carolina	Wyoming	Georgia
Missouri	Nebraska	Utah
Georgia	Maine	Washington



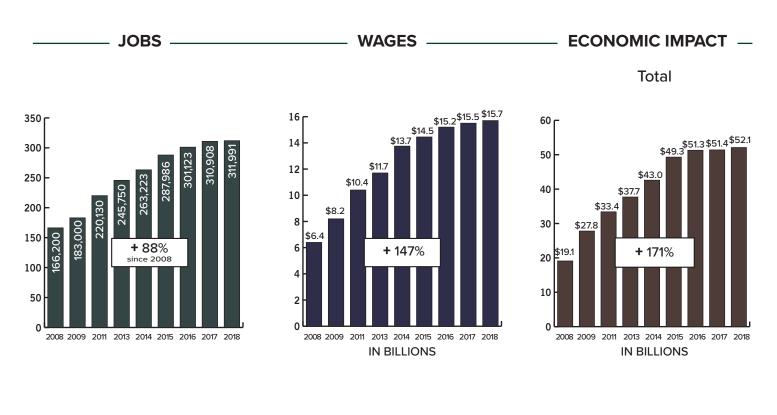
Excise Tax: Top Ten States

Federal Excise Taxes, number
Texas
California
Ohio
Florida
Pennsylvania
Missouri
Washington
Michigan
North Carolina
Georgia

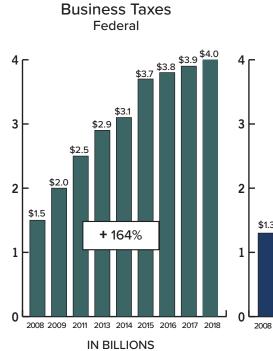
Federal Excise Taxes, per capita
Idaho
Alaska
Wyoming
Maine
Utah
South Dakota
Montana
Kansas
North Dakota
Missouri

Growth in Excise Taxes	
Idaho	
Utah	
Washington	
New Mexico	
Kentucky	
Connecticut	
Delaware	
Colorado	
New Hampshire	
Montana	

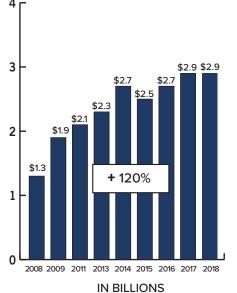
WHAT A GROWING INDUSTRY LOOKS LIKE...



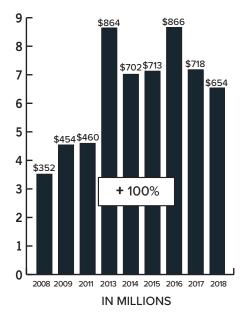
TAXES GENERATED



Business Taxes State



Excise Taxes





The United States is currently considering a ban on firearms such as semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. The implementation of such a ban ensures that the firearms industry will not be able to continue to operate effectively in the country – this includes manufacturers as well as wholesalers and retailers. The industry currently sells an estimated 1.3 million modern sporting rifles and similar types of guns and 247,790 semi-automatic shotguns per year that would be affected by various legislative proposals.¹ A prohibition on the sale of guns in these categories will impact the country's economy.

	Lost Jobs	Lost Wages	Lost Output
Direct	11,753	\$486,734,458	\$1,714,325,680
Supplier	5,424	\$337,777,031	\$1,041,691,084
Induced	9,235	\$434,417,928	\$1,333,889,634
Total	26,413	\$1,258,929,416	\$4,089,906,398
·		Federal Business Taxes	\$309,766,990
		State Business Taxes	\$254,243,057
		Pittman–Robertson Aid	\$82,336,534

Impact of Banning Modern Sporting Rifles and Semi-Automatic Shotguns in the United States²

The Firearms Industry and Its Suppliers are an Important Part of the Country's Economy

- The Firearms industry directly employs about 99,822 people and generates an additional 120,310 jobs in supplier and other firms.³ In total the firearms industry and its suppliers generate \$10.41 billion in wages for employees in the United States. These are good jobs, paying an average of \$47,280 in wages and benefits.
- ✤ In the United States, the industry and its employees pay over \$2.10 billion in property, income, and sales taxes. They also pay \$2.54 billion in federal taxes and \$459.54 million in federal excise taxes which contribute to federal programs, many of which are reallocated in the form of Federal domestic assistance programs.
- Beyond creating jobs, in 2012 the industry was responsible for as much as \$33.36 billion in total economic activity in the United States. This broader activity flows through businesses well beyond firearms. Industries as varied as banking, retail, accounting, metal working, and even in printing, all benefit from the firearms industry for their livelihood.

The Loss of Modern Sporting Rifles Will Be Detrimental for the Nation's Economy

- ✤ A ban on modern sporting rifles and semi-automatic shotguns could lead to 26,413 jobs lost, paying an estimated \$1.26 billion in wages. These jobs include not only those directly employed by the firearms industry but also industries far removed from the firearms industry which depend on it.
- In addition to jobs lost, an estimated \$309.77 million will be lost in federal business taxes and another \$254.24 million in state business taxes. The ban would mean a reduction of about \$82.34 million in Pittman-Robertson aid for wildlife conservation.
- With the national unemployment rate at 7.8 percent, this means that there are already 12,102,000 people trying to find jobs in the country and possibly collecting unemployment benefits.⁴ The loss of this segment of the industry will cause further unemployment problems for the country.

Estimates on the number of firearms affected calculated using sales data provided by the National Shooting Sports Foundation and the Small Arms Survey 2007 and 2011 available at http://www.smallarmssurvey.org/. Due to unclear drafting of the proposed bill, it is difficult to determine the exact models of guns which are affected. This model assumes all semi-automatic shotguns and modern sporting rifles.
Proved for the proposed bill, it is difficult to determine the exact models of guns which are affected. This model assumes all semi-automatic shotguns and modern sporting rifles.

² Based on figures developed for the National Shooting Sports Foundation by John Dunham & Associates, 2013.

³ Direct jobs are those involved in the manufacturing, wholesaling, and retailing of firearms and related goods. Supplier jobs are defined as jobs that provide essential goods and services to the firearms industry, such as metal processors, engineers, and even janitors. Induced jobs are the result of spending of wages earned by employees in the direct and supplier sectors. These can range from jobs in restaurants that these employees frequent to movie theaters and retail outlets.

⁴ The Bureau of Labor Statistics. Available on-line at: www.bls.gov/lau/home.htm. Data for January-13

INDUSTRY INTELLIGENCE REPORTS^{5M} Helping Our Members Make Informed Decisions

2015 Edition

Firearms Production In the United States with Firearm Import and Export Data

ANNUAL UPDATE

This report presents a comprehensive overview of firearms production trends spanning a quarter-century. Most of the data presented is sourced from the Bureau of Alcohol, Tobacco, Firearms and Explosives' (ATF's) Annual Firearms Manufacturing and Export Reports (AFMER). Every effort has been made to provide accurate and updated information so that the reader may keep this edition as a reliable resource of trend information. Production data is a leading indicator of industry performance; this is especially true when combined with other valuable sources of information.

This edition includes manufacturing trends for ammunition as sourced from the Annual Survey of Manufacturers (ASM). However, manufacturing trends for firearms based on the ASM report will not be presented, since the 2012 revisions to the NAICS codes included a variety of military applications not formerly reported under the category of "small arms". Additionally, the latest import and export statistics for firearms as compiled by the U.S. International Trade Commission (USITC) are presented in conjunction with the AFMER numbers to provide a more accurate picture of the historical production that has been made available to the U.S. market. Used collectively, the data sources referenced here help to provide an overview of the firearms and ammunition manufacturing industries.

THE BIG PICTURE

Information on production, imports, exports and other manufacturing variables are only a piece of the more complex puzzle that is the firearms industry. Other factors outside the manufacturing sector, such as the retail sector, the economy and the political climate, must all be taken into consideration.

The limitation of the AFMER data is that it reflects historic trends. However, using the data in combination with other reports provides a more complete picture of the industry. The bottom line is that firearms and ammunition production provides a significant contribution to the national economy in terms of jobs, wages and benefits. Capital expenditures on materials (energy, equipment and fuels) drive local economies. This report highlights a vibrant and essential element of the firearms industry.





NSSF.ORG

25 YEARS U.S. Firearms Production (1989-2013)

			Total			Total	Production	% Change in Total Production
Year	Pistols	Revolvers	Handguns	Rifles	Shotguns	Long Guns	Total (a)	Year over Year
1989	1,402,660	628,765	2,031,425	1,407,317	935,541	2,342,858	4,374,283	14.6%
1990	1,371,537	470,418	1,841,955	1,156,213	848,948	2,005,161	3,847,116	-12.1%
1991	1,381,325	456,941	1,838,266	883,482	828,426	1,711,908	3,550,174	-7.7%
1992	1,549,660	460,373	2,010,033	1,001,708	1,018,204	2,019,912	4,029,945	13.5%
1993	2,093,186	562,292	2,655,478	1,171,872	1,148,939	2,320,811	4,976,289	23.5%
1994	1,995,511	586,450	2,581,961	1,349,116	1,254,926	2,604,042	5,186,003	4.2%
1995	1,195,266	527,664	1,722,930	1,331,780	1,173,645	2,505,425	4,228,355	-18.5%
1996	985,533	498,944	1,484,477	1,424,319	925,732	2,350,051	3,834,528	-9.3%
1997	1,036,077	370,428	1,406,505	1,251,341	915,978	2,167,319	3,573,824	-6.8%
1998	960,365	324,390	1,284,755	1,345,899	1,036,520	2,382,419	3,667,174	2.6%
1999	995,446	335,784	1,331,230	1,569,685	1,106,995	2,676,680	4,007,910	9.3%
2000	962,901	318,960	1,281,861	1,583,042	898,442	2,481,484	3,763,345	-6.1%
2001	626,836	320,143	946,979	1,284,554	679,813	1,964,367	2,911,346	-22.6%
2002	741,514	347,070	1,088,584	1,515,286	741,325	2,256,611	3,345,195	14.9%
2003	811,660	309,364	1,121,024	1,430,324	726,078	2,156,402	3,277,426	-2.0%
2004	728,511	294,099	1,022,610	1,325,138	731,769	2,056,907	3,079,517	-6.0%
2005	803,425	274,205	1,077,630	1,431,372	709,313	2,140,685	3,218,315	4.5%
2006	1,021,260	382,069	1,403,329	1,496,505	714,618	2,211,123	3,614,452	12.3%
2007	1,219,664	391,334	1,610,998	1,610,923	645,231	2,256,154	3,867,152	7.0%
2008	1,387,271	431,753	1,819,024	1,746,139	630,710	2,376,849	4,195,873	8.5%
2009	1,868,268	547,547	2,415,815	2,253,103	752,699	3,005,802	5,421,617	29.2%
2010	2,087,577	558,927	2,646,504	1,830,556	743,378	2,573,934	5,220,438	-3.7%
2011	2,464,255	572,857	3,037,112	2,305,854	862,401	3,168,255	6,205,367	18.9%
2012	3,311,081	667,357	3,978,438	3,109,940	949,010	4,058,950	8,037,388	29.5%
2013	4,314,550	725,282	5,039,832	3,996,673	1,203,072	5,199,745	10,239,577	27.4%

(a): Does not include AFMER MISC firearms category, which includes items such as pen guns and starter guns. Also adjusted to exclude the following:

* 2011 figures from the following manufacturers:

- Pistol parts and components manufacturers were not included in this report: Hi Tech Plastics 20,021; Independent Plating 3,719; Burbak Machine Corp. 102,688; and Nationwide Precision 7,573.
- Rifle parts manufacturer was not included in this report: John W Heaton 12,353 (same company as Precision machine Works). Parts are included in the final, finished product and are reported by that manufacturer.
- * 2012 figures from the following manufacturers:
 - Pistol parts and components manufacturers were not included in this report: Hi Tech Plastics 14,749; Burbak Machine Corp. 129,984; and Nationwide Precision 33,051.

- Rifle parts manufacturer was not included in this report: John W Heaton 14,339. The parts are included in the final, finished product and are reported by the final firearm

manufacturer. Aero Precision, estimated approximately one-third of total reported accounted for lower receivers. Revised count from 73,172 to 25,000 on 3/31/2015.

* 2013 figures from the following manufacturers:

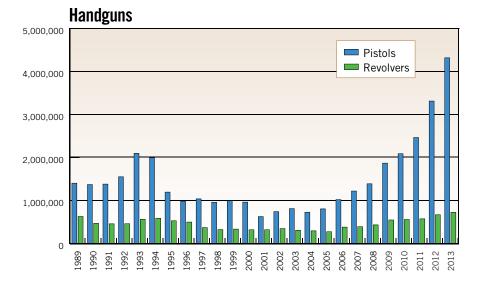
- Pistol parts and components manufacturers were not included in this report: Burbak Machine Corp. 107,569; Hi Tech Plastics 2,480; Engineering & Cycle Co., Inc. 12,148; and EPP Team Inc. 4,979.
- Pifle parts manufacturers were not included in this report: Engineering & Cycle Co. Inc 1,338; R&D Manufacturing Industries Inc. 1,887; Microtool, Inc. 3,611; and John W. Heaton 14,666. The parts are included in the final, finished product and are reported by the final firearm manufacturer.

ANNUAL AVERAGES

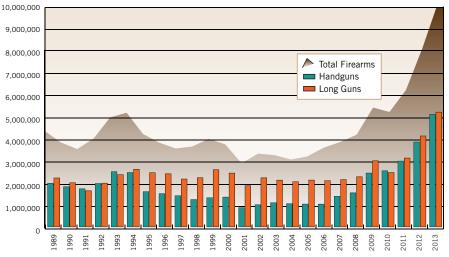
Years	Pistols	Revolvers	Total Handguns	Rifles	Shotguns	Total Long Guns	Production Total
25 YR (1989 to 2013)	1,492,614	454,537	1,947,150	1,632,486	887,269	2,519,754	4,466,904
15 YR (1999 to 2013)	1,556,281	431,783	1,988,065	1,899,273	806,324	2,705,597	4,693,661
10 YR (2004 to 2013)	1,920,586	484,543	2,405,129	2,110,620	794,220	2,904,840	5,309,970
5 YR (2009 to 2013)	2,809,146	614,394	3,423,540	2,699,225	902,112	3,601,337	7,024,877

Source: Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) Annual Firearms Manufacturing and Export Report (AFMER). Data is in total units and represents the number of firearms "manufactured and disposed of in commerce during the calendar year." Totals include firearms sold for export and law enforcement, but not military sales.

25 YEARS Firearms Production in the U.S. (1989-2013)



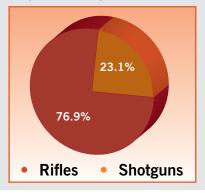
Total Production



Long Guns 4,000,000 💻 Rifles 3,500,000 Shotguns 3,000,000 2,500,000 2,000,000 1,500,000 1,000,000 500,000 0 2013 1989 1999 2010 2012 990 1991 1992 1993 1994 1995 1996 1997 1998 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2011

2013 Production At A Glance							
• Pistols • Revolvers							
Pisto	ols by Ca	aliber					
To .22	554,431	12.9%					
To. 25	18,578	0.4%					
To .32	6,591	0.2%					
To .380	852,663	19.8%					
To 9mm	1,653,900	38.3%					
To .50	1,228,387	28.5%					
	4,314,550	100.0%					
Revol	ver by C	aliber					
To .22	226,749	31.3%					
To .32	1,914	0.3%					
To. 357 M	149,730	20.6%					
To .38 Sp	238,384 32.9%						
To .44 M	46,466	6.4%					
To. 50	62,039	8.6%					
	725,282	100.0%					

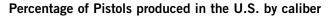
NOTE: Caliber designations as reported in ATF reports are preceded by the word "to." This represents a range of calibers in a category. For example, the pistol "To .50" category includes .40- and .45-caliber models among others that are larger than 9mm.



Source: AFMER

20 YEARS U.S. Handgun Production by Caliber (1994-2013)

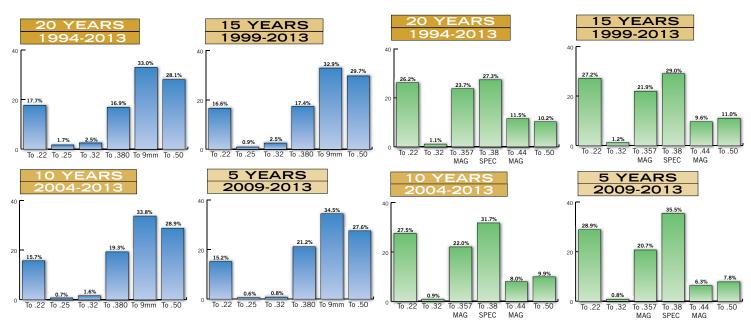
Pistols				Sol -	R		ALL ST
Year	To .22	To .25	To .32	To .380	To 9mm	To .50	Total
1994	449,237	110,732	25,972	313,915	750,698	344,957	1,995,511
1995	260,059	51,025	19,220	182,802	398,467	283,693	1,195,266
1996	204,819	41,156	20,709	165,789	319,696	233,364	985,533
1997	250,983	43,103	43,623	154,046	303,212	241,110	1,036,077
1998	184,836	50,936	62,338	98,266	284,374	279,615	960,365
1999	229,852	24,393	52,632	81,881	270,298	336,390	995,446
2000	184,577	23,198	60,527	108,523	277,176	308,900	962,901
2001	123,374	5,697	57,823	41,634	213,378	181,164	623,070
2002	144,722	10,009	53,999	59,476	205,197	268,111	741,514
2003	189,785	10,987	43,471	79,788	219,668	267,961	811,660
2004	211,473	10,140	32,435	68,291	182,493	223,679	728,511
2005	139,178	10,455	29,024	107,386	299,681	217,701	803,425
2006	141,651	9,625	39,197	126,939	352,383	351,465	1,021,260
2007	180,419	11,361	43,914	138,484	391,312	454,174	1,219,664
2008	195,633	14,586	40,485	278,945	421,746	435,876	1,387,271
2009	320,697	15,053	47,396	390,897	586,364	507,861	1,868,268
2010	320,237	21,722	39,792	615,630	591,876	498,320	2,087,577
2011	357,884	19,182	13,890	537,063	838,957	697,279	2,464,255
2012	586,625	9,853	11,248	582,645	1,175,564	945,146	3,311,081
2013	554,431	18,578	6,591	852,663	1,653,900	1,228,387	4,314,550
TOTAL	5,230,472	511,791	744,286	4,985,063	9,736,440	8,305,153	29,513,205





Year	To .22	To .32	To .357 MAG	To .38 SPEC	To .44 MAG	To .50	Total
1994	133,990	9,160	170,856	146,630	89,713	36,101	586,450
1995	99,578	4,381	210,379	92,913	90,144	30,269	527,664
1996	127,119	3,083	134,910	115,432	80,456	37,944	498,944
1997	109,296	3,876	70,792	85,935	61,324	39,205	370,428
1998	68,108	2,602	73,905	77,289	64,236	38,250	324,390
1999	80,140	5,844	68,174	86,356	55,957	39,313	335,784
2000	79,472	1,598	81,017	59,339	46,931	50,603	318,960
2001	77,433	5,003	50,120	85,628	39,515	62,444	320,143
2002	86,806	17,599	95,570	51,472	46,080	49,543	347,070
2003	108,518	3,928	59,591	57,078	46,533	33,716	309,364
2004	88,570	3,446	62,640	54,842	35,097	49,504	294,099
2005	63,333	2,297	68,476	68,785	25,802	45,512	274,205
2006	84,452	2,242	99,562	85,321	54,308	56,184	382,069
2007	91,963	3,509	93,320	104,498	46,719	51,325	391,334
2008	115,511	6,681	105,944	133,621	31,135	38,861	431,753
2009	141,840	7,590	107,834	232,339	29,967	27,977	547,547
2010	131,543	8,605	126,525	210,762	45,361	36,131	558,927
2011	153,749	5,182	125,237	206,191	35,791	46,707	572,857
2012	234,164	1,717	126,594	203,005	36,116	65,761	667,357
2013	226,749	1,914	149,730	238,384	46,466	62,039	725,282
TOTAL	2,302,334	100,257	2,081,176	2,395,820	1,007,651	897,389	8,784,627

Percentage of Revolvers produced in the U.S. by caliber

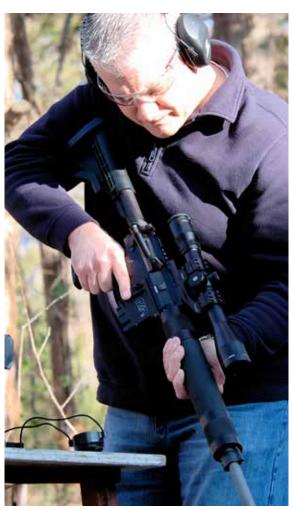


SOURCE: AFMER

NOTE: Caliber designations as reported in ATF reports are preceded by the word "to." This represents a range of calibers in a category. For example, the pistol "To .50" category includes .40- and .45- caliber models among others that are larger than 9mm.

23 YEARS Modern Sporting Rifle Production plus Imports less Exports (estimated)

Year	US Production less exports of MSR/AR	US Imports less exports of MSR/AK	TOTAL
1990	43,000	24,000	67,000
1991	45,800	62,000	107,800
1992	33,100	68,000	101,100
1993	61,700	236,000	297,700
1994	102,600	172,000	274,600
1995	54,500	76,000	130,500
1996	27,000	41,000	68,000
1997	44,300	80,000	124,300
1998	69,800	74,000	143,800
1999	113,000	123,000	236,000
2000	86,300	135,000	221,300
2001	60,500	122,000	182,500
2002	97,200	149,000	246,200
2003	117,900	273,000	390,900
2004	107,300	215,000	322,300
2005	141,400	166,000	307,400
2006	195,900	203,000	398,900
2007	269,470	228,000	497,470
2008	443,960	183,000	626,960
2009	692,440	321,000	1,013,440
2010	420,630	135,000	555,630
2011	632,400	80,000	712,400
2012	1,267,800	249,000	1,516,800
Total	5,128,000	3,415,000	8,543,000





Sources: ATF AFMER, USITC & NSSF Industry contacts

U.S. Production by Manufacturer (2013)

LICENSE NAME HANDGUNS	PISTOLS	REVOLVERS	TOTAL
STURM, RUGER & COMPANY, INC	1,114,537	295,661	1,410,198
SMITH & WESSON CORP	931,416	225,777	1,157,193
SIG SAUER, INC	551.001	0	551.001
GLOCK, INC	204,481	0	204,481
BERETTA U S A CORPORATION	163,233	0	163,233
KIMBER MFG, INC	146,832	0	146,832
TAURUS INTERNATIONAL MANUFACTURING, INC	116,045	0	116,045
FN MANUFACTURING, LLC	110,043	0	110,043
BEEMILLER, INC	93,200	0	93,200
HERITAGE MANUFACTURING, INC	0	90,016	90,016
COBRA ENTERPRISES OF UTAH, INC	82,041	281	82,322
KEL TEC CNC INDUSTRIES, INC	81.714	0	81,714
SAEILO, INC	81,598	0	81,598
COLT'S MANUFACTURING CO, LLC	69,808	978	70,786
REMINGTON ARMS COMPANY, LLC	64,260	0	64,260
JIMENEZ ARMS, INC	60,416	0	60,416
ARMS TECHNOLOGY, INC	58,387	0	58,387
NORTH AMERICAN ARMS, INC	687	56,426	57,113
PARA USA, LLC	57,003	0	57,003
SPRINGFIELD, INC	50,857	0	50,857
CHARCO 2000, INC	0	50,733	50,733
SCCY INDUSTRIES, LLC	43,300	0	43,300
HASKELL MANUFACTURING, INC	30,200	0	30,200
PHOENIX ARMS	29,000	0	29,000
IBERIA FIREARMS, INC	26,700	0	26,700
DIAMONDBACK FIREARMS, LLC	28,700	0	28,700
HECKLER & KOCH, INC	17,114	0	
AZIMUTH TECHNOLOGY, LLC	17,114	0	17,114
BOND ARMS, INC	15,092	0	16,417 15,092
MAGNUM RESEARCH, INC	10,073	1,222	11,295
STI INTERNATIONAL, INC	6,155	0	6,155
CHIAPPA FIREARMS LTD	1,761	3,156	4,917
	,	0	
WILSONS GUN SHOP, INC	4,012	4	4,012
CZ-USA, INC LEINAD, INC	3,724 3,700	4	3,728
	,		3,700
FMK FIREARMS, INCORPORATED	3,571	0	3,571
ED BROWN PRODUCTS, INC VLH. INC	3,245	0	3,245
	3,211	0	3,211
LES BAER CUSTOM, INC	3,144		3,144
NIGHTHAWK CUSTOM, LLC	2,646	0	2,646
CENTURY ARMS, INC	2,587	0	2,587
IVER JOHNSON ARMS, INC	2,345	0	2,345
ROCK RIVER ARMS, INC	2,129	0	2,129
KEYSTONE SPORTING ARMS, LLC	1,917	0	1,917
KRISS USA, INC	1,895	0	1,895
EXTAR, LLC	1,800	0	1,800
CASPIAN ARMS LTD	1,741	0	1,741
CDQ SOLUTIONS, LLC	1,585	0	1,585
COONAN, INC	1,286	0	1,286
LW SEECAMP CO, INC	1,286	0	1,286
BOBERG ARMS CORPORATION	879	0	879
V CUSTOM, INC	863	0	863
OLYMPIC ARMS, INC	639	0	639
TOTAL HANDGUN PRODUCTION REPORTED (2013)	4,314,550	725,282	5,039,832

LICENSE NAME LONG GUNS	RIFLES	SHOTGUNS	TOTAL
REMINGTON ARMS COMPANY, LLC	879,761	457,359	1.337.120
STURM, RUGER & COMPANY, INC	768,284	2.298	770,582
MAVERICK ARMS, INC	50,689	524,104	574,793
SAVAGE ARMS, INC	370,509	154,102	524,611
SMITH & WESSON CORP	348,731	39	348,770
HENRY RAC HOLDING CORP	304,491	0	304,491
COLT'S MANUFACTURING CO, LLC	147,183	0	147,183
SIG SAUER, INC	121,242	0	121,242
KEYSTONE SPORTING ARMS, LLC	89,410	1	89,411
WINDHAM WEAPONRY, INC STAG ARMS, LLC	84,193 62,590	0	84,193 62,590
ROCK RIVER ARMS, INC	58,400	0	58,400
BEEMILLER, INC	43,200	0	43,200
KEL-TEC CNC INDUSTRIES, INC	17,067	18,775	35,842
O F MOSSBERG & SONS, INC	34,545	0	34,545
DIAMONDBACK FIREARMS, LLC	32,639	Ő	32,639
DANIEL DEFENSE, INC	30,168	0	30,168
CENTURY ARMS, INC	27,136	0	27,136
FMK FIREARMS, INCORPORATED	25,796	0	25,796
GOOD TIME OUTDOORS, INC	23,785	0	23,785
BROWNING	20,223	2,279	22,502
COATING TECHNOLOGY, INC	9,313	11,577	20,890
AERO PRECISION, INC	20,000	0	20,000
SPRINGFIELD, INC	18,607	0	18,607
LWRC INTERNATIONAL, LLC	17,999	0	17,999
ARMALITE, INC	15,761	0	15,761
DEL-TON, INC	15,451	0	15,451
BERETTA USA CORPORATION	0	15,450	15,450
IWI US, INC OLYMPIC ARMS, INC	14,599 12,999	0	14,599 12,999
		0	
CMMG, INC JUST RIGHT CARBINES, LLC	12,679 12,610	0	12,679
MEGA ARMS, LLC	12,510	0	12,610 12,564
CHAZKAT, LLC	10,870	0	10,870
PALMETTO STATE ARMORY, LLC	10,848	0	10,848
YAMPA PRECISION MFG, INC	10,366	Ő	10,366
ADAMS ARMS, LLC	9,807	Ő	9,807
TEMPCO MANUFACTURING CO, INC	9,795	0	9,795
PATRIOT ORDNANCE FACTORY, INC	9,475	0	9,475
SAEILO, INC	9,097	0	9,097
FN MANUFACTURING, LLC	8,918	0	8,918
LEWIS MACHINE & TOOL CO	8,727	0	8,727
LRB OF LONG ISLAND, INC	8,408	0	8,408
INVESTMENT DEVELOPMENT CORPORATION	0	8,378	8,378
AREOTEK INDUSTRIES, LLC	8,195	0	8,195
KNIGHTS MANUFACTURING CO	7,548	0	7,548
BLACK RAIN ORDNANCE, INC	7,371	0	7,371
ADCOR DEFENSE, INC ADVANCED ARMAMENT CORP. LLC	6,561 6,477	0	6,561 6,477
MAGNUM RESEARCH, INC	5,736	0	5,736
HECKLER & KOCH, INC	5,569	0	5,569
BARRETT FIREARMS MFG, INC	5,437	0	5.437
WM C ANDERSON, INC	5,324	0	5,324
KRISS USA. INC	4.698	0	4.698
AMERICAN TACTICAL IMPORTS, INC	4,581	Ö	4,581
KIMBER MFG, INC	3,898	Ő	3,898
COOPER FIREARMS OF MONTANA, INC	3,829	0	3,829
I O, INC	3,656	0	3,656
TDJ, INC	3,440	0	3,440
DS ARMS, INC	3,402	0	3,402
DOUBLE STAR CORP	3,387	0	3,387
TNW FIREARMS, INC	3,225	0	3,225
STEYR ARMS, INC.	3,180	0	3,180
XLI CORPORATION	3,178	0	3,178
WEATHERBY, INC	3,164	0	3,164
TOTAL LONG GUN PRODUCTION REPORTED (2013)	3,158,112	949,010	4,107,122

Manufacturers producing less than 500 handguns in 2013 are not displayed above.

Top 25 U.S. Firearm Manufacturers (2013)

Manufacturers producing less than 3,000 long guns are not displayed above. *Estimate

LICENSE NAME	PISTOLS	REVOLVERS	TOTAL HANDGUNS	RIFLES	SHOTGUNS	TOTAL LONG GUNS	TOTAL FIREARMS MANUFACTURED	% OF TOTAL 2013 U.S. HANDGUN & LONG GUN PRODUCTION
STURM, RUGER & COMPANY, INC	1,114,537	295,661	1,410,198	768,284	2,298	770,582	2,180,780	21.3%
SMITH & WESSON CORP	931,416	225,777	1,157,193	348,731	39	348,770	1,505,963	14.7%
REMINGTON ARMS COMPANY, LLC	64,260	0	64,260	879,761	457,359	1,337,120	1,401,380	13.7%
SIG SAUER, INC	551,001	0	551,001	121,242	0	121,242	672,243	6.6%
MAVERICK ARMS, INC	0	0	0	50,689	524,104	574,793	574,793	5.6%
SAVAGE ARMS, INC	0	0	0	370,509	154,102	524,611	524,611	5.1%
HENRY RAC HOLDING CORP	0	0	0	304,491	0	304,491	304,491	3.0%
COLT'S MANUFACTURING CO, LLC	69,808	978	70,786	147,183	0	147,183	217,969	2.1%
GLOCK, INC	204,481	0	204,481	0	0	Ó	204,481	2.0%
BERETTA USA CORPORATION	163,233	0	163,233	0	15,450	15,450	178,683	1.7%
KIMBER MFG, INC	146,832	0	146,832	3,898	0	3,898	150,730	1.5%
BEEMILLER, INC	93,200	0	93,200	43,200	0	43,200	136,400	1.3%
FN MANUFACTURING, LLC	110,279	0	110,279	8,918	0	8,918	119,197	1.2%
KEL-TEC CNC INDUSTRIES, INC	81,714	0	81,714	17,067	18,775	35,842	117,556	1.1%
TAURUS INTERNATIONAL MANUFACTURING, INC	116,045	0	116,045	0	0	0	116,045	1.1%
KEYSTONE SPORTING ARMS, LLC	1,917	0	1,917	89,410	1	89,411	91,328	0.9%
SAEILO, INC	81,598	0	81,598	9,097	0	9,097	90,695	0.9%
HERITAGE MANUFACTURING, INC	0	90,016	90,016	0	0	0	90,016	0.9%
WINDHAM WEAPONRY, INC	0	0	0	84,193	0	84,193	84,193	0.8%
COBRA ENTERPRISES OF UTAH, INC	82,041	281	82,322	0	0	0	82,322	0.8%
SPRINGFIELD, INC	50,857	0	50,857	18,607*	0	18,607*	69,464	0.7%
STAG ARMS, LLC	0	0	0	62,590	0	62,590	62,590	0.6%
ROCK RIVER ARMS, INC	2,129	0	2,129	58,400	0	58,400	60,529	0.6%
JIMENEZ ARMS, INC	60,416	0	60,416	0	0	0	60,416	0.6%
ARMS TECHNOLOGY, INC	58,387	0	58,387	798	0	798	59,185	0.6%
Total Produced in 2013 by Top 25 Manufacturers	3,984,151	612,713	4,596,864	3,387,068	1,172,128	4,559,196	9,156,060	89.4%
Percentage of Total 2013 Production by Category	92.3%	84.5%	91.2%	84.7%	97.4%	87.7%	89.4%	

2013 U.S. Manufacturers Direct Exports at a Glance

PISTOL MANUFACTURER	EXPORTS
GLOCK, INC	94,564
SIG SAUER, INC	13,207
SIG SAUER, INC	13,032
SMITH & WESSON CORP	12,869
STURM, RUGER & COMPANY, INC	9,043
KRISS USA, INC	5,335
BERETTA USA CORPORATION	4,281
KIMBER MFG, INC	4,280
COLT'S MANUFACTURING CO, LLC	2,609
STI INTERNATIONAL, INC	2,507
REMINGTON ARMS COMPANY, LLC	1,502
TAURUS INTERNATIONAL MANUFACTURING, INC	1,110
PARA USA, LLC	536
MAGNUM RESEARCH, INC	483
LES BAER CUSTOM, INC	361
FMK FIREARMS, INCORPORATED	233
KEL-TEC CNC INDUSTRIES, INC	210
NIGHTHAWK CUSTOM, LLC	189
DJ GETZ FIREARMS CO	186
STRAYER VOIGT, INC	177
FN MANUFACTURING, LLC	165
ED BROWN PRODUCTS, INC	154
BOBERG ARMS CORPORATION	124
SAEILO, INC	91
PRECISION SMALL ARMS, INC	88
MEGGITT TRAINING SYSTEMS, INC	75
WALTHER ARMS, INC	61
TDJ, INC	38
NORTH AMERICAN ARMS, INC	35
L&M PRECISION GUNWORKS, LLC	29
WILSONS GUN SHOP, INC	22
OHIO ORDNANCE WORKS, INC	13
VOLKMANN PRECISION, LLC	12
AMCHAR WHOLESALE, INC	10
PISTOL TOTAL	167,653

REVOLVER MANUFACTURER	EXPORTS
SMITH & WESSON CORP	14,668
STURM, RUGER & COMPANY, INC	5,789
NORTH AMERICAN ARMS, INC	589
MAGNUM RESEARCH, INC	83
HS PRECISION, INC	56
MEGGITT TRAINING SYSTEMS, INC	46
REVOLVER TOTAL	21,236

SHOTGUN MANUFACTURER	EXPORTS
MAVERICK ARMS, INC	39,958
SAVAGE ARMS, INC	6,123
BERETTA U S A CORPORATION	2,381
KEL TEC CNC INDUSTRIES, INC	1,154
TASER INTERNATIONAL, INC	50
ITHACA GUN COMPANY	33
IVER JOHNSON ARMS, INC	20
WILSONS GUN SHOP, INC	18
NIGHTHAWK CUSTOM, LLC	12
SHOTGUN TOTAL	49,766

NOTE: A manufacturer that reported less than ten (10) units exported does not appear in the corresponding table on this page. The number of units is included in the total.

RIFLE MANUFACTURER	EXPORTS
SAVAGE ARMS, INC	55,071
STURM, RUGER & COMPANY, INC	45,638
MAVERICK ARMS, INC	5,753
SMITH & WESSON CORP	5,392
HENRY RAC HOLDING CORP	2,769
COLT DEFENSE, LLC	2,237
SIG SAUER, INC	1,707
KEL-TEC CNC INDUSTRIES, INC	1,520
JUST RIGHT CARBINES, LLC	1,520
ZDF IMPORT/EXPORT, LLC	1,045
SIG SAUER, INC	886
BARRETT FIREARMS MFG, INC	792
DANIEL DEFENSE , INC	689
WEATHERBY, INC	616
WINDHAM WEAPONRY, INC	496
STAG ARMS, LLC	451
SAEILO, INC	422
KIMBER MFG, INC	410
DESERT TECH, LLC	407
TNW FIREARMS, INC	320
DS ARMS, INC	299
COLT'S MANUFACTURING CO, LLC	298
MAGNUM RESEARCH, INC	286
PRIMARY WEAPONS SYSTEMS, INC	285
KRISS USA, INC	282
TDJ, INC	216
LEWIS MACHINE & TOOL CO	214
THUREON DEFENSE, LLC	134
STI INTERNATIONAL, INC	128
GOOD TIME OUTDOORS, INC	125
MONTANA RIFLE COMPANY	102
ARAK GUNS, LLC	102
DJ GETZ FIREARMS CO	90
HIGH STANDARD FIREARMS LTD	88
ARMALITE, INC	79
MCMILLAN FIREARMS MANUFACTURING, LLC	71
MACK'S SPORT SHOP LLLP	60
KELBLY'S RIFLE RANGE, INC	59
TROY INDUSTRIES, INC	52
ROCK RIVER ARMS, INC	51
WAR SPORT INDUSTRIES, LLC	48
GUNWERKS, LLC	44
KNIGHTS MANUFACTURING CO	40
7.62MM FIREARMS, LLC	34
WOLFE, JONATHAN YORK	33
OHIO ORDNANCE WORKS, INC	32
AMERICAN PRECISION ARMS, LLC	27
KASBARIAN, HRANT	24
POWDER RIVER RIFLE CO, INC	23
SIMPSON, JOHN FREDERICK	20
MITCHELL, RONALD	18
BIXLER, CHRISTOPHER A	18
MERIDIAN ORDNANCE, LLC	16
EAST TEXAS ARMORY, LLC	15
MILLER, JEFFERY ALLEN	10
ONE OF A KIND LLC	10
ENTERBRAS ENTERPRISE, INC	10
RIFLE TOTAL	131,718

INDUSTRY STATISTICS (CURRENT SNAPSHOT)

The data listed on this page are sourced from the most current Annual Survey of Manufacturers (ASM). The report is produced by the U.S. Department of Commerce. NAICS (North American Industry classification System) code 332992 represents "Small-Arms Ammunition," and NAICS code 332 represents "Fabricated-Metal-Product Manufacturing."



DEFINITION OF TERMS

Employees: includes all full-time and part-time employees on the payroll of operating manufacturing establishments.

Production workers: includes workers (up through the line-supervisor level) actively engaged in the manufacturing process.

Payroll: includes the gross earnings of all employees paid in a calendar year.

Value added: measure of manufacturing activity derived by subtracting the cost of materials and supplies from the value of shipments (finished products and services rendered).

Capital expenditures:

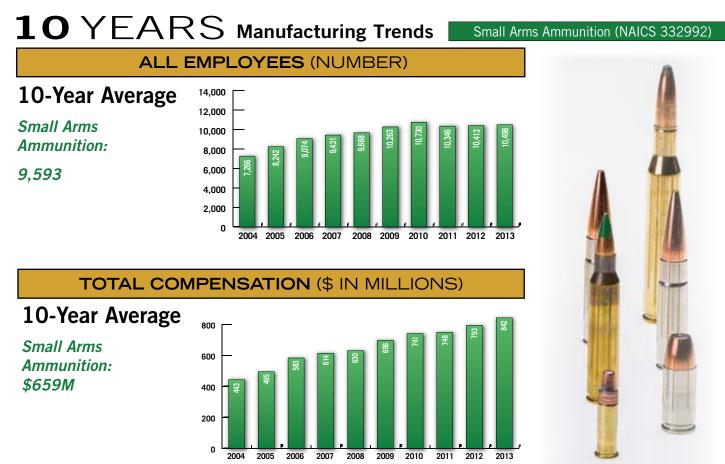
represents the total new and used expenditures reported by establishments in operation and any known plants under construction.

Inventories: includes products and materials held outside of the establishment, such as in warehouses (private or public).

* D: Withheld to avoid disclosing data for individual companies Source: 2013 Annual Survey of Manufacturers (ASM)

INDUSTRY STATISTIC	(332) Fabricated Metal Product Manufacturing (2011)	(332992) Ammunition Manufacturing (2011)	Ammunition Percent of Total Fabricated Meta I Product Manu- facturing
Employment & Labor Costs			
Total number of employees	1,379,859	10,496	0.8%
Number of production workers	1,016,981	8,660	0.9%
Production workers hours worked	2,087,259,000	17,917,000	0.9%
Production workers wages	\$43,141,663,000	\$470,217,000	1.1%
Total annual payroll	\$69,157,348,000	\$645,059,000	0.9%
Total fringe benefits	\$18,454,972,000	\$196,925,000	1.1%
Total annual compensation	\$87,612,320,000	\$841,984,000	1.0%
Purchased Fuels and Electric Energy Use	d for Heat and Pov	ver	
Electric energy purchased (kWh)	42,666,241,000	377,502,000	0.9%
Cost of electric energy	\$3,376,824,000	D*	not available
Cost of purchased fuels	\$1,242,512,000	\$12,026,000	1.0%
Total cost of fuels and electric energy	\$4,619,336,000	D*	not available
Capital Expenditures for Plant and Equip	ment		
Buildings and other structures	\$3,609,158,000	\$6,461,000	0.2%
Rental or lease payments for machinery and equipment	\$1,109,789,000	\$8,462,000	0.8%
Expensed computer hardware and other equipment and purchases of software	\$571,799,000	\$1,314,000	0.2%
All other operating expenses	\$30,775,901,000	\$569,555,000	1.9%
Total capital expenditures for plant and equipment	\$36,066,647,000	\$585,792,000	1.6%
Value of Manufacturers' Inventories by St	tage of Fabrication		
В	eginning of Year		
Finished products	\$15,426,371,000	\$190,096,000	1.2%
Work-in-process	\$11,901,710,000	\$112,799,000	0.9%
Materials, supplies, fuels, etc.	\$17,048,303,000	\$175,227,000	1.0%
Total	\$44,376,384,000	\$478,122,000	1.1%
	End of Year		
Finished products	\$15,954,790,000	\$201,848,000	1.3%
Work-in-process	\$12,345,455,000	\$123,381,000	0.9%
Materials, supplies, fuels, etc.	\$17,319,008,000	\$214,292,000	1.0%
Total	\$45,619,253,000	\$539,521,000	1.2%
Man	ufacturing Activity		
Total value of shipments	\$345,089,256,000	\$4,207,336,000	1.2%
Total cost of materials	\$162,288,478,000	\$1,651,458,000	1.0%
Value added	\$183,908,899,000	\$2,578,492,000	1.4%

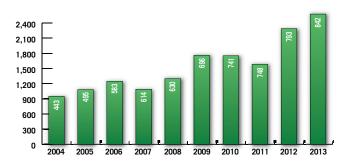
Note: The last implimented update to NAICS codes went into effect in 2012. NAICS code 332994 was revised at that time. It was formerly reported in this table as Small Arms/Firearms Manufacturing, but now includes a list of military applications/products in addition to those manufactured for sporting use. As such, code 332994 has been excluded from this report.



VALUE ADDED (\$ IN MILLIONS)

10-Year Average

Small Arms Ammunition: \$1,562M

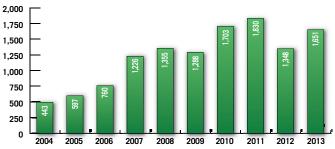


COST OF MATERIALS (\$ IN MILLIONS)

10-Year Average²

Small Arms Ammunition:

\$1,225M



Source: U.S. Census Bureau, Annual Survey of Manufacturers (ASM) and Economic Census reports

HISTORICAL Firearm Imports By Country (in actual units of quantity)

2005

1,613

2006

2,097

118,200

2007

2,437

Pistols: HTS 9302000040 [PISTOLS, SEMIAUTOMATIC EXCEPT OF HEADING 9303 OR 93041 -- or -- HTS 9302000090 [PISTOLS, EXCEPT OF HEADING 9303 OR 9304, NESOI (not elsewhere specified or included)]

Revolvers: HTS 9302000020 [REVOLVERS, EXCEPT OF HEADING 9303 OR 9304]

2009

303

2010

0

0

200

228.876

0

236.270

100

98,480

2008

967

203.803

COUNTRY	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	COUNTRY	
Argentina	41,720	54,100	65,195	65,915	63,872	74,245	71,838	75,984	82,635	43,710	Argentina	
Austria	286,537	327,845	347,188	371,910	602,146	431,118	515,396	821,522	932,117	791,469	Brazil	
Belgium	11,761	13,158	14,490	12,179	33,195	18,874	9,769	10,754	14,493	18,221	Czech Republic	
Brazil	90,567	135,371	240,670	181,808	285,075	206,207	161,597	215,470	215,895	113,976	France	
Bulgaria	38	300	0	1,347	2,881	3,325	1,450	4,586	8,397	270	Germany	
Canada	13,646	12,135	13,178	16,313	10,544	6	2	13	36	134	Italy	
Costa Rica	0	0	0	0	0	0	19,500	38	0	0	Philippines	
Croatia	91,631	142,050	204,379	191,876	272,204	239,021	211,001	389,014	451,657	441,337	Poland	
Czech Republic	14,479	45,665	21,610	19,583	49,408	19,531	18,588	38,540	37,467	47,104	Russia	
Finland	144	148	0	0	0	0	0	1	0	52	Serbia	
Germany	123,026	168,580	169,731	250,422	282,075	221,446	254,574	402,566	502,117	282,006	Slovak Republic	
Hungary	6,275	14,505	12,962	2,446	7,950	349	311	695	777	898	Switzerlan	
Israel	11,739	14,403	16,786	18,388	10,238	2,645	9,995	20,017	23,979	13,189	Turkey	
Italy	26,078	44,848	40,920	54,280	81,811	86,867	63,540	154,999	171,221	106,462	Ukraine United Aral Emirates	
Japan	0	0	0	0	0	0	0	0	0	40		
Korea	0	0	0	0	20	29	0	1,021	3,879	62	United Kingdom	
Montenegro	0	0	0	0	0	0	0	1,000	48	0	TOTAL	
Norway	12	0	14	14	14	21	14	0	1	10	Countries	
Pakistan	0	0	0	0	0	0	0	0	161	250	Note: For	
Philippines	1,948	10,656	17,459	18,277	27,294	38,572	48,908	73,430	131,898	62,823	Source: D	
Poland	1,095	2,632	709	1,645	10,234	3,922	20,895	9,806	8,406	12,094		
Romania	0	0	2,491	8,935	10,571	16,945	13,775	3,579	3,655	5,800	-	
Russia	3	3	3	0	0	1,050	5,400	61	772	0	100	
Serbia	0	0	0	0	3,038	12,455	720	29,204	48,786	10,180		
Slovak Republic	0	0	157	0	0	0	0	801	1,204	417		
Spain	4,797	384	42	176	410	989	322	376	262	10,485		
Switzerland	546	420	3,012	821	2,207	735	979	3,110	5,508	2,222		
Turkey	0	5,120	7,614	7,345	17,984	15,825	15,408	25,798	92,321	17,435		
United Arab Emirates	0	0	0	0	0	0	0	3,814	909	47		
United Kingdom	0	1	123	13	0	1	4,355	1	63	149	M	

98,214 157,247 368,128 319,804 198,249 4,229 290 0 6.287 83 38 0 9 0 7 Republic 98 0 0 0 0 0 0 2 350 163 Germany 11,068 3,680 4,168 4,025 9,367 8,431 9,423 11,416 11,747 11,905 27,847 23.884 24.387 27,495 24,926 16.929 18.536 40.238 53,152 48.525 4.640 5,339 6.666 8,198 Philippines 7.676 1.680 2.960 6,127 6,054 8,915 0 0 259 0 0 0 0 0 0 79 2,280 5,795 12,042 11,500 11,486 0 0 0 0 0 0 0 0 0 0 0 0 0 1,872 0 0 0 0 400 1,503 260 640 480 0 0 71 7 18 ٥ 23 12 268 ٥ Switzerland 3 0 0 0 0 0 0 0 0 0 0 20 0 62 480 1.000 5.500 4.000 0 0 0 0 United Arab Emirates 0 0 0 0 0 0 285 4.995 0 0 United Kingdom 6 0 0 489 360 0 1 83 1 0 258,878 304,397 316,582 172,349 208,810 237,470 410,156 353,457 167,553 158,169

Countries with limited activity over this period are not shown. Note: For 2005, Czech Republic units were revised per posted correction, Census Bureau. Source: Data from the U.S. Department of Commerce and the U.S. International Trade Commission.



More detail on import and export data is available through the U.S. International Trade Commission (USITC) website. To obtain the highest level of product definition, use the HTS (Harmonized Tariff Schedule) 10-digit codes whenever possible.

Refer to the most current Harmonized Tariff Schedule for IMPORT codes and Schedule B for EXPORT codes. Note that import and export codes do not always match.

As of July 3, 2014, import and export data for years 2010-2013 have been updated in USITC Data Web with the latest official revisions from the Census Bureau. The first official revisions for 2014 data won't be available until June 2015.

For posted corrections pertaining to years prior to 2010. go to:

census.gov/foreign-trade/statistics/ corrections/index.html

Countries with limited activity over this period are not shown.

Note: Units posted for both the Czech Republic and Hungary in 2005, as well as for Turkey in 2007, were revised per posted corrections, Census Bureau.

Source: Data from the U.S. Department of Commerce and the U.S. International Trade Commission.



HISTORICAL Firearm Imports By Country (in actual units of quantity)

Shotguns: HTS 930320 [SPORTING, HUNTING OR TARGET-SHOOTING SHOTGUNS, INCLUDING COMBINATION SHOTGUN-RIFLES, EXCEPT MUZZLELOADING FIREARMS] **Rifles** HTS 930330 [SPORTING, HUNTING OR TARGET-SHOOTING RIFLES, EXCEPT MUZZLELOADING FIREARMS AND COMBINATION SHOTGUN-RIFLES] (Adjusted to EXCLUDE HTS codes 9303304010 & 9303308005 - Telescopic Sights Imported with Rifles)

COUNTRY	2005	2006	2007 2008 2009 2010		2011	2012	2013	2014			
Austria	5	15	18	9	245	497	1,507	783	618	34	
Belgium	730	2,119	467	787	25	48	114	157	9	1,375	
Brazil	112,534	129,641	151,419	119,556	172,369	169,136	105,676	125,891	119,090	58,729	
China	31,039	52,969	52,878	41,170	53,336	61,956	90,952	154,446	234,486	112,095	
Czech Republic	723	0	2,000	172	1,738	34	6	0	142	50	
Finland	3	0	0	0	0	0	6	0	0	22	
France	30	15	29	48	20	20	10 6,		10	9	
Germany	2,414	2,487	1,672	3,265	1,254	2,364 2,204		3,467	1,370	1,205	
Italy	191,542	187,997	210,813	182,396	140,500	139,182	137,767	170,460	212,557	206,540	
Japan	2,973	3,253	5,548	2,526	1,148	344	1,834	2,875	1,525	652	
Philippines	0	0	0	100	560	1,139	950	5,500	9,800	6,496	
Portugal	3	1,074	7,607	1,858	5	704	2,115	2,384	6,415	3,465	
Russia	88,140	58,516	91,631	65,090	60,937	3,708	50,837	47,360	34,904	21,830	
Spain	4,910	7,284	3,565	2,519	4,628	1,722	1,328	1,692	1,620	1,746	
Sweden	164	46	50	718	133	42	0	238	143	228	
Switzerland	0	0	0	73	0	0	10	0	0	1	
Turkey	105,201	152,295	182,661	107,350	113,618	122,721	122,682	174,212	306,312 233,367		
United Kingdom	5,368	10,149	13,511	8,155	8,046	6,099	8,251	8,836	8,922	495	
TOTALS	546,261	607,894	725,635	535,960	558,679	509,792	530,564	704,828	937,952	648,339	

Countries with limited activity over this 10-year period are not shown. Note: Units posted for Turkey in 2005 and 2007 were revised per posted corrections, Census Bureau

Source: Data from the U.S. Department of Commerce and the U.S. International Trade Commission.



Muzzleloaders:	HTS=930310 [MUZZLELOADING FIREARMS]
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COUNTRY	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Austria	1,575	2,296	1,765	1,623	2,593	2,756	6,192	6,319	8,966	2,988
Belgium	11,116	23,678	30,425	17,696	21,819	16,017	16,317	20,634	29,920	34,067
Brazil	77,670	68,431	164,308	118,007	94,858	46,243	156,847	316,577	404,234	56,411
Bulgaria	1,340	2,406	6,017	5,791	5,142	0	0	10,790	31,087	12,900
Canada	139,334	167,142	191,277	112,676	161,552	134,519	156,860	267,993	292,404	258,803
China	0	0	0	0	0	0	0	0	0	4,049
Czech Republic	18,574	21,019	25,952	20,453	16,774	15,072	20,236	23,264	25,507	25,404
Finland	38,596	31,081	18,133	31,800	32,623	26,464	23,417	33,536	43,858	40,162
France	15	75	120	81	60	42	64	64	47	50
Germany	9,141	15,254	11,743	32,406	101,939	32,476	42,116	96,013	134,305	39,889
Israel	0	0	0	0	0	0	0	1	18,502	27,771
Italy	23,716	17,643	20,360	15,026	21,829	16,393	12,222	20,705	53,115	27,885
Japan	65,832	48,440	52,148	75,282	83,329	49,946	59,471	71,538	76,399	89,657
Mexico	0	0	0	1,000	1,770	0	0	0	200	800
Norway	15	0	0	0	10	0	25	22	0	36
Philippines	2,000	1,850	1,030	400	4,092	2,050	1,430	2,437	5,909	7,435
Poland	0	0	0	0	1,313	0	1,081	2,170	510	1,454
Portugal	0	1,636	0	5,240	14,173	4,740	0	250	4	1,298
Romania	48,501	53,160	37,183	57,567	82,312	33,855	37,648	46,533	44,734	14,039
Russia	1,061	26,221	11,680	26,540	82,333	50,547	87,681	74,512	71,230	29,864
Serbia	0	0	0	0	1,224	13,468	7,562	20,320	44,672	12,720
Spain	8	1,609	221	1,936	1,532	6,898	10,015	18,989	17,403	9,411
Sweden	108	255	182	1,456	55	0	138	114	375	758
Switzerland	70	142	1,512	936	2,275	1,260	441	163	3,607	3,889
Taiwan	0	0	0	48	0	0	0	919	1,396	0
Turkey	0	0	0	149	200	400	1,153	475	0	15
Ukraine	0	0	6,500	0	0	6,800	10,600	0	0	0
United Arab Emirates	0	0	0	0	0	0	0	1	0	5
United Kingdom	7,796	13,520	11,361	6,482	5,183	6,665	3,979	3,575	4,243	5,028
TOTALS	448,862	516,127	612,837	538,283	697,800	466,799	656,256	1,039,716	1,312,628	706,788

Countries with limited activity over this 10-year period are not shown. Note: Units posted under Russia in 2009 were revised per posted corrections, Census Bureau. Source: Data from the U.S. Department of Commerce and the U.S. International Trade Commission.

COUNTRY	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Brazil	1,340	1,385	835	300	480	0	0	0	0	0
Canada	0	167	412	600	0	0 0		0	0	2
China	7,240	370	0	0	56	0	1,500	0	0	0
France	0	0	0	3	0	0	0	0	2,300	0
Germany	500	1,165	2,965	5,025	30	5	4,183	0	0	0
Hong Kong	0	0	0	0	0	0	0	0	0	300
India	106	42	0	0	27	87	21	90	135	9
Italy	45,122	41,494	35,966	30,387	37,595	26,171	32,613	40,559	44,007	51,726
Spain	190,256	163,278	182,153	134,670	103,468	129,472	128,778	124,509	133,189	122,861
TOTALS	244,564	208,279	222,404	170,998	141,656	155,818	167,095	165,158	179,631	174,898

Countries with limited activity over this 10-year period are not shown.

Source: Data from the U.S. Department of Commerce and the U.S. International Trade Commission.

$\textbf{20} Y EARS \quad \textbf{U.S. Imports for Consumption}$

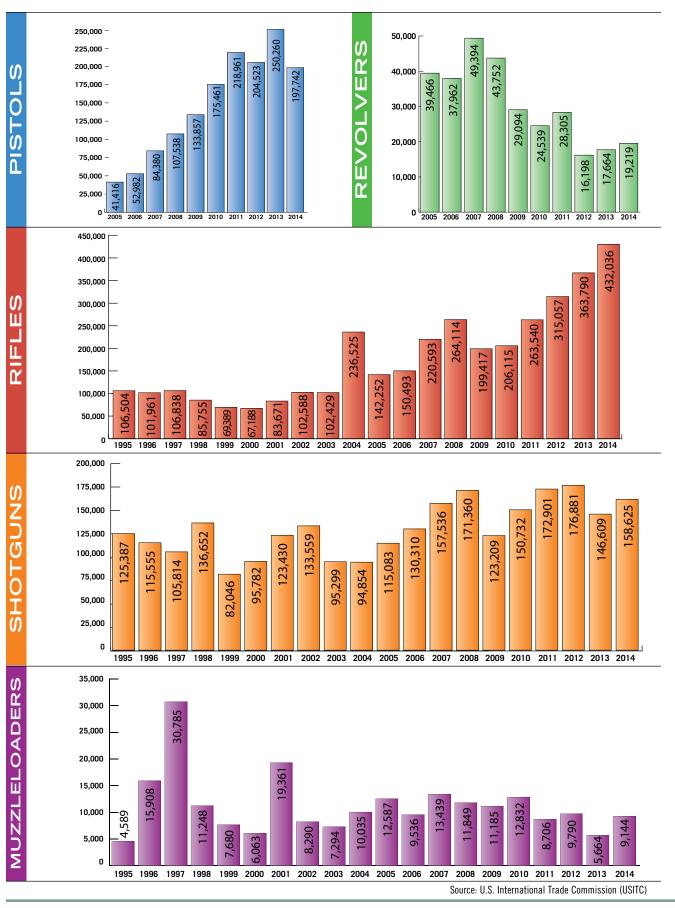
Year	Revolvers & Pistols (930200)	Rifles (930330)	Shotguns (930320)	Muzzleloaders (930310)	TOTAL FIREARMS
1995	825,127	286,218	136,733	331,168	1,579,246
1996	663,801	234,931	145,676	221,585	1,265,993
1997	1,316,931	266,869	142,067	185,145	1,911,012
1998	590,661	229,051	163,663	186,514	1,169,889
1999	677,757	313,980	335,489	155,764	1,482,990
2000	712,661	321,316	332,704	259,315	1,625,996
2001	710,958	322,201	428,308	345,534	1,807,001
2002	971,135	458,684	498,535	380,499	2,308,853
2003	762,764	517,509	498,677	353,673	2,132,623
2004	838,856	491,932	507,050	379,883	2,217,721
2005	878,172	448,862	546,261	244,564	2,117,859
2006	1,164,973	516,127	607,894	208,279	2,497,273
2007	1,387,428	612,837	725,635	222,404	2,948,304
2008	1,468,062	538,283	535,960	170,998	2,713,303
2009	2,184,417	697,800	558,679	141,656	3,582,552
2010	1,747,635	466,799	509,792	155,818	2,880,044
2011	1,707,313	656,256	530,564	167,095	3,061,228
2012	2,591,117	1,039,716	704,828	165,158	4,500,819
2013	3,055,329	1,312,628	937,952	179,631	5,485,540
2014	2,148,404	706,788	648,339	174,898	3,678,429
Average					
5-year (2010-2014)	2,249,960	836,437	666,295	168,520	3,921,212
10-year (2005-2014)	1,833,285	699,610	630,590	183,050	3,346,535
15-year (2000-2014)	1,488,615	607,183	571,412	236,627	2,903,836
20-year (1995-2014)	1,320,175	521,939	474,740	231,479	2,548,334

20 YEARS Total U.S. Exports

1995	(020200)	Rifles (930330)	Shotguns (930320)	Muzzleloaders (930310)	TOTAL FIREARMS
1990	(930200) 218,826	106,504	125.387	4,589	455,306
1996	193,647	101.961	115.555	15,908	427,071
1997	146,846	106,838	105,814	30,785	390,283
1998	124,295	85,755	136,652	11,248	357,950
1999	116,467	69,389	82,046	7,680	275,582
2000	80,249	67,188	95,782	6,063	249,282
2001	86,041	83,671	123,430	19,361	312,503
2002	82,338	102,588	133,559	8,290	326,775
2003	73,337	102,429	95,299	7,294	278,359
2004	69,316	236,525	94,854	10,035	410,730
2005	80,882	142,252	115,083	12,587	350,804
2006	90,944	150,493	130,310	9,536	381,283
2007	133,774	220,593	157,536	13,439	525,342
2008	151,290	264,114	171,360	11,849	598,613
2009	162,951	199,417	123,209	11,185	496,762
2010	201,231	205,950	150,956	12,842	570,979
2011	247,738	263,223	172,770	8,786	692,517
2012	220,923	315,037	180,634	9,841	726,435
2013	267,924	363,790	146,609	5,664	783,987
2014	216,961	432,036	158,625	9,144	816,766
Average					
5-year (2010-2014)	230,955	316,007	161,919	9,255	718,137
10-year (2005-2014)	177,462	255,691	150,709	10,487	594,349
15-year (2000-2014)	144,393	209,954	136,668	10,394	501,409
20-year (1995-2014)	148,299	180,988	130,774	11,306	471,366

IMPORTS

20 YEARS U.S. Firearms Total Exports (Manufacturers & Other Exporters)



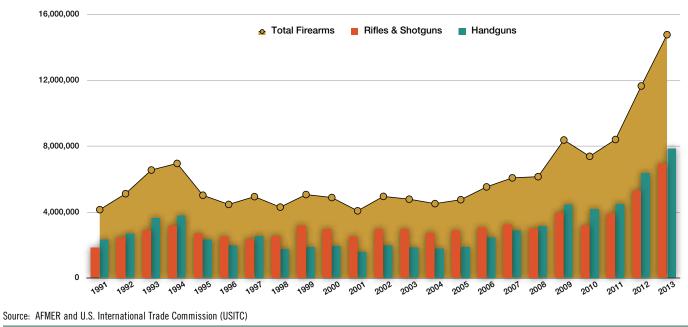
Total Firearm Unit Availability in the United States on an Annual Basis

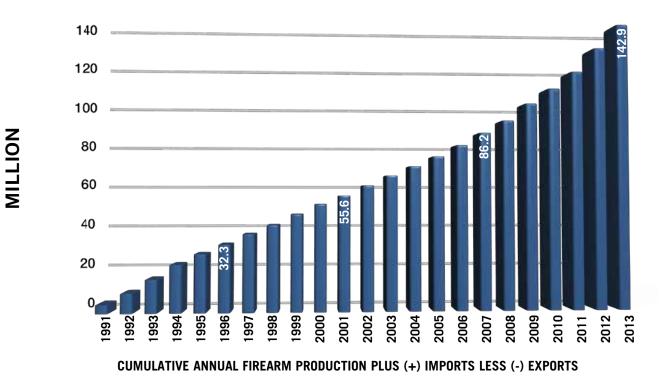
Year	Handguns Produced in U.S.		Handguns Imported into U.S.		Handguns Exported out of U.S.		Total Handguns	Year	Rifles & Shotguns Produced in U.S.		Rifles & Shotguns Imported into U.S.		Rifles & Shotguns Exported out of U.S.		Total Rifles & Shotguns	TOTAL HAND- GUNS, RIFLES & SHOTGUNS	% Change Yoy	Year
1991	1,838,266	+	692,282	-	223,248	=	2,307,300	1991	1,711,908	+	447,410	-	318,221	=	1,841,097	4,148,397	-	1991
1992	2,010,033	+	876,314	-	210,358	=	2,675,989	1992	2,019,912	+	732,988	-	309,171	=	2,443,729	5,119,718	23.4%	1992
1993	2,655,478	+	1,169,123	-	170,378	=	3,654,223	1993	2,320,811	+	881,935	-	301,257	=	2,901,489	6,555,712	28.0%	1993
1994	2,581,961	+	1,383,279	-	195,031	=	3,770,209	1994	2,604,042	+	875,867	-	294,065	=	3,185,844	6,956,053	6.1%	1994
1995	1,722,930	+	825,127	-	218,826	=	2,329,231	1995	2,505,425	+	422,951	-	231,891	=	2,696,485	5,025,716	-27.8%	1995
1996	1,484,477	+	663,801	-	193,647	=	1,954,631	1996	2,350,051	+	380,607	-	217,516	=	2,513,142	4,467,773	-11.1%	1996
1997	1,406,505	+	1,316,931	-	146,846	=	2,576,590	1997	2,167,319	+	408,936	-	212,652	=	2,363,603	4,940,193	10.6%	1997
1998	1,284,755	+	590,661	-	124,295	=	1,751,121	1998	2,382,419	+	392,714	-	222,407	=	2,552,726	4,303,847	-12.9%	1998
1999	1,331,230	+	677,757	-	116,467	=	1,892,520	1999	2,676,680	+	649,469	-	151,435	=	3,174,714	5,067,234	17.7%	1999
2000	1,281,861	+	712,661	-	80,249	=	1,914,273	2000	2,481,484	+	654,020	-	162,970	=	2,972,534	4,886,807	-3.6%	2000
2001	946,979	+	710,958	-	86,041	=	1,571,896	2001	1,964,367	+	750,509	-	207,101	=	2,507,775	4,079,671	-16.5%	2001
2002	1,088,584	+	971,135	-	82,338	=	1,977,381	2002	2,256,611	+	957,219	-	236,147	=	2,977,683	4,955,064	21.5%	2002
2003	1,121,024	+	762,764	-	73,337	=	1,810,451	2003	2,156,402	+	1,016,186	-	197,728	=	2,974,860	4,785,311	-3.4%	2003
2004	1,022,610	+	838,856	-	69,316	=	1,792,150	2004	2,056,907	+	998,982	-	331,379	=	2,724,510	4,516,660	-5.6%	2004
2005	1,077,630	+	878,172	-	80,882	=	1,874,920	2005	2,140,685	+	995,123	-	257,335	=	2,878,473	4,753,393	5.2%	2005
2006	1,403,329	+	1,164,973	-	90,944	=	2,477,358	2006	2,211,123	+	1,124,021	-	280,803	=	3,054,341	5,531,699	16.4%	2006
2007	1,610,998	+	1,387,428	-	133,774	=	2,864,652	2007	2,256,154	+	1,338,472	-	378,129	=	3,216,497	6,081,149	9.9%	2007
2008	1,819,024	+	1,468,062	-	151,290	=	3,135,796	2008	2,376,849	+	1,074,243	-	435,474	=	3,015,618	6,151,414	1.2%	2008
2009	2,415,815	+	2,184,417	-	162,951	=	4,437,281	2009	3,005,802	+	1,256,479	-	322,626	=	3,939,655	8,376,936	36.2%	2009
2010	2,646,504	+	1,747,635	-	201,231	=	4,192,908	2010	2,573,934	+	976,591	-	356,906	=	3,193,619	7,386,527	-11.8%	2010
2011	3,037,112	+	1,707,313	-	247,738	=	4,496,687	2011	3,168,255	+	1,186,820	-	435,993	=	3,919,082	8,415,769	13.9%	2011
2012	3,978,438	+	2,591,117	-	220,923	=	6,348,632	2012	4,058,950	+	1,744,544	-	495,671	=	5,307,823	11,656,455	38.5%	2012
2013	5,039,832	+	3,055,329	-	267,924	=	7,827,237	2013	5,199,745	+	2,250,580	-	510,399	=	6,939,926	14,767,163	26.7%	2013
TOTAL	44,805,375	+	28,376,095	-	3,548,034	=	69,633,436	TOTAL	58,645,835	+	21,516,666	-	6,867,276	=	66,355,299	142,928,661		

Sources: U.S. firearm production figures from AFMER, Import and Export figures from USITC.

In order to obtain an estimate for the number of total firearms available in the United States in a given year, NSSF combined U.S. firearm production with firearms exported.

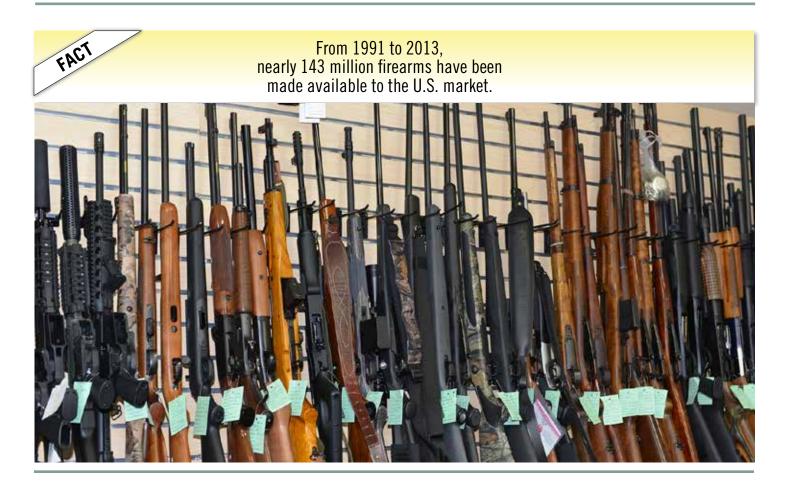
Total Firearm Unit Availability in the United States on an Annual Basis





Firearms to U.S. Market 1991- 2013

Source: AFMER and U.S. International Trade Commission (USITC)



KEY FINDINGS

- Total firearm production reported in the 2013 AFMER was 10,239,577 – an increase of 27.4% over 2012 reported figures.
- Long guns totaled **5,199,745** and accounted for **50.8%** of total U.S. firearms production. Of that, rifles totaled **3,996,673** (**76.9%** of long gun production) and shotguns totaled **1,203,072** (**23.1%**).
- The annual average production of firearms in the U.S. was **4,466,904** for the last quarter-century.
- The latest figures show that nearly 65% of U.S. pistol production fell into either 9mm calibers (38.3%) or .50 calibers (28.5%).

- The top 25 U.S. firearm manufacturers accounted for **89.4%** of the U.S. production total for the year.
- Sturm, Ruger & Company topped the list again in 2013, accounting for 21.3% of total firearm production reported in the U.S. followed by: Smith & Wesson Corporation, 14.7%; Remington Arms Company, 13.7%; Sig Sauer, Inc., 6.6%; Maverick Arms, Inc., 5.6%; and Savage Arms, Inc., 5.1%.
- In 2013, the greatest number of imported handguns came from Austria (932,117), representing 30.5% of all imported handguns. Austria was followed by Germany with 513,864 or 16.8%, Brazil at 14.8% with 452,165 units, and 14.8% were imported from Croatia (451,657).
- The greatest number of shotguns imported in 2013 came from Turkey (306,312), China (234,486), and Italy (212,557). For rifles it was Brazil (404,234), Canada (292,404), and Germany (134,305). Spain (133,189) was the source of the highest of number of muzzleloaders imported, follow by Italy (44,007).
- Firearms and ammunition manufacturing accounts for more than 10,000 employees producing more than \$4.2 billion in goods shipped. These figures represent an increase of 1.4% in the number of employees and an increase of 24.5% in the value of goods shipped in 2013 compared to the ASM data last reported for 2011.
- According to USITC data, the U.S. exported 783,987 total firearms in 2013 as compared to 726,435 in 2012 - an

SOURCES

Total Production	Detail data source: The 2013 Annual Firearms Manufacturing and Export Report (AFMER). This annual report is prepared by the office of Firearms and Explosives Services Division (FESD), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Washington, D.C. (Historical analysis conducted by NSSF.) For purposes of this report only, "Production" is defined as firearms, including separate frames, receivers, actions or barreled actions, manufactured and disposed of in commerce during each calendar year. The
	ATF's latest full AFMER is for calendar year 2013, since the agency embargoes the data for a period of one year. Production totals data source: The AFMER 2013 as reported through February 3, 2015 — reviewed/adjusted by NSSF (adjustments are noted on page 2). For more information visit atf.gov/content/about/statistics
Manufacturing Trends	Annual Survey of Manufacturers (ASM): Statistics for Industry Groups and Industries: Released. U.S. Census Bureau, U.S. Department of Commerce. (Historical analysis conducted by NSSF.) The 2013 data is available through the U.S. Census Bureau website census.gov/manufacturing/asm/index.html
Firearms Imports for Consumption / Total Exports	U.S. Department of Commerce and the U.S. International Trade Commission (USITC) — Interactive Tariff and Trade DataWeb: dataweb.usitc.gov/ U.S. Census Bureau for corrections to import/export data at www.census.gov/foreign-trade/statistics/corrections/index.html
Manufacturers Export	The 2013 Annual Firearms Manufacturing and Export Report (AFMER) www.atf.gov/content/about/statistics

During the 25-year period covered in this report (1989 – 2013), the violent crime rate has decreased by 45 percent and unintentional firearm-related fatalities have declined by 64 percent. Sources: FBI Uniform Crime Reports and National Safety Council Injury Facts 2015 Edition.



Report provided by NSSF. For additional research materials, please visit nssf.org/research

11 Mile Hill Road Newtown, CT 06470-2359 T: 203.426.1320 F: 203.426.1087 nssf.org

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NSSF[®] Report Sport Shooting Participation In The United States in 2014



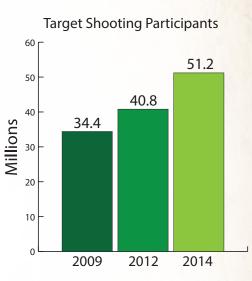


Responsive Management

Conducted for the National Shooting Sports Foundation® by Responsive Management













SPORT SHOOTING PARTICIPATION IN THE UNITED STATES IN 2014

Conducted for the National Shooting Sports Foundation



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2015

SPORT SHOOTING PARTICIPATION IN THE UNITED STATES IN 2014

2015

Responsive Management National Office

Mark Damian Duda, Executive Director Martin Jones, Senior Research Associate Tom Beppler, Research Associate Steven J. Bissell, Ph.D., Qualitative Research Associate Amanda Center, Research Associate Andrea Criscione, Research Associate Patrick Doherty, Research Associate Gregory L. Hughes, P.E., Research Associate Claudia Reilly, Survey Center Manager Alison Lanier, Business Manager

> 130 Franklin Street Harrisonburg, VA 22801 Phone: 540/432-1888 E-mail: mark@responsivemanagement.com www.responsivemanagement.com

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EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the National Shooting Sports Foundation (NSSF), following up on similar studies in 2010 (about 2009 participation) and 2013 (about 2012 participation), to determine the regional and national participation rates in target shooting and sport shooting. The study entailed a telephone survey of U.S. residents ages 18 years old and older. Calculations based on 234,564,071 figure for U.S. residents ages 18 years old and older .

For the survey, telephones were selected as the sampling medium because of the almost universal ownership of telephones, particularly with the coverage provided by dual-frame samples that include both cell phones and landlines. Telephone surveys tend to have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

The telephone survey questionnaire was developed cooperatively by Responsive Management and the NSSF, based on previous similar surveys conducted for the NSSF. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

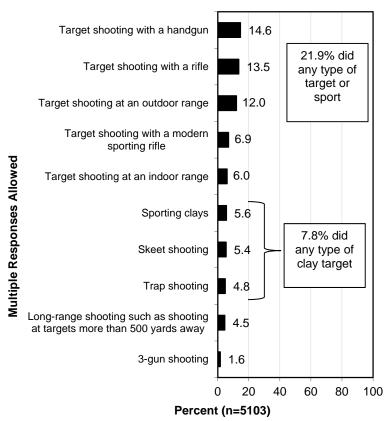
The methodology used a dual-frame sample, which consisted of a random sample of landline telephones and a random sample of cell phone numbers, called in their proper proportions, which ensures that all people in the pool of telephone users have an approximately equal chance of being called. The scientific sampling plan entailed obtaining a target number of interviews in each state, from both landlines and cell phones in their proper proportions, so that the number of respondents in each state in the sample would be exactly proportional to the state's population and, by extension, within the United States population as a whole. The sample was obtained from Survey Sampling International and DatabaseUSA, companies specializing in providing scientifically valid telephone survey samples. The overall sample with landlines and cell phones was representative of all Americans 18 years old and older. Responsive Management obtained 5,103 completed interviews overall.

The software used for data collection was Questionnaire Programming Language. The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management.

PARTICIPATION IN TARGET AND SPORT SHOOTING

The survey found that 21.9% of the U.S. adult population, or an estimated 51 million adults, participated in any type of target or sport shooting in 2014. As shown in the graph that follows, the most popular types are target shooting with a handgun (14.6% participated), target shooting with a rifle (13.5%), and target shooting at an outdoor range (12.0%). Note that respondents could have done more than one shooting activity. The actual numbers of participants are tabulated following the graph.

Initial survey question: We are interested in activities you may have done in 2014. Please tell me if you did any of the following in 2014. What about...? Go target shooting or sport shooting, including any informal target shooting on your own property.



Participation in the following sport shooting activities.

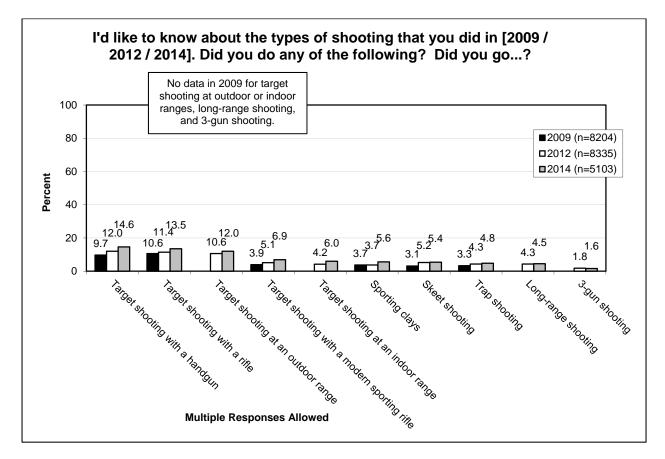
National Participation in Target and Sport Shooting

Activity	Estimated Total	95% Confidence Interval	
Activity	Participants*	Lower Limit	Upper Limit
Any target shooting or sport shooting	51,226,765	48,567,512	53,886,018
Target shooting with a handgun	34,221,107	31,949,047	36,493,168
Target shooting with a rifle	31,764,116	29,561,757	33,966,476
Target shooting at an outdoor range	28,075,842	25,986,547	30,165,138
Any type of clay target shooting (sporting clays, skeet, or trap)	18,396,758	16,667,771	20,125,745
Target shooting with a modern sporting rifle	16,267,924	14,632,709	17,903,139
Target shooting at an indoor range	14,007,982	12,782,759	15,533,204
Sporting clays	13,033,633	11,559,165	14,508,101
Skeet shooting	12,596,361	11,145,408	14,047,314
Trap shooting	11,227,278	9,853,226	12,601,330
Long-range shooting	10,434,630	9,107,621	11,761,639
3-gun shooting	3,837,132	3,020,666	4,653,599

*Ages 18 years old and older

TRENDS IN PARTICIPATION IN TARGET AND SPORT SHOOTING

The current survey found a 21.9% participation rate in any type of target or sport shooting, which is an increase over the 15.1% rate among Americans in 2009 and 17.4% in 2012. Additionally, as shown in the trends graph below, the participation rate in each shooting activity shows an increase (except for 3-gun shooting), although the increase is so small for some activities that the rate could be said to have stayed essentially the same. The tabulation compares estimated numbers of participants; the estimated number of target/sport shooters in 2014 increased 25.6% over the 2012 number.



Activity	Estimated Total Participants* in 2009	Estimated Total Participants* in 2012	Estimated Total Participants* in 2014	%Change Compared to 2012
National				
Any target shooting or sport shooting	34,382,566	40,779,651	51,226,765	+25.6
Target shooting with a handgun	22,169,700	28,209,283	34,221,107	+21.3
Target shooting with a rifle	24,045,795	26,822,425	31,764,116	+18.4
Target shooting w/ a Modern Sporting Rifle	8,868,085	11,976,702	16,267,924	+35.8
Skeet shooting	6,979,680	12,090,346	12,596,361	+4.2
Trap shooting	7,582,479	10,116,684	11,227,278	+11.0
Sporting clays	8,399,989	8,789,340	13,033,633	+48.3
Any clay target shooting (skeet, trap, sc)	11,597,841	17,758,371	18,396,758	+3.6

*Ages 18 years old and older

DAYS OF PARTICIPATION IN TARGET AND SPORT SHOOTING

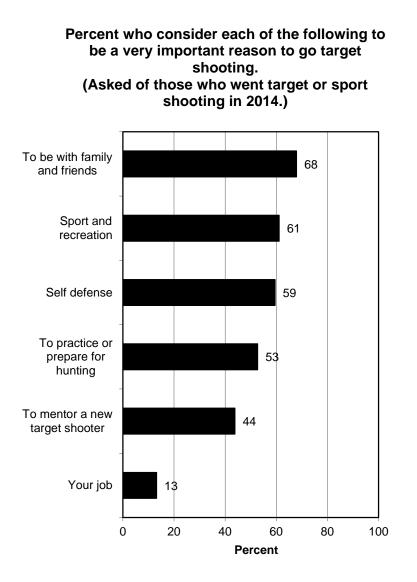
The tabulation below shows the mean and median days spent in the various shooting activities, among those who participated in each activity. Nationally, shooting with a modern sporting rifle is the activity with the highest mean days of participation, followed by 3-gun shooting. The top-ranked activity in mean days is shaded dark green; those activities within 2.0 percentage points of the top activity are shaded light green.

Activity	Mean Days Spent on Activity in 2014	Median Days Spent on Activity in 2014	
National			
Target shooting with a traditional rifle	14.42	5	
Target shooting with a modern sporting rifle	17.84	6	
Target shooting with a handgun	16.32	6	
Trap shooting	14.23	5	
Skeet shooting	13.88	5	
Sporting clays	13.10	5	
3-gun shooting	17.43	4	
Long-range shooting	15.62	5	

In addition to the tabulation above, the survey also provided data about the number of times that respondents went shooting at a range in 2014: the mean number is 9.85 times, and the median is 4 times.

MOTIVATIONS FOR TARGET AND SPORT SHOOTING

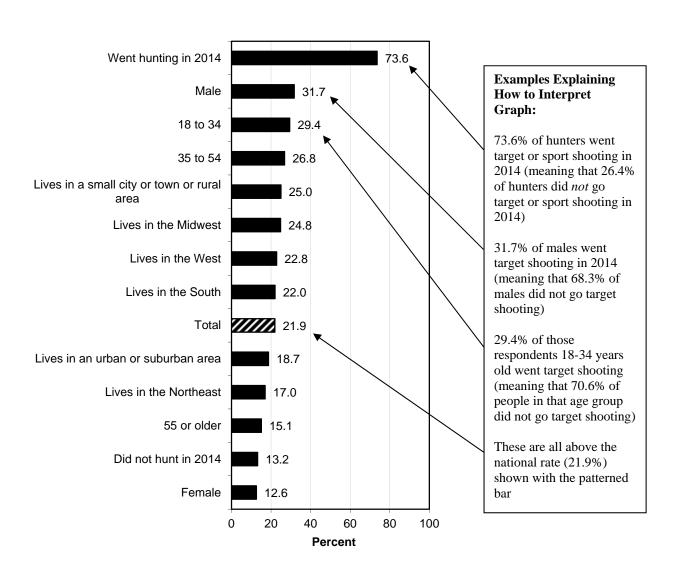
The survey asked a series of questions examining motivations for target/sport shooting. The social reasons top the list: to be with family and friends (68% said it was *very* important) and for the sport and recreation (61%). More practical reasons are lower down, but still very important to a majority: self defense (59%) and to practice or prepare for hunting (53%). The graph on the following page shows the percentage who indicated that the reason was a very important reason to go target or sport shooting; these questions were asked of those who had gone target or sport shooting in 2014.



DEMOGRAPHIC CHARACTERISTICS OF SHOOTERS

This report includes an analysis of the demographic makeup of shooters. Participation in target and sport shooting is correlated with hunting participation, being male, being 18 to 34 years old, and being on the rural side of the urban-rural continuum. The Midwest Region is positively correlated, while the Northeast Region is negatively correlated.

The graph on the following page shows the rate of target/sport shooting participation in the population as a whole (21.9%, the bar that is patterned in the middle of the graph). Those demographic groups above the patterned bar have participation rates higher than the overall rate. For instance, 31.7% of males participated in target/sport shooting (compared to only 12.6% of females, shown in the last bar at the bottom of the graph).



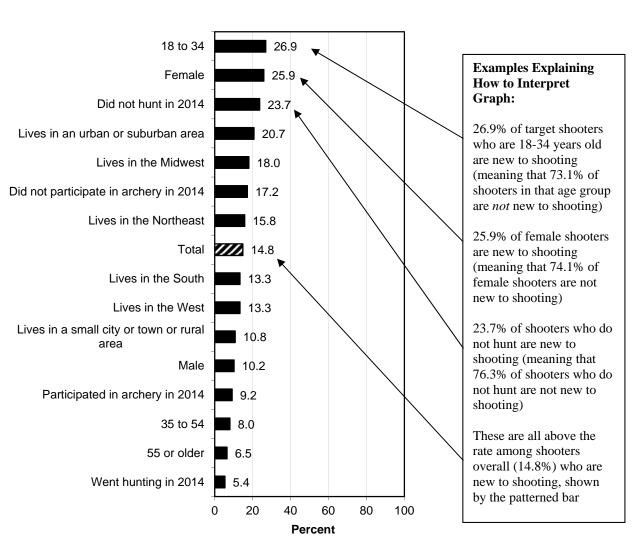
Percent of each of the following groups who target or sport shot in 2014:

DEMOGRAPHIC CHARACTERISTICS OF NEW SHOOTERS

For this analysis, new shooters were defined as those who started shooting within the past 5 years. The analysis first shows that 15% of those who participated in target or sport shooting in 2014 were first initiated into the shooting sports within the previous 5 years.

The analysis looked at the group of all target/sport shooters and then separated out new shooters. Among all target shooters, these new shooters are correlated with the following demographic factors, as shown in the graph that follows: being 18 to 34 years old, being female, not being a hunter, and living on the urban side of the urban-rural continuum. In this graph, 14.8% of all

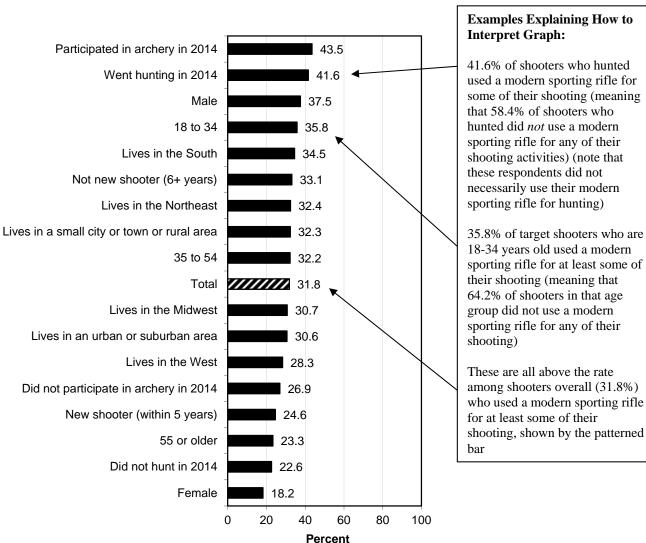
shooters are new shooters (the patterned bar). Those groups above the bar are positively correlated with being a new shooter. For instance, 25.9% of female target/sport shooters are new shooters (compared to 10.2% of male shooters being new shooters).



Among all target/sport shooters, the percent of each of the following groups who are new shooters:

DEMOGRAPHIC CHARACTERISTICS OF MODERN SPORTING RIFLE SHOOTERS

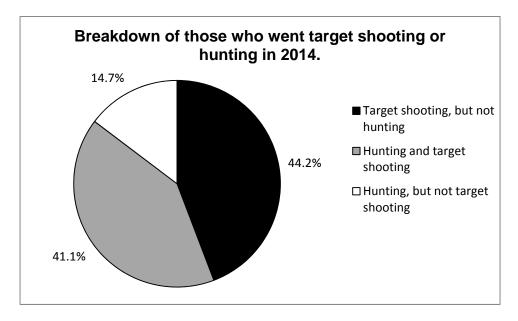
The analyses explored the demographic makeup of those who shoot with a modern sporting rifle. As shown below, the analysis looks at subgroups within all target/sport shooters. This analysis shows that target/sport shooters who also participated in archery are positively correlated with shooting a modern sporting rifle. In addition, positive correlations were found to target/sport shooters who hunt and to male target/sport shooters. The groups with participation rates in shooting a modern sporting rifle that are higher than the rate of such use overall are at the top of the graph, above the percentage of shooters overall who used a modern sporting rifle (31.8%, shown by the patterned bar).



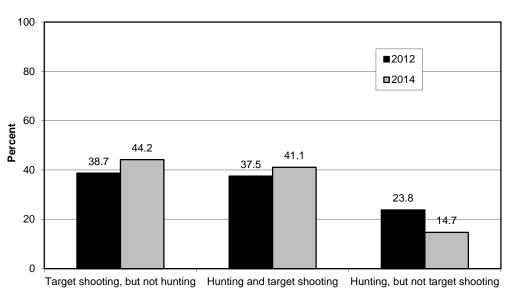
Among target shooters, the percent of each of the following groups who shot with a modern sporting rifle in 2014:

OVERLAP OF PARTICIPATION IN TARGET SHOOTING AND HUNTING

The survey also obtained information on participation in hunting, and the pie graph below shows the proportions of target shooters, hunters, and those who do both. The entire pie consists of those who *either* hunted (with firearms or archery) or went target/sport shooting. About 2 in 5 of those who either hunted or went target/sport shooting did both activities.



A trend graph shows that hunting exclusive of target/sport shooting has declined from 2012 to 2014.





LIKELIHOOD TO GO TARGET OR SPORT SHOOTING IN THE FUTURE

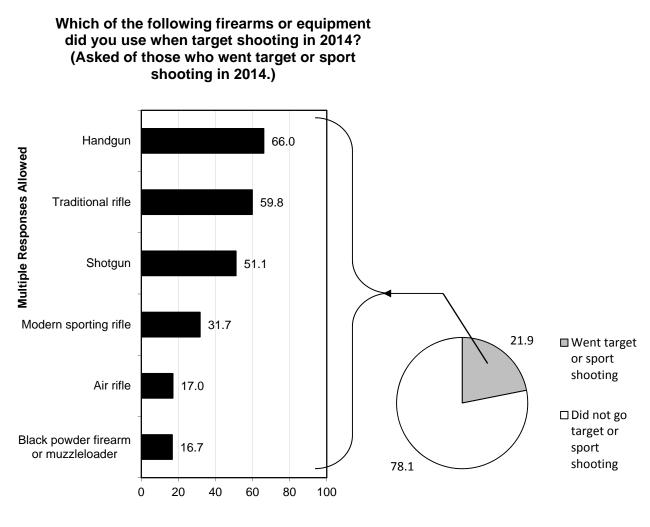
There appears to be some interest in target or sport shooting among those who did *not* go target or sport shooting in 2014: 8% of those who did *not* participate in target or sport shooting in 2014 said that they would be *very* likely to participate in target or sport shooting in the following 2 years. Demographic analyses compare those who say that they are *very* likely to those who are *not at all* likely, thereby giving a little insight into who these people are.

Men show a bit more interest than women in target/sport shooting, among people who did not shoot in 2014. The age crosstabulations suggest that younger people have a greater propensity to be likely to go target/sport shooting in the next 2 years. Non-shooters in the Northeast are markedly less interested in shooting, compared to the other regions, particularly the Midwest Region.

The above looked at those who had *not* participated in target or sport shooting; however, the same question was also asked of those who *had* participated. Of 2014 sport shooting participants, 63% are *very* likely to go sport shooting in the following 2 years, and 18% are *somewhat* likely (a sum of 81% who plan to continue in the sport). The same demographic analyses were run comparing those who are *very* likely to those who are *not at all* likely; gender had the most marked differences in the results. The gender crosstabulations found that women appear to be more likely to drop out of target/sport shooting: females make up only 25% of those who had shot in 2014 and are *very* likely to shoot in the next 2 years, while they make up 37% of those who had shot in 2014 but are unlikely to shoot in the next 2 years.

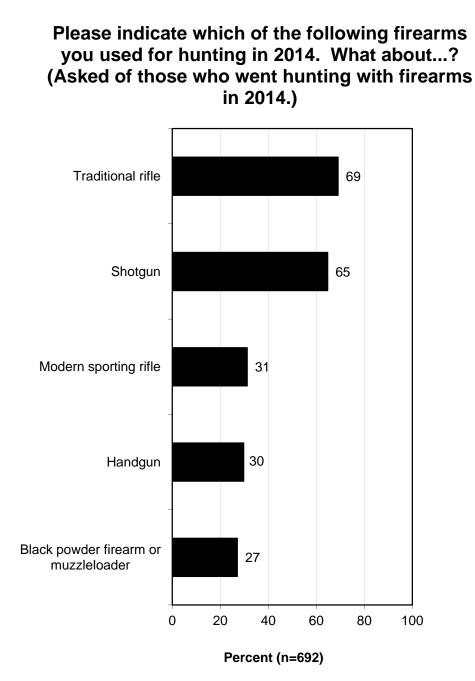
TYPES OF FIREARMS USED IN TARGET OR SPORT SHOOTING AND HUNTING

The graph below shows the percentages of target or sport shooters using various types of firearms (in total, 21.9% of all U.S. residents went target or sport shooting). Handguns and traditional rifles top the list, closely followed by shotguns. For each of these three types, a majority of those who go target or sport shooting use it.



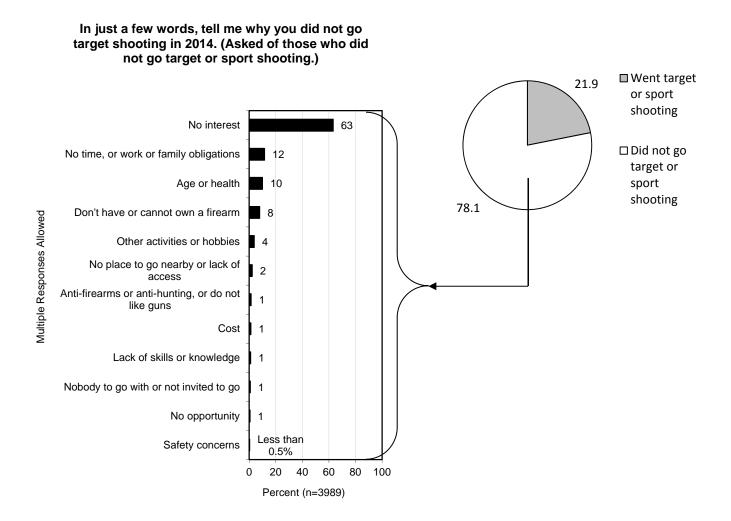
Percent (n=1114)

The survey also asked those who hunted to indicate the various firearms they used while hunting in 2014. While traditional rifles and shotguns top the list (69% and 65%, respectively), about a third use modern sporting rifles and handguns as part of their hunting (31% and 30%, respectively).



REASONS FOR NOT PARTICIPATING IN TARGET OR SPORT SHOOTING

The survey asked those who did not participate in target/sport shooting for their reasons for not doing so (78.1% of U.S. residents did not go target or sport shooting in 2014). While simple lack of interest is, by far, the top reason (63% of those who did not target or sport shoot), other important reasons include lack of time because of family or work obligations (12%), age/health (10%), and lacking a firearm (8%). Other than lack of interest, the most typical reasons are social constraints over which agencies and the shooting industry may have little influence.



PUTTING RESPONSIVE MANAGEMENT'S PARTICIPATION DATA INTO CONTEXT

The report includes a final section that has an extensive examination of Responsive Management's data collection methods and its data. Its methods were compared to a variety of other data collection methods, and its data, likewise, were compared to other data. The evidence helps to validate the accuracy of Responsive Management's research on these sports.

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INTRODUCTION AND METHODOLOGY

This study was conducted for the National Shooting Sports Foundation (NSSF), following up on similar studies in 2010 (about 2009 participation) and 2013 (about 2012 participation), to determine the regional and national participation rates in target shooting and sport shooting. The study entailed a scientific telephone survey, using a dual-frame sample that included both cell phones and landlines in their proper proportions, of randomly selected residents of the United States 18 years old and older. Calculations based on 234,564,071 figure for U.S. residents ages 18 years old and older. Specific aspects of the research methodology are discussed below.

USE OF TELEPHONES FOR THE SURVEY

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones, particularly with the coverage provided by dual-frame samples that include both cell phones and landlines. Telephone surveys tend to have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

QUESTIONNAIRE DESIGN

The telephone survey questionnaire was developed cooperatively by Responsive Management and the NSSF, based on previous similar surveys conducted for the NSSF. As in the previous surveys on sport shooting participation, the survey used a "ruse" line of questioning at the beginning of the survey. This was done because the main objective of the survey was to determine national and regional participation rates in the shooting sports, and the survey was worded to avoid bias that would arise from the tendency for those who do *not* shoot to refuse to participate in a survey about shooting. Therefore, the survey starts by asking about some general activities, mixing shooting and hunting participation in with participation in other non-shooting activities. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

SURVEY SAMPLE

The methodology used a dual-frame sample, which consisted of a random sample of landline telephones and a random sample of cell phone numbers, called in their proper proportions, which ensures that all people in the pool of telephone users have an approximately equal chance of being called. The scientific sampling plan entailed obtaining a target number of interviews in each state, from both landlines and cell phones in their proper proportions, so that the number of respondents in each state in the sample would be exactly proportional to the state's population and, by extension, within the United States population as a whole.

The sample was obtained from Survey Sampling International and DatabaseUSA, companies specializing in providing scientifically valid telephone survey samples. The overall sample with landlines and cell phones was representative of all Americans 18 years old and older.

TELEPHONE INTERVIEWING FACILITIES

A central polling location in Harrisonburg, Virginia, allowed for rigorous quality control over the interviews and data collection. Responsive Management maintains its own in-house telephone interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources and outdoor recreation.

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted project briefings with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey instrument, reading of the survey instrument, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument.

For this survey, interviewers fluent in Spanish conducted interviews with respondents who had previously been called but could not take the survey in English. Those respondents were put on a callback list and were called by interviewers fluent in Spanish.

INTERVIEWING DATES AND TIMES

Responsive Management's calling times are Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A fivecallback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. **The survey was conducted in February and March 2015.** Responsive Management obtained 5,103 completed interviews overall.

TELEPHONE SURVEY DATA COLLECTION AND QUALITY CONTROL

The software used for data collection was Questionnaire Programming Language (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey questionnaire was programmed so that QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection.

The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. The survey questionnaire itself contained error checkers and computation statements to ensure quality and consistent data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness.

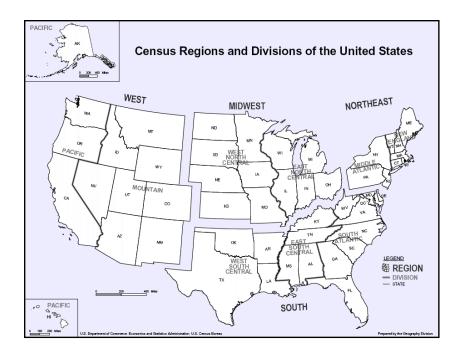
DATA ANALYSIS

The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management. As noted previously, there were set goals for the numbers of interviews in each state, and the demographic breakdown of the resulting sample was very close to the reported demographic breakdown of the population as a whole in each state (using U.S. Census data). Nonetheless, the results were slightly weighted by age and gender to be exactly proportional to the total population of each region and of the United States as a whole.

In the analysis, each state was sampled proportionately to preserve proper distribution within each region and in the U.S. as a whole, and each respondent was then assigned a region based on the state; the analysis was conducted on a regional basis and on the U.S. as a whole, but not at the state level. The number of completed interviews from each state is shown in the tabulation below:

State of Residence	Completed Interviews	State of Residence	Completed Interviews	State of Residence	Completed Interviews
Alabama	78	Louisiana	77	Ohio	192
Alaska	16	Maine	52	Oklahoma	61
Arizona	102	Maryland	96	Oregon	71
Arkansas	48	Massachusetts	107	Pennsylvania	213
California	597	Michigan	161	Rhode Island	21
Colorado	80	Minnesota	87	South Carolina	77
Connecticut	59	Mississippi	47	South Dakota	15
Delaware	15	Missouri	99	Tennessee	107
Florida	302	Montana	16	Texas	389
Georgia	155	Nebraska	36	Utah	43
Hawaii	23	Nevada	44	Vermont	18
Idaho	26	New Hampshire	28	Virginia	137
Illinois	202	New Jersey	148	Washington	113
Indiana	106	New Mexico	34	West Virginia	33
Iowa	50	New York	317	Wisconsin	94
Kansas	49	North Carolina	156	Wyoming	9
Kentucky	73	North Dakota	13	Washington D.C.	11
				TOTAL	5,103

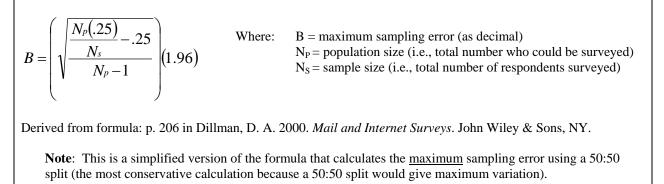
As mentioned, the states were also grouped into regions to aid in comparison and analysis. The four main U.S. Census Bureau regions were used. The map on the following page from the U.S. Census Bureau website shows each region.



SAMPLING ERROR

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample, the sampling error is at most plus or minus 1.37 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within plus or minus 1.37 percentage points of each other. Sampling error was calculated using the formula described below, with a sample size of 5,103 and a population size of 234,564,071 United States residents 18 years old and older.

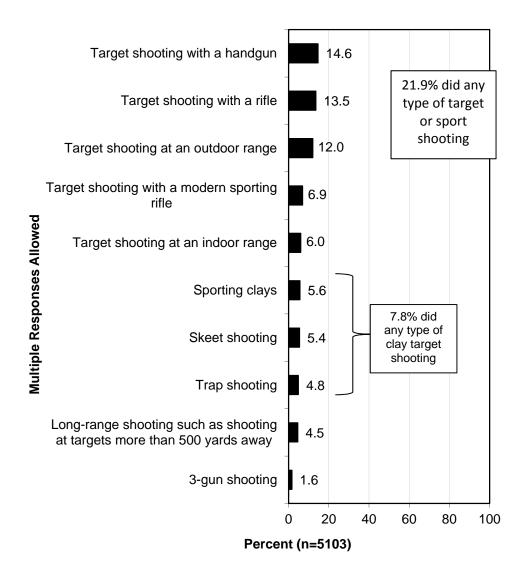
Sampling Error Equation



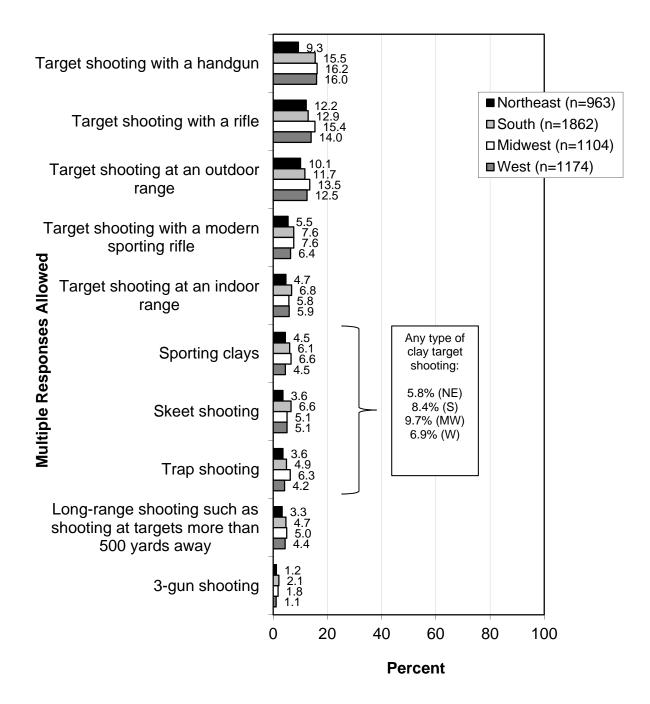
SURVEY RESULTS

PARTICIPATION IN TARGET AND SPORT SHOOTING

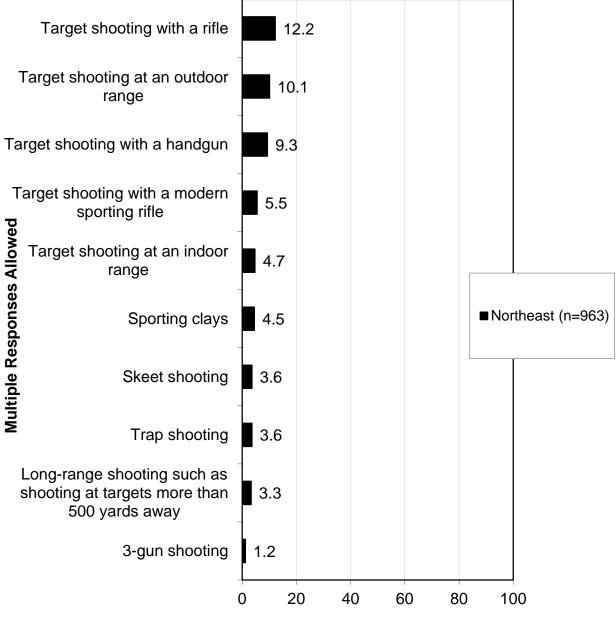
The survey found that 21.9% of the U.S. adult population, or an estimated 51 million adults, participated in any type of target or sport shooting in 2014. As shown in the graph below, the most popular types are target shooting with a handgun (14.6% participated), target shooting with a rifle (13.5%), and target shooting at an outdoor range (12.0%). Note that respondents could have done more than one shooting activity. The actual numbers of participants are tabulated following the regional graphs.

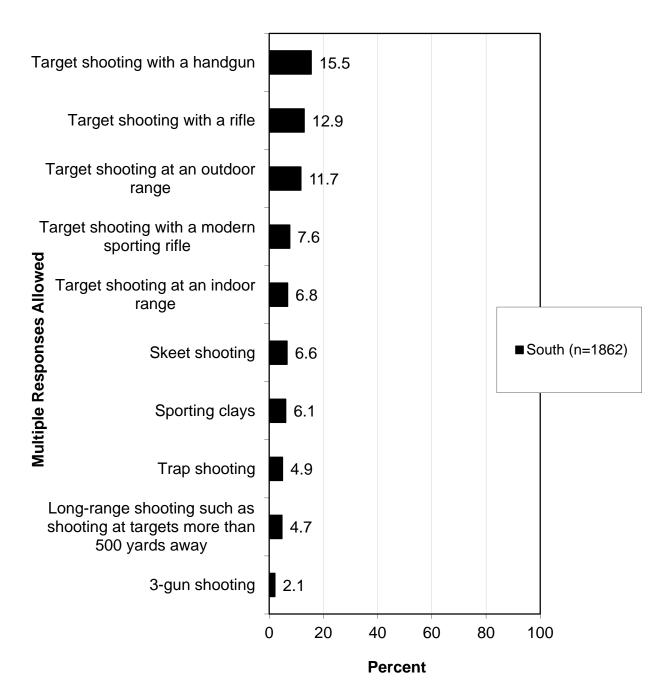


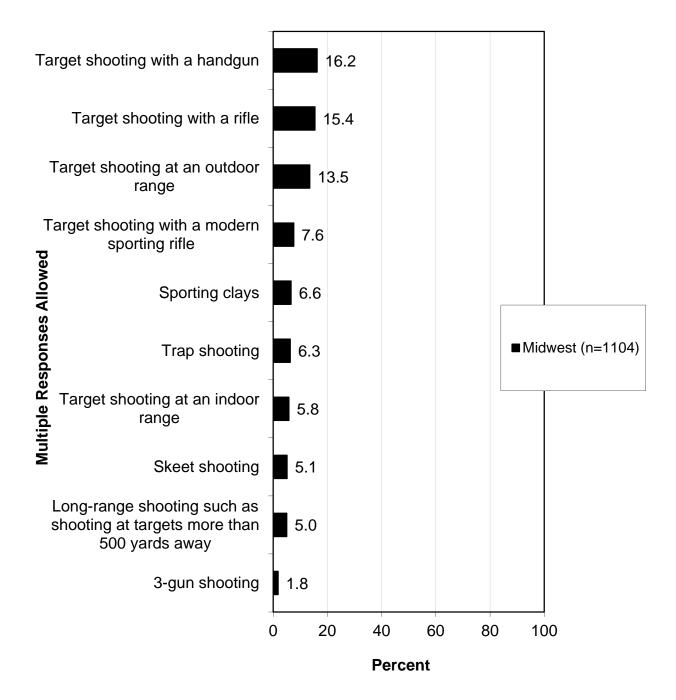
The graph below compares the regions on this question, followed by an individual graph for each region with the activities ranked from highest to lowest participation in each region.

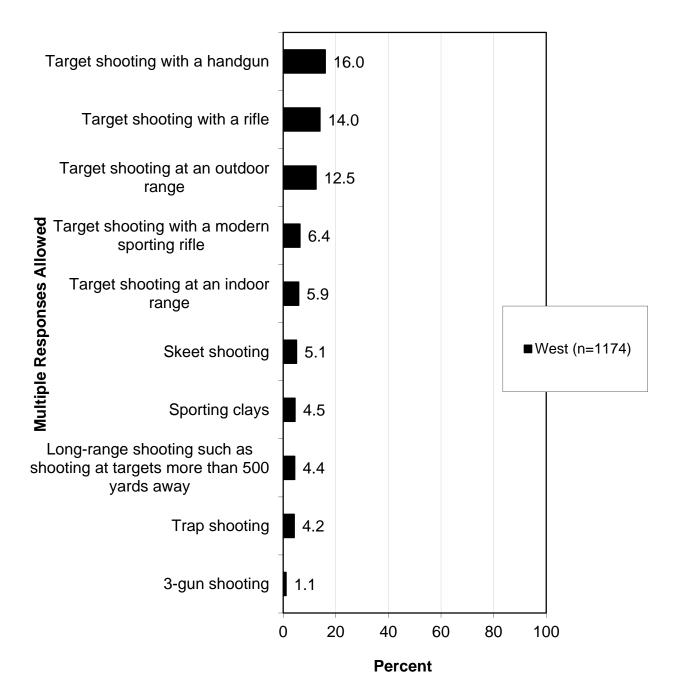












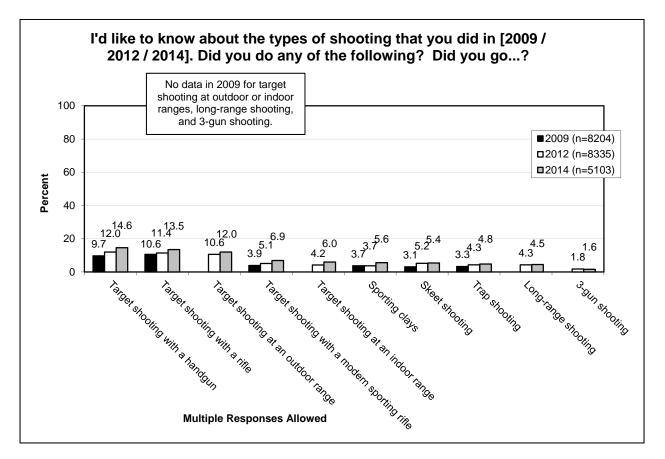
	Estimated Total	95% Confidence Interval		
Activity	Participants (ages 18 years and older)	Lower Limit	Upper Limit	
National				
Any target shooting or sport shooting	51,226,765	48,567,512	53,886,018	
Target shooting with a handgun	34,221,107	31,949,047	36,493,168	
Target shooting with a rifle	31,764,116	29,561,757	33,966,476	
Target shooting at an outdoor range	28,075,842	25,986,547	30,165,138	
Any type of clay target shooting (sporting clays, skeet, or trap)	18,396,758	16,667,771	20,125,745	
Target shooting with a modern sporting rifle	16,267,924	14,632,709	17,903,139	
Target shooting at an indoor range	14,007,982	12,782,759	15,533,204	
Sporting clays	13,033,633	11,559,165	14,508,101	
Skeet shooting	12,596,361	11,145,408	14,047,314	
Trap shooting	11,227,278	9,853,226	12,601,330	
Long-range shooting	10,434,630	9,107,621	11,761,639	
3-gun shooting	3,837,132	3,020,666	4,653,599	
Northeast Region			, ,	
Any target shooting or sport shooting	7,310,715	6,290,198	8,331,232	
Target shooting with a rifle	5,251,338	4,361,804	6,140,872	
Target shooting at an outdoor range	4,331,227	3,513,583	5,148,872	
Target shooting with a handgun	4,017,408	3,226,751	4,808,065	
Any type of clay target shooting (sporting clays, skeet, or trap)	2,490,617	1,856,313	3,124,921	
Target shooting with a modern sporting rifle	2,369,462	1,749,544	2,989,381	
Target shooting at an indoor range	2,035,759	1,458,794	2,612,724	
Sporting clays	1,949,118	1,383,967	2,514,269	
Skeet shooting	1,561,698	1,053,440	2,069,957	
Trap shooting	1,531,689	1,028,156	2,035,223	
Long-range shooting	1,410,819	926,857	1,894,781	
3-gun shooting	502,853	210,782	794,923	
South Region	,	- ,	7	
Any target shooting or sport shooting	19,087,871	17,454,861	20,720,882	
Target shooting with a handgun	13,421,864	11,996,339	14,847,390	
Target shooting with a rifle	11,152,632	9,833,240	12,472,023	
Target shooting at an outdoor range	10,165,577	8,897,729	11,433,425	
Any type of clay target shooting (sporting		, ,		
clays, skeet, or trap)	7,265,016	6,173,402	8,356,630	
Target shooting with a modern sporting rifle	6,581,539	5,537,794	7,625,284	
Target shooting at an indoor range	5,863,399	4,873,840	6,852,958	
Skeet shooting	5,728,268	4,749,363	6,707,174	
Sporting clays	5,332,187	4,385,425	6,278,948	
Trap shooting	4,222,828	3,374,571	5,071,086	
Long-range shooting	4,107,269	3,270,113	4,944,425	
3-gun shooting	1,813,747	1,249,770	2,377,723	

The tabulation below shows estimates of numbers of participants nationally and by region.

	Estimated Total	95% Confidence Interval		
Activity	Participants (ages 18 years and older)	Lower Limit	Upper Limit	
Midwest Region				
Any target shooting or sport shooting	12,605,352	11,310,438	13,900,266	
Target shooting with a handgun	8,242,288	7,136,999	9,347,577	
Target shooting with a rifle	7,819,018	6,737,143	8,900,893	
Target shooting at an outdoor range	6,868,386	5,843,257	7,893,516	
Any type of clay target shooting (sporting clays, skeet, or trap)	4,915,836	4,029,897	5,801,775	
Target shooting with a modern sporting rifle	3,870,597	3,075,217	4,665,977	
Sporting clays	3,344,681	2,601,177	4,088,184	
Trap shooting	3,196,573	2,468,584	3,924,562	
Target shooting at an indoor range	2,952,173	2,250,774	3,653,573	
Skeet shooting	2,613,679	1,951,384	3,275,973	
Long-range shooting	2,543,890	1,890,024	3,197,756	
3-gun shooting	932,724	530,240	1,335,207	
West Region				
Any target shooting or sport shooting	12,288,624	10,992,760	13,584,489	
Target shooting with a handgun	8,618,627	7,486,663	9,750,591	
Target shooting with a rifle	7,551,182	6,479,249	8,623,116	
Target shooting at an outdoor range	6,732,981	5,711,912	7,754,049	
Any type of clay target shooting (sporting clays, skeet, or trap)	3,725,290	2,942,336	4,508,244	
Target shooting with a modern sporting rifle	3,472,320	2,714,192	4,230,448	
Target shooting at an indoor range	3,181,617	2,453,834	3,909,400	
Skeet shooting	2,729,206	2,052,157	3,406,255	
Sporting clays	2,427,687	1,787,258	3,068,117	
Long-range shooting	2,391,239	1,755,410	3,027,067	
Trap shooting	2,293,324	1,670,059	2,916,588	
3-gun shooting	598,976	275,275	922,677	

TRENDS IN PARTICIPATION IN TARGET AND SPORT SHOOTING

The current survey is similar to surveys conducted regarding Americans' target shooting activities in 2009 and 2012, to which the current survey's results are compared. The current survey found a 21.9% participation rate in any type of target or sport shooting, which is an increase over the 15.1% rate among Americans in 2009 and 17.4% in 2012. Additionally, as shown in the trends graph below, the participation rate in each shooting activity shows an increase (except for 3-gun shooting), although the increase is so small for some activities that the rate could be said to have stayed essentially the same. The tabulation compares estimated numbers of participants; the estimated number of target/sport shooters in 2014 increased 25.6% over the 2012 number.

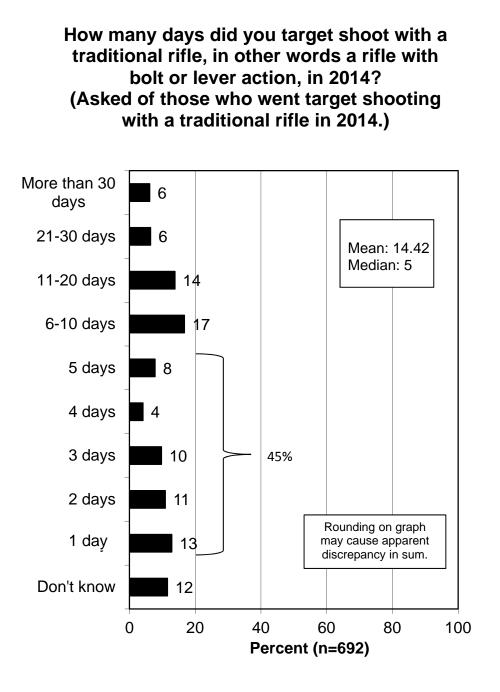


Activity	Estimated Total Participants* in 2009	Estimated Total Participants* in 2012	Estimated Total Participants* in 2014	%Change Compared to 2012
National				
Any target shooting or sport shooting	34,382,566	40,779,651	51,226,765	+25.6
Target shooting with a handgun	22,169,700	28,209,283	34,221,107	+21.3
Target shooting with a rifle	24,045,795	26,822,425	31,764,116	+18.4
Target shooting w/ a Modern Sporting Rifle	8,868,085	11,976,702	16,267,924	+35.8
Skeet shooting	6,979,680	12,090,346	12,596,361	+4.2
Trap shooting	7,582,479	10,116,684	11,227,278	+11.0
Sporting clays	8,399,989	8,789,340	13,033,633	+48.3
Any clay target shooting (skeet, trap, sc)	11,597,841	17,758,371	18,396,758	+3.6

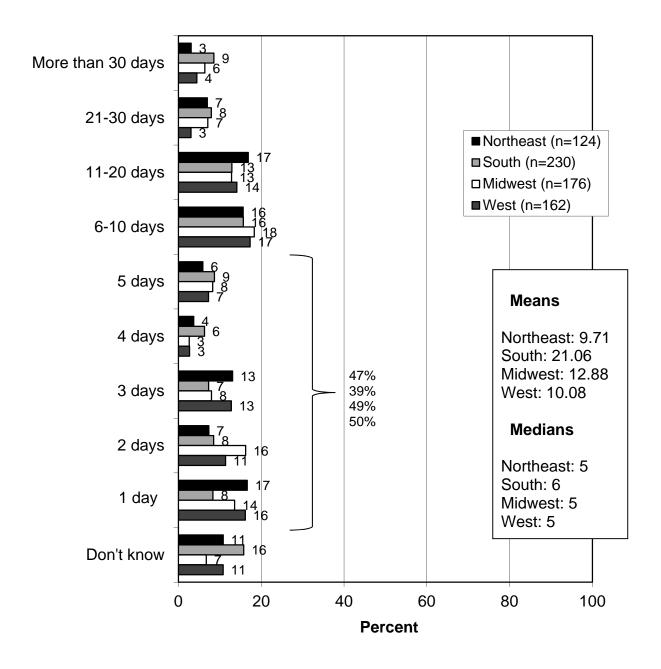
*Ages 18 years old and older

DAYS OF PARTICIPATION IN TARGET AND SPORT SHOOTING

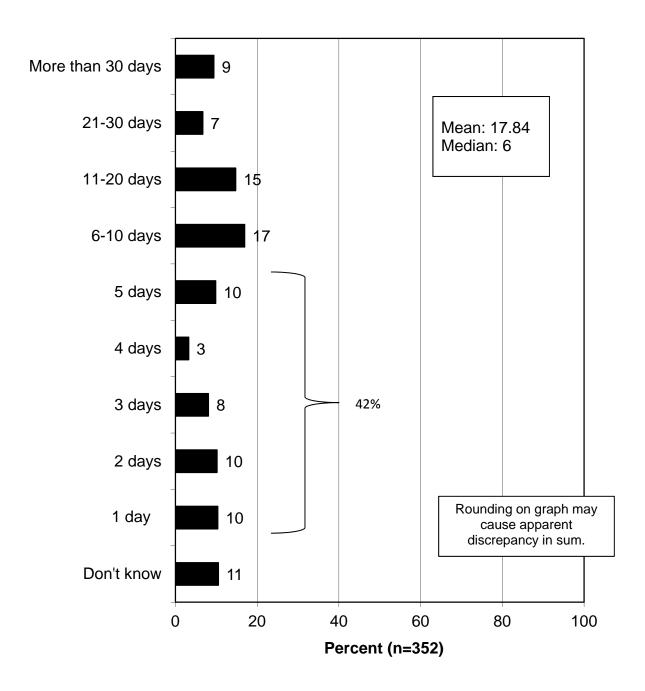
The survey asked about the days of participation. For each type of target or sport shooting, a graph shows the number of days of participation among those who participated. Regional graphs are also included for each activity. Following the graphs is a tabulation showing the mean and median number of days spent participating in the activity.



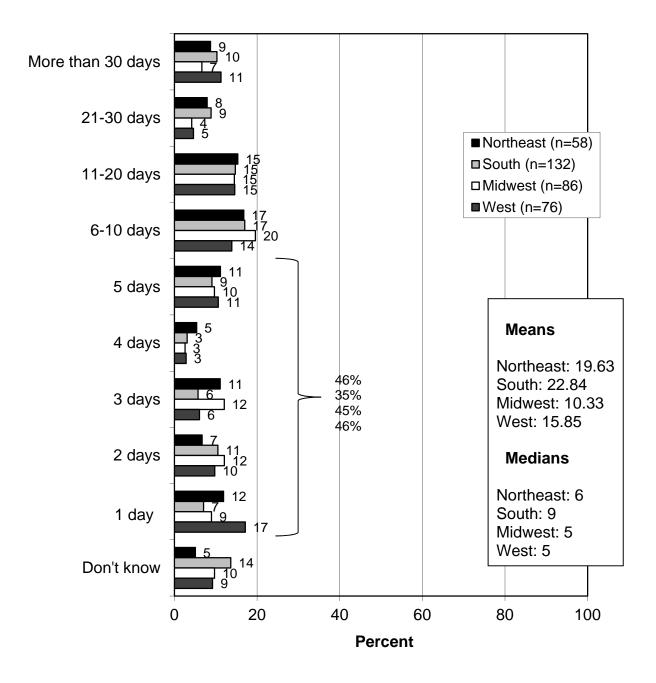
How many days did you target shoot with a traditional rifle, in other words a rifle with bolt or lever action, in 2014? (Asked of those who went target shooting with a traditional rifle in 2014.)



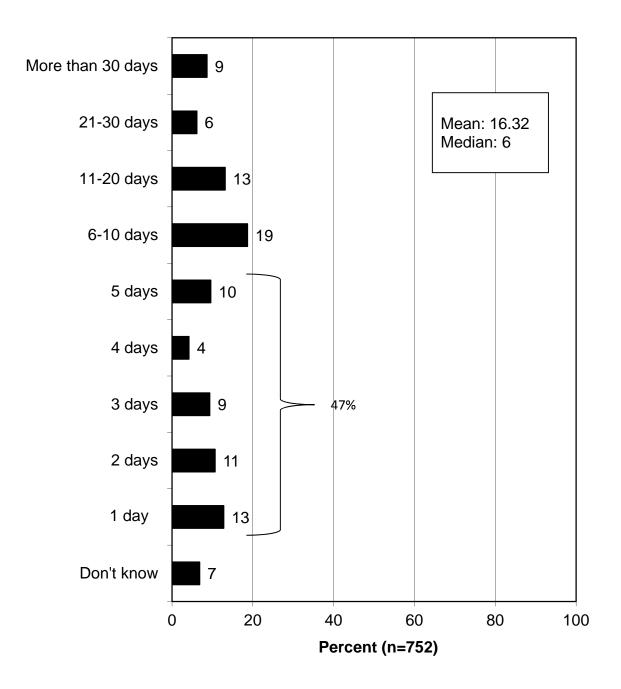
How many days did you target shoot with a modern sporting rifle in 2014? (Asked of those who went target shooting with a modern sporting rifle in 2014.)



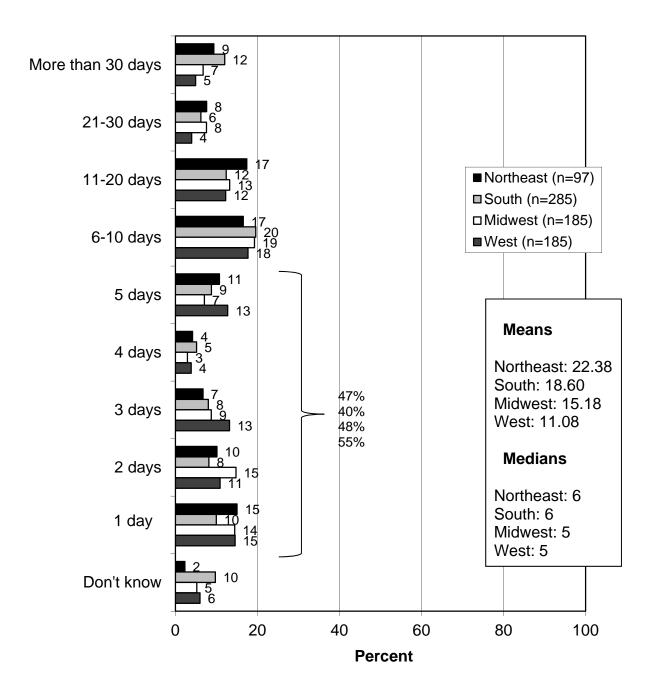
How many days did you target shoot with a modern sporting rifle in 2014? (Asked of those who went target shooting with a modern sporting rifle in 2014.)

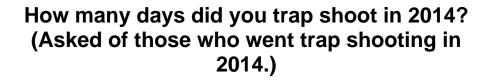


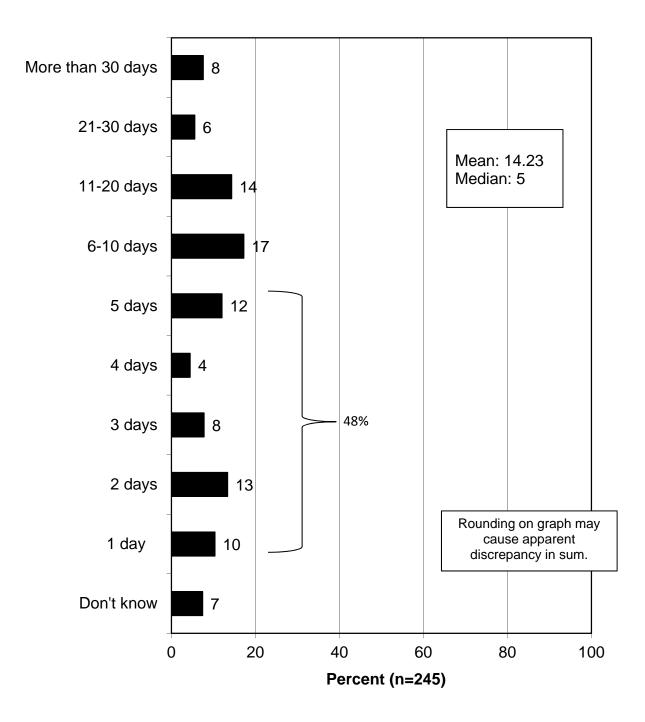
How many days did you target shoot with a handgun in 2014? (Asked of those who went target shooting with a handgun in 2014.)



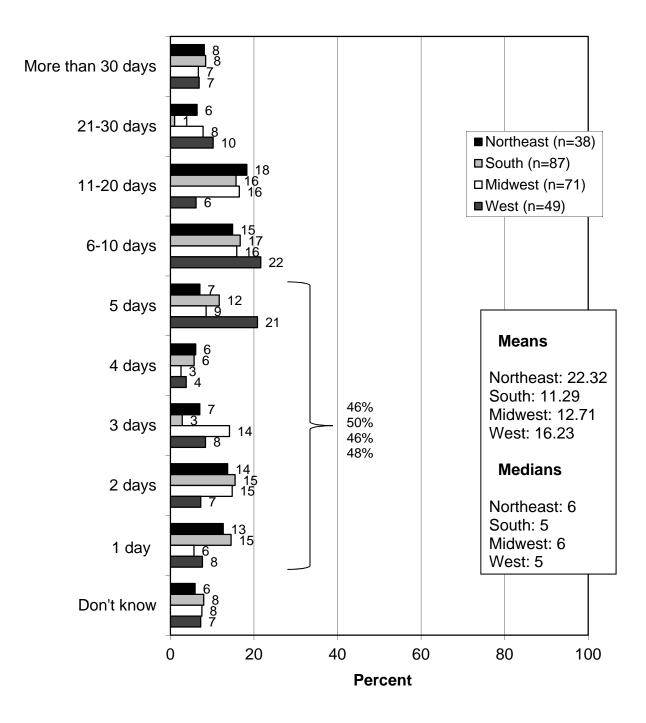
How many days did you target shoot with a handgun in 2014? (Asked of those who went target shooting with a handgun in 2014.)



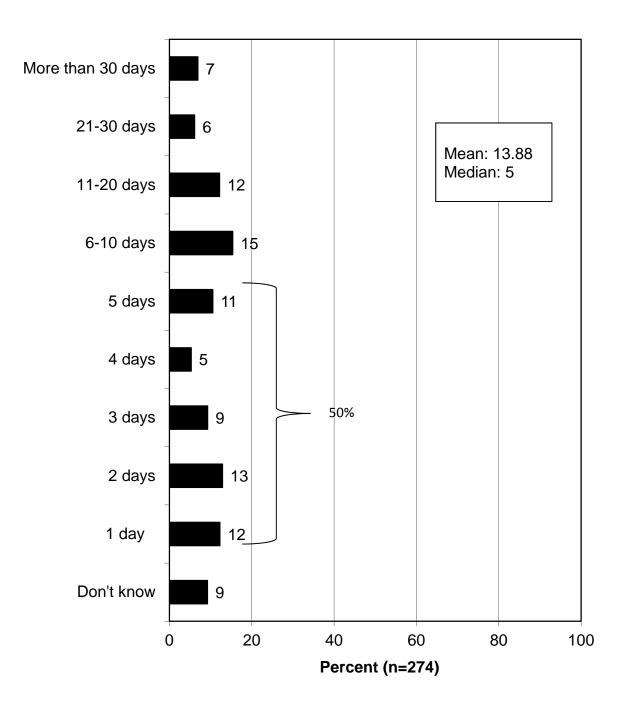




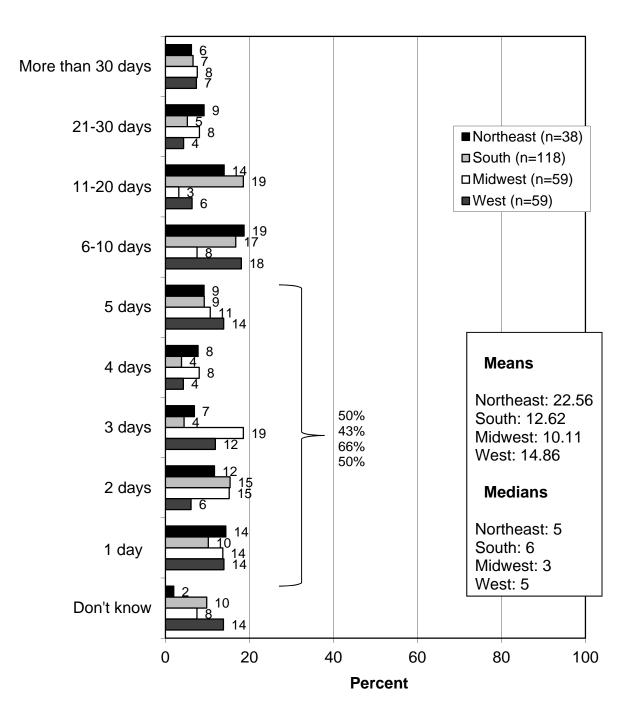
How many days did you trap shoot in 2014? (Asked of those who went trap shooting in 2014.)



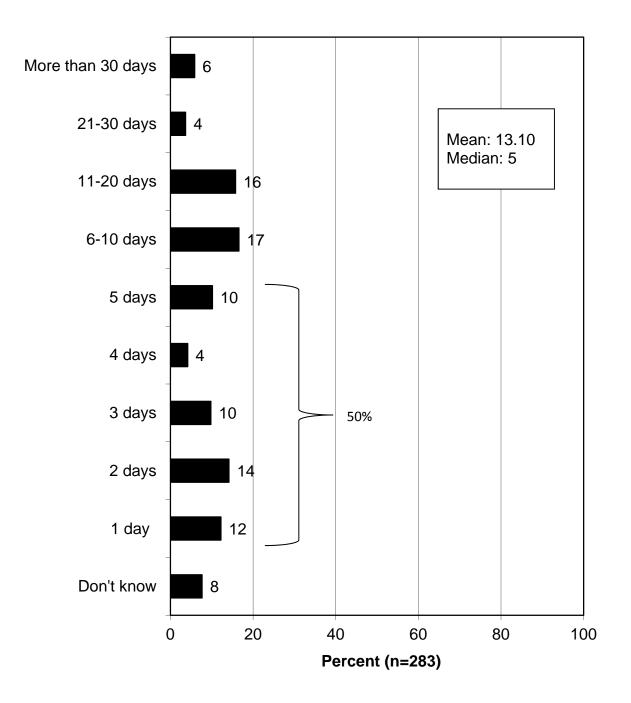
How many days did you skeet shoot in 2014? (Asked of those who went skeet shooting in 2014.)



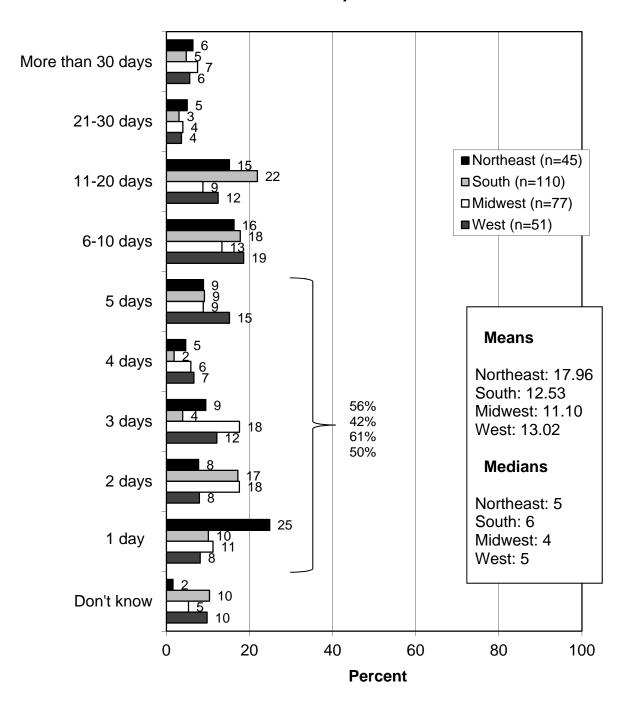
How many days did you skeet shoot in 2014? (Asked of those who went skeet shooting in 2014.)



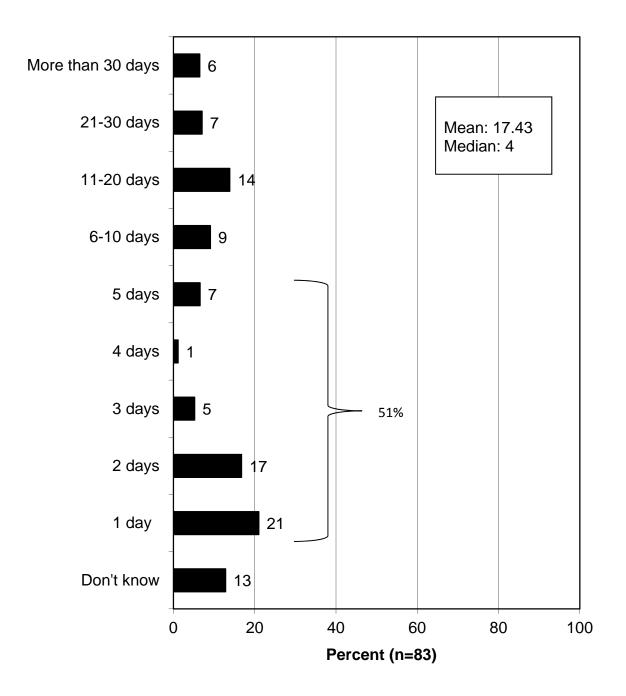
How many days did you shoot sporting clays in 2014? (Asked of those who shot sporting clays in 2014.)



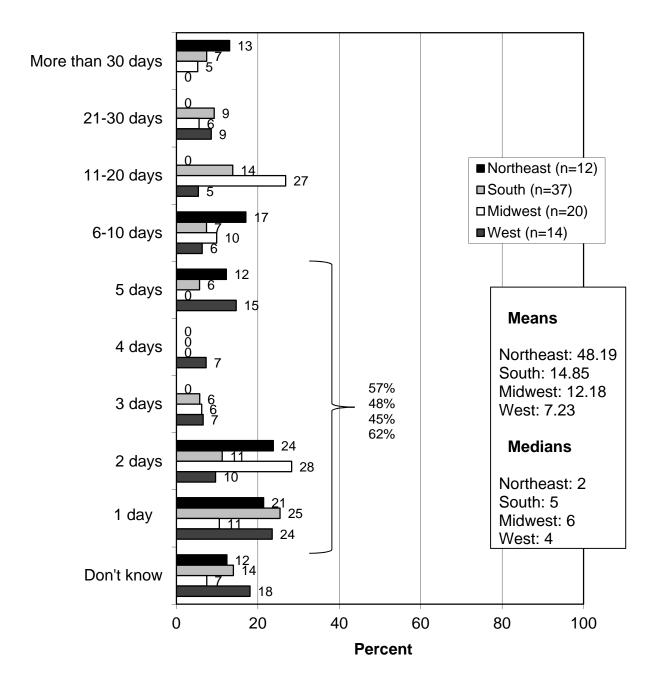
How many days did you shoot sporting clays in 2014? (Asked of those who shot sporting clays in 2014.)



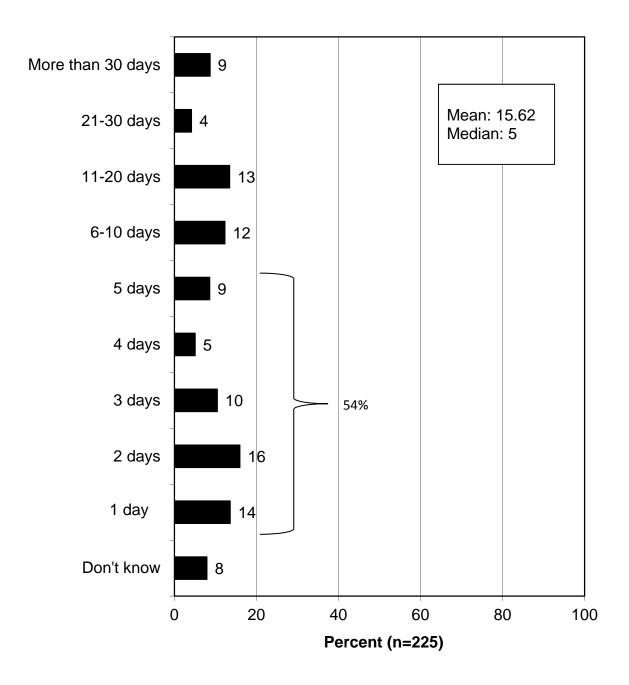
How many days did you go 3-gun shooting in 2014? (Asked of those who went 3-gun shooting in 2014.)



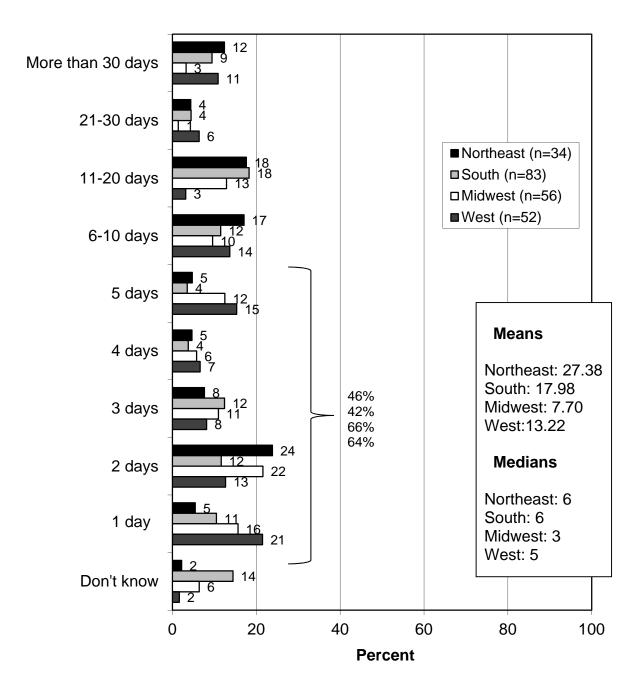
How many days did you go 3-gun shooting in 2014? (Asked of those who went 3-gun shooting in 2014.)



How many days did you go long-range target shooting in 2014? (Asked of those who went long-range target shooting in 2014.)



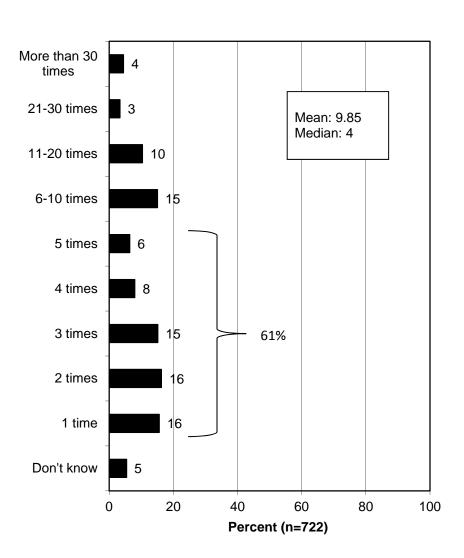
How many days did you go long-range target shooting in 2014? (Asked of those who went long-range target shooting in 2014.)



The tabulation below shows the mean and median days spent in the various shooting activities, among those who participated in each activity. Nationally, shooting with a modern sporting rifle is the activity with the highest mean days of participation, followed by 3-gun shooting. In each region, the top-ranked activity in mean days is shaded dark green; any activity within 2.0 percentage points of the top activity is shaded light green.

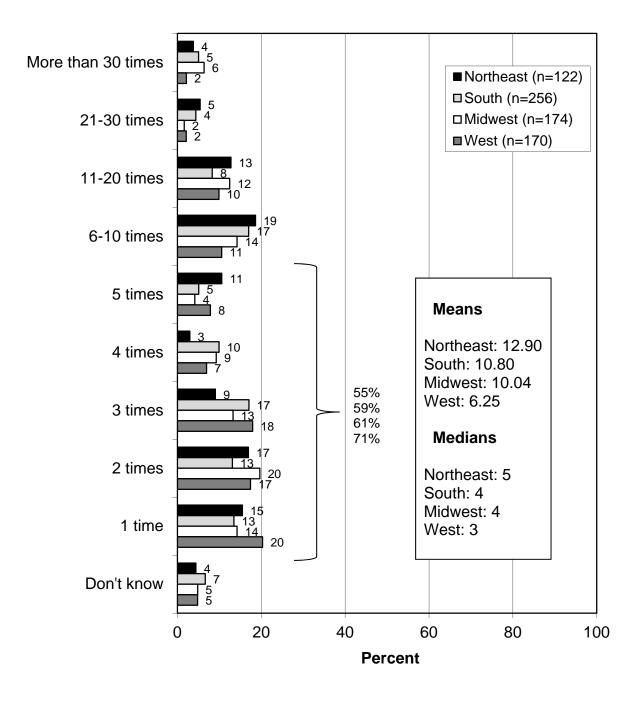
Activity	Mean Days Spent on Activity in 2014	Median Days Spent on Activity in 2014
National	·	
Target shooting with a traditional rifle	14.42	5
Target shooting with a modern sporting rifle	17.84	6
Target shooting with a handgun	16.32	6
Trap shooting	14.23	5
Skeet shooting	13.88	5
Sporting clays	13.10	5
3-gun shooting	17.43	4
Long-range shooting	15.62	5
Northeast Region		
Target shooting with a traditional rifle	9.71	5
Target shooting with a modern sporting rifle	19.63	6
Target shooting with a handgun	22.38	6
Trap shooting	22.32	6
Skeet shooting	22.56	5
Sporting clays	17.96	5
3-gun shooting	4.04	2
Long-range shooting	10.53	5
South Region		
Target shooting with a traditional rifle	21.06	6
Target shooting with a modern sporting rifle	22.84	9
Target shooting with a handgun	18.60	6
Trap shooting	11.29	5
Skeet shooting	12.62	6
Sporting clays	12.53	6
3-gun shooting	14.85	5
Long-range shooting	17.98	6
Midwest Region		
Target shooting with a traditional rifle	12.88	5
Target shooting with a modern sporting rifle	10.33	5
Target shooting with a handgun	15.18	5
Trap shooting	12.71	6
Skeet shooting	10.11	3
Sporting clays	11.10	4
3-gun shooting	12.18	6
Long-range shooting	7.70	3
West Region		
Target shooting with a traditional rifle	10.08	5
Target shooting with a modern sporting rifle	15.85	5
Target shooting with a handgun	11.08	5
Trap shooting	16.23	5
Skeet shooting	14.86	5
Sporting clays	13.02	5
3-gun shooting	7.23	4
Long-range shooting	13.22	5

Another question looked at the number of times sport shooters had target shot at a range in 2014. A graph showing regional results is on the next page.

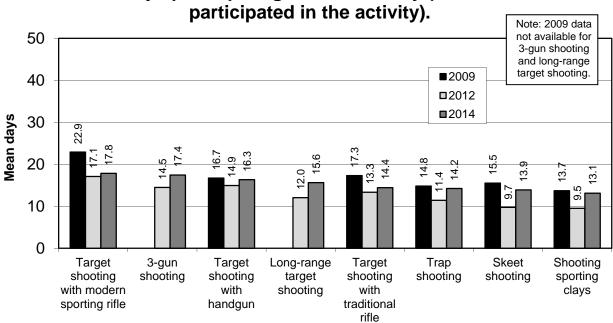


Approximately how many times did you go target shooting at a range in 2014? (Asked of those who shot at a range in 2014.)

Approximately how many times did you go target shooting at a range in 2014? (Asked of those who shot at a range in 2014.)



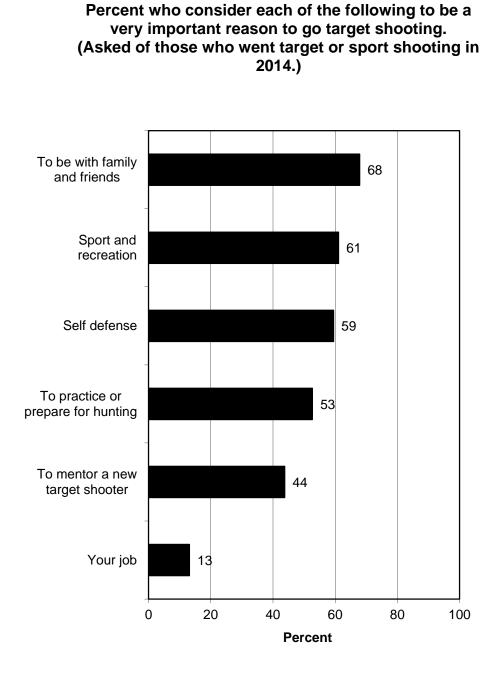
The following graph shows the trend in mean days of participating in the various shooting activities. In general, mean days are slightly more in 2014 than in 2012.



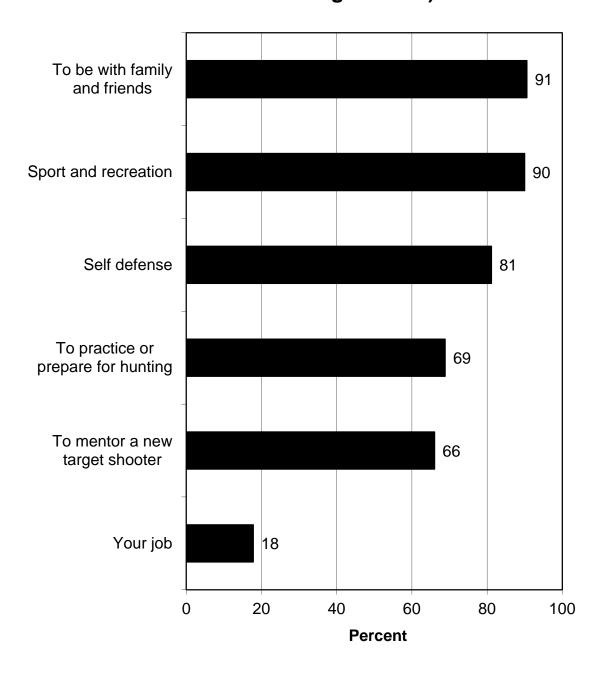
Mean days participating in each activity (of those who participated in the activity)

MOTIVATIONS FOR TARGET AND SPORT SHOOTING

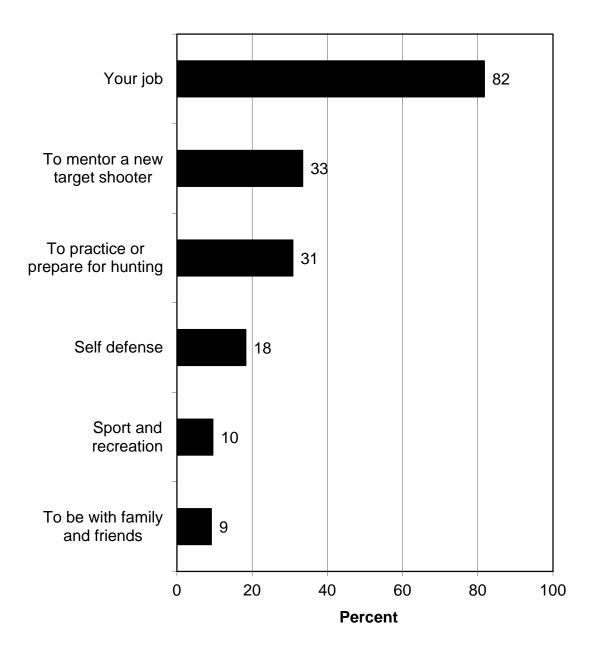
The survey asked a series of questions examining motivations for target/sport shooting. The social reasons top the list: to be with family and friends (68% said it was *very* important) and for the sport and recreation (61%). More practical reasons are lower down, but still very important to a majority: self defense (59%) and to practice or prepare for hunting (53%). (There are three graphs of overall results: *very* important by itself, *very* or *somewhat* important combined, and *not at all* important. There are then the same three graphs regionally.)



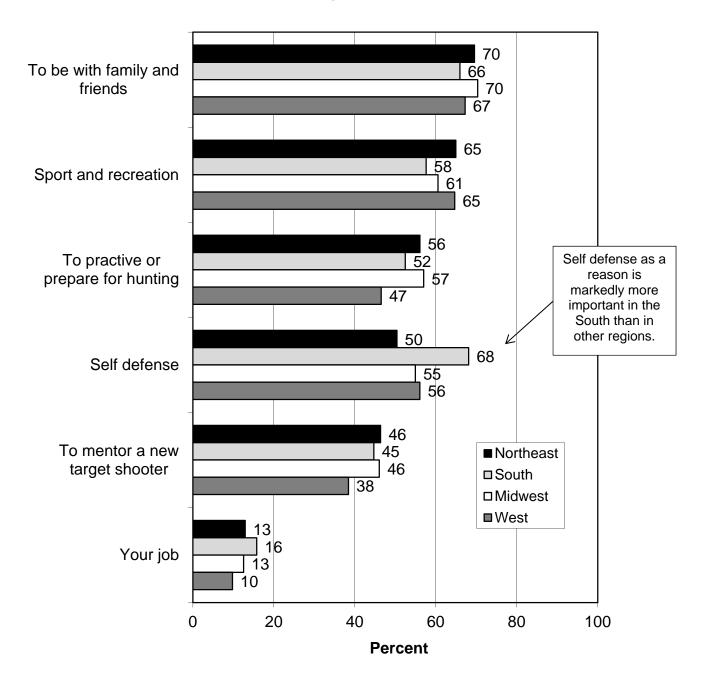
Percent who consider each of the following to be a very or somewhat important reason to go target shooting. (Asked of those who went target or sport shooting in 2014.)



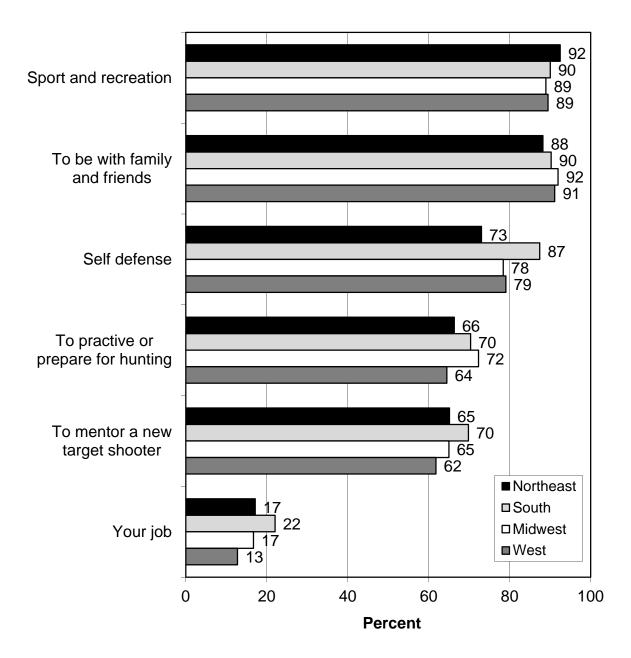
Percent who consider each of the following to be not at all important as a reason to go target shooting. (Asked of those who went target or sport shooting in 2014.)



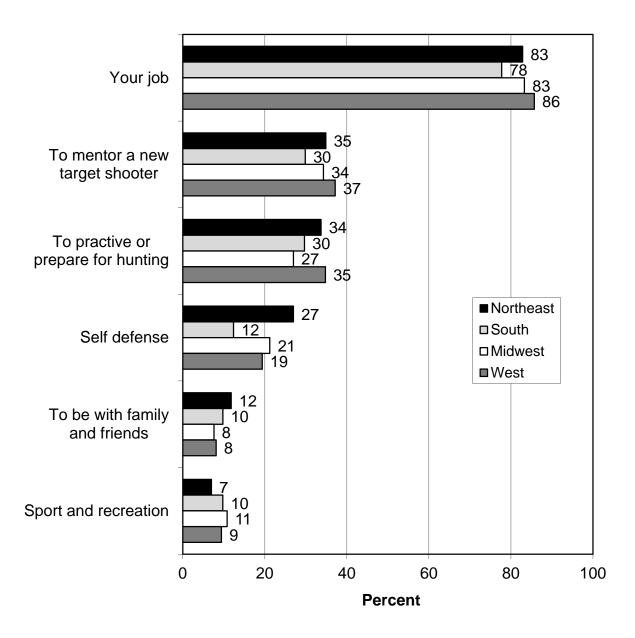
Percent who consider each of the following to be a very important reason to go target shooting. (Asked of those who went target or sport shooting in 2014.)



Percent who consider each of the following to be a very or somewhat important reason to go target shooting. (Asked of those who went target or sport shooting in 2014.)



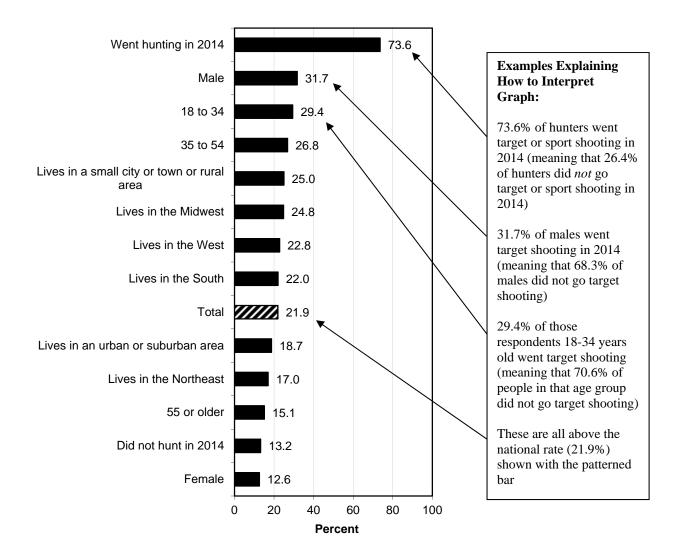
Percent who consider each of the following to be not at all important as a reason to go target shooting. (Asked of those who went target or sport shooting in 2014.)



DEMOGRAPHIC CHARACTERISTICS OF SHOOTERS

This report includes an analysis of the demographic makeup of shooters. As shown in the graph that follows, participation in target and sport shooting is correlated with hunting participation, being male, being 18 to 34 years old, and being on the rural side of the urban-rural continuum. The Midwest Region is positively correlated, while the Northeast Region is negatively correlated.

The graph shows the rate of target/sport shooting participation in the population as a whole (21.9%, the bar that is patterned in the middle of the graph). Those demographic groups above the patterned bar have participation rates higher than the overall rate. For instance, 31.7% of males participated in target/sport shooting (compared to only 12.6% of females, shown in the last bar at the bottom of the graph).



Percent of each of the following groups who target or sport shot in 2014:

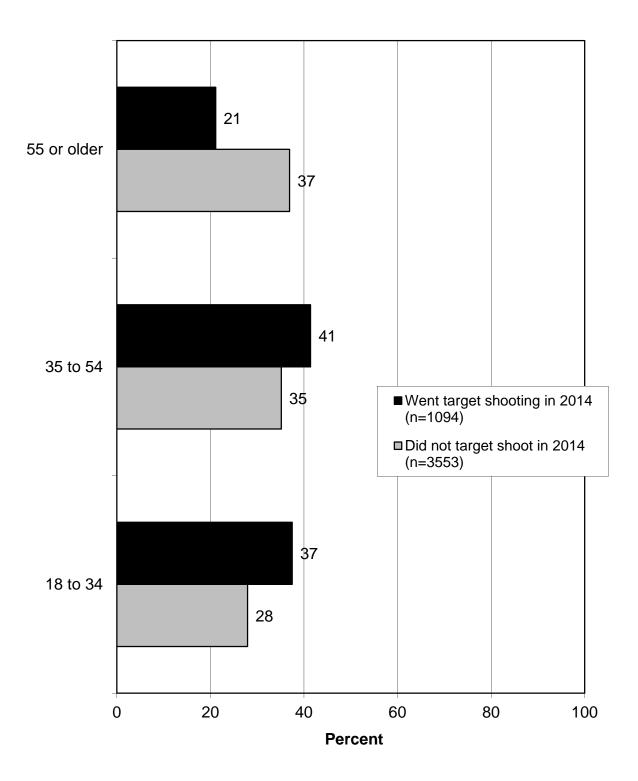
The following crosstabulations reinforce the findings already discussed. Nonetheless, it is interesting to see the exact breakdown of target/sport shooters.

Target/sport shooters are mostly male (70% of 2014 sport shooters are male, compared to 42% of non-shooters). Note, however, that nearly a third of shooters are female.

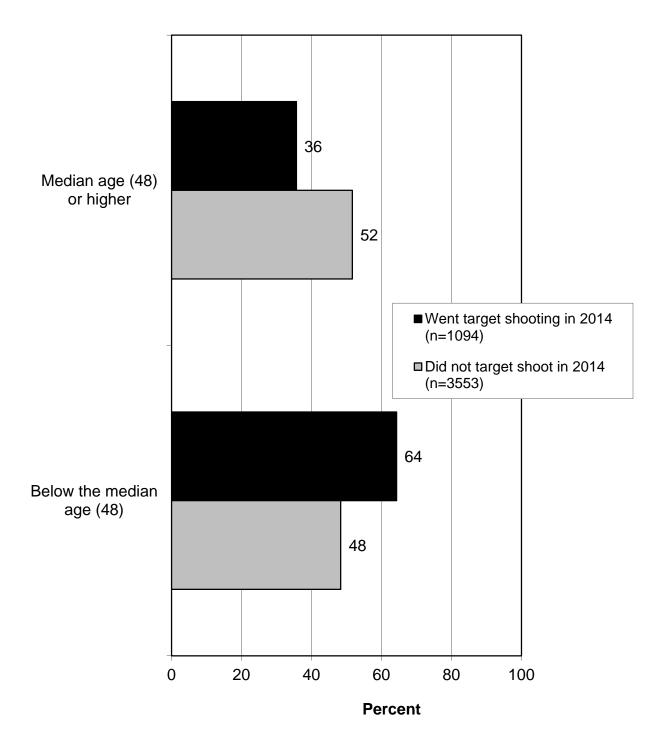
70 Male 42 ■Went target shooting in 2014 (n=1114) Did not target shoot in 2014 (n=3989) 30 Female 58 0 20 40 60 80 100 Percent

Respondent's gender (observed by interviewer; not asked).

Target/sport shooters tend to be younger (37% of 2014 sport shooters are 18 to 34 years old, compared to 28% of non-shooters—the median age split is also shown). The difference is quite marked in the "55 years old and older" category.

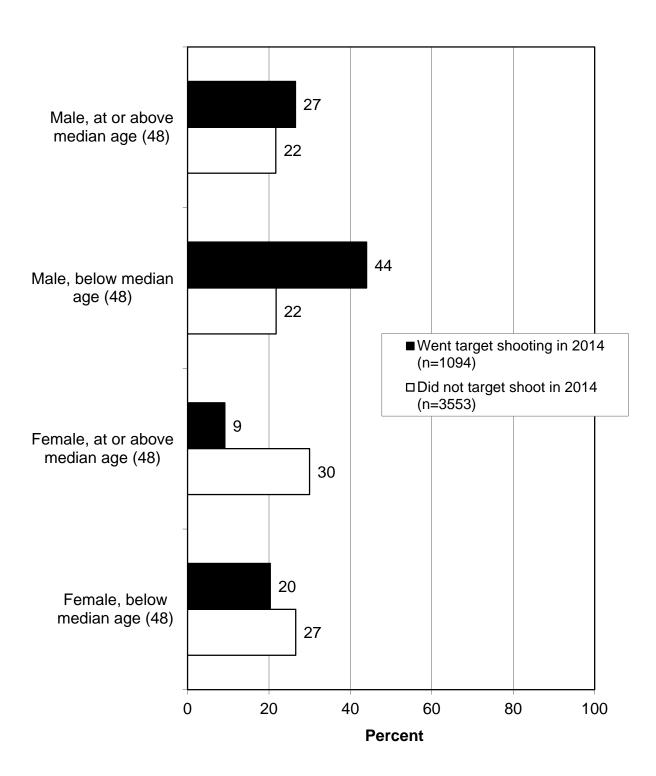


Respondent's age.



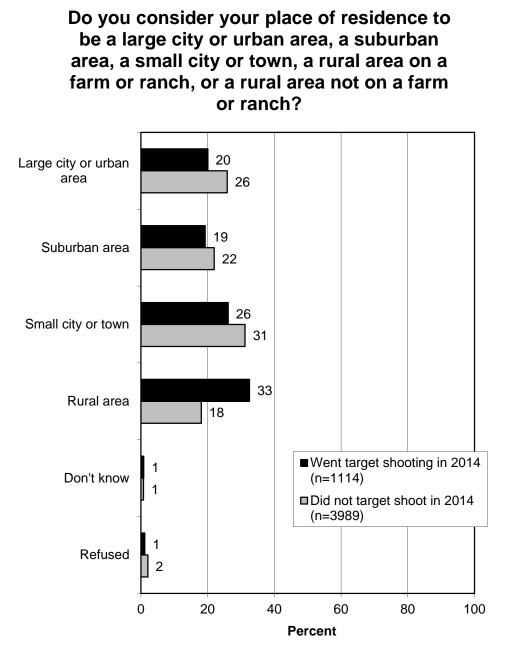
Median split of age.

In particular, women older than the median age are not well represented among active target/sport shooters in 2014.

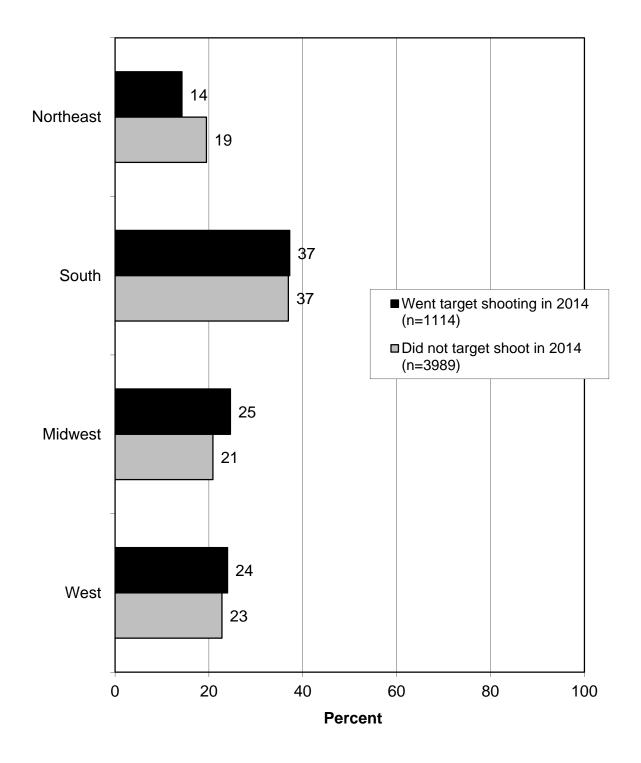


Gender / median age categories.

While shooters are more rural than urban (33% among 2014 shooters, compared to 18% among non-shooters), it is worth noting that 2 in 5 shooters are from a large city/urban area or a suburban area.

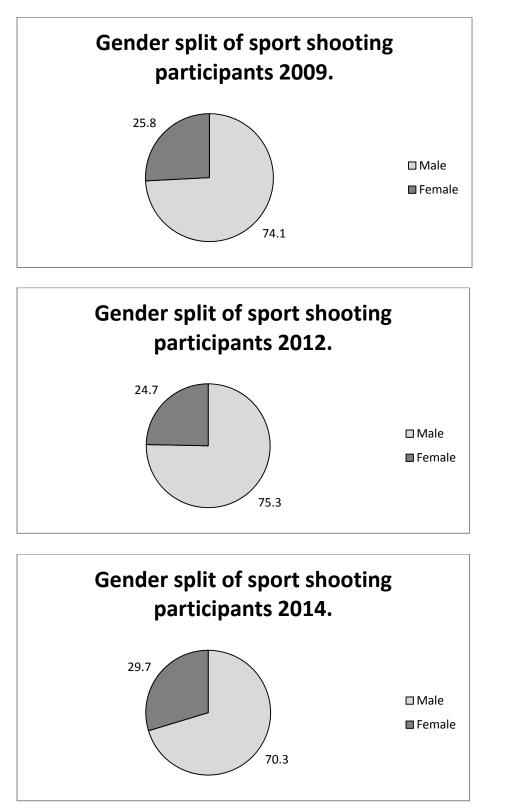


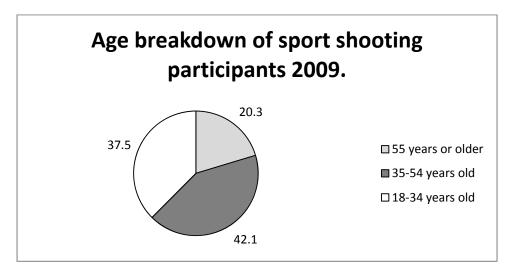
Finally, the Midwest Region is correlated to target/sport shooting participation, although the greatest number of target/sport shooters are from the South relative to the other regions.



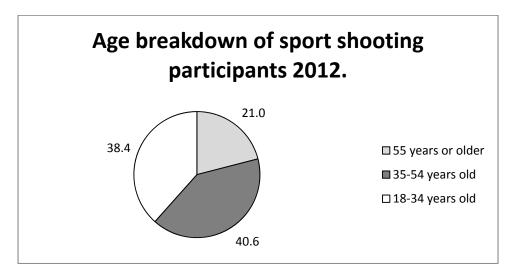
U.S. Census Region.

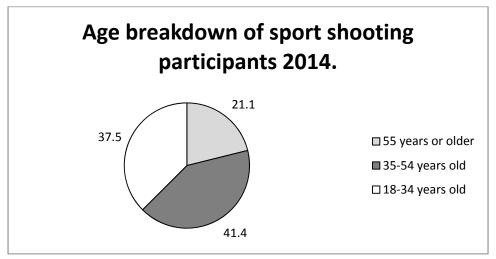
The following four pages present demographic trends data for the surveys in 2009, 2012, and 2014. Women make up a larger proportion in 2014 than in previous years.



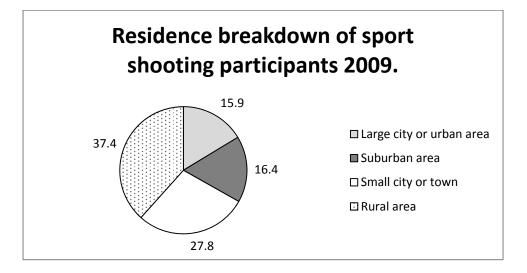


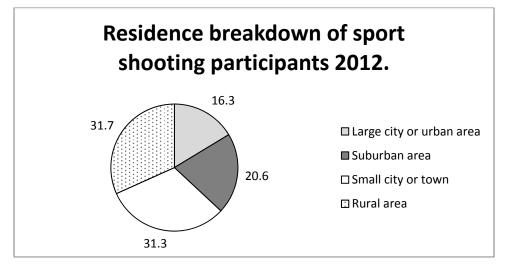
The trends regarding age are fairly consistent across the three survey years.



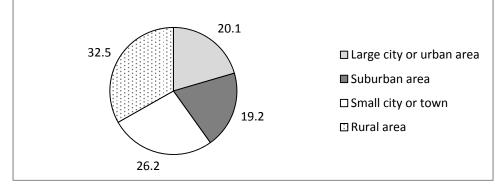


In 2014, the large city/urban areas and the suburban areas make up a greater proportion of target/sport shooters than they did in 2009.

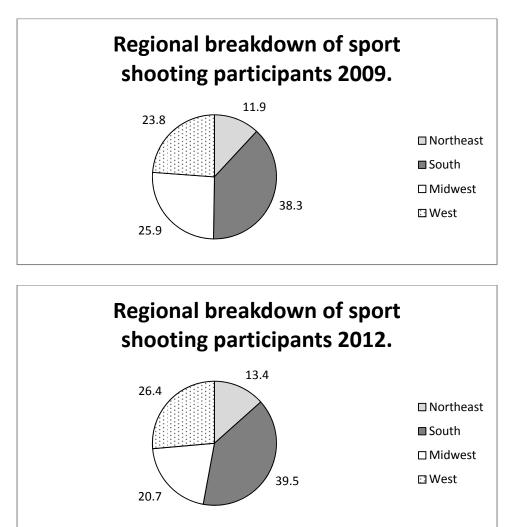


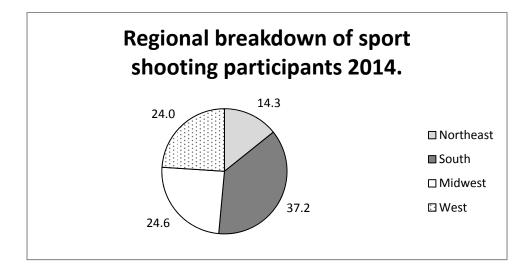


Residence breakdown of sport shooting participants 2014.



Between 2009 and 2012, the Midwest lost some share of the pie to the other regions; however, in 2014, the Midwest had gained back some of the share so that the regional proportions are not markedly different between 2009 and 2014.

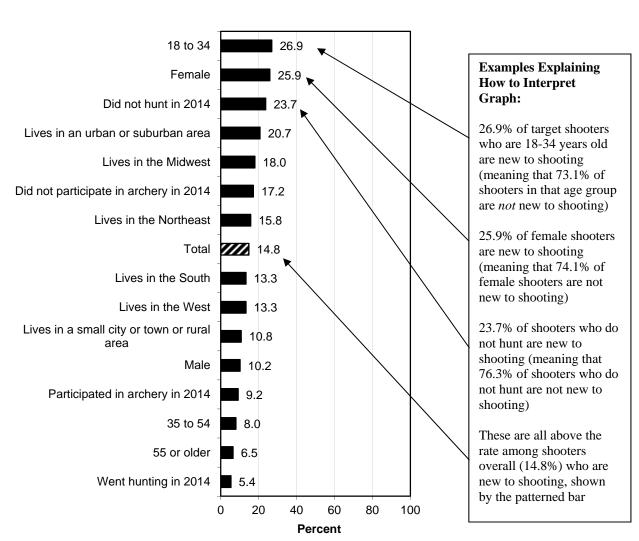




DEMOGRAPHIC CHARACTERISTICS OF NEW SHOOTERS

For this analysis, new shooters were defined as those who started shooting within the past 5 years. The analysis first shows that 15% of those who participated in target or sport shooting in 2014 were first initiated into the shooting sports within the previous 5 years.

The analysis looked at the group of all target/sport shooters and then separated out new shooters. Among all target shooters, these new shooters are correlated with the following demographic factors, as shown in the graph below: being 18 to 34 years old, being female, not being a hunter, and living on the urban side of the urban-rural continuum. In this graph, 14.8% of all shooters are new shooters (the patterned bar). Those groups above the bar are positively correlated with being a new shooter. For instance, 25.9% of female target/sport shooters are new shooters (compared to 10.2% of male shooters being new shooters).



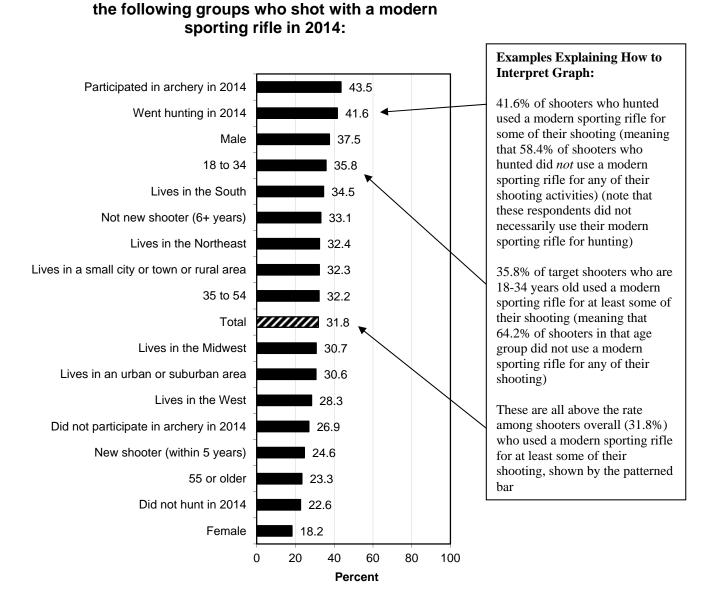
Among all target/sport shooters, the percent of each of the following groups who are new shooters:

DEMOGRAPHIC CHARACTERISTICS OF MODERN SPORTING RIFLE SHOOTERS

52

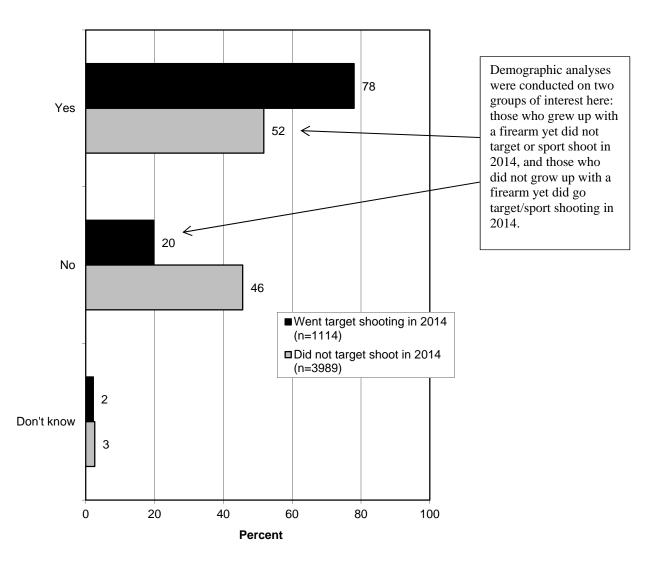
The analyses explored the demographic makeup of those who shoot with a modern sporting rifle. As shown below, the analysis looks at subgroups within all target/sport shooters. This analysis shows that target/sport shooters who also participated in archery are positively correlated with shooting a modern sporting rifle. In addition, positive correlations were found to target/sport shooters who hunt and to male target/sport shooters. The groups with participation rates in shooting a modern sporting rifle that are higher than the rate of such use overall are at the top of the graph, above the percentage of shooters overall who used a modern sporting rifle (31.8%, shown by the patterned bar).

Among target shooters, the percent of each of



GROWING UP WITH FIREARMS AND ITS EFFECT ON SHOOTING PARTICIPATION

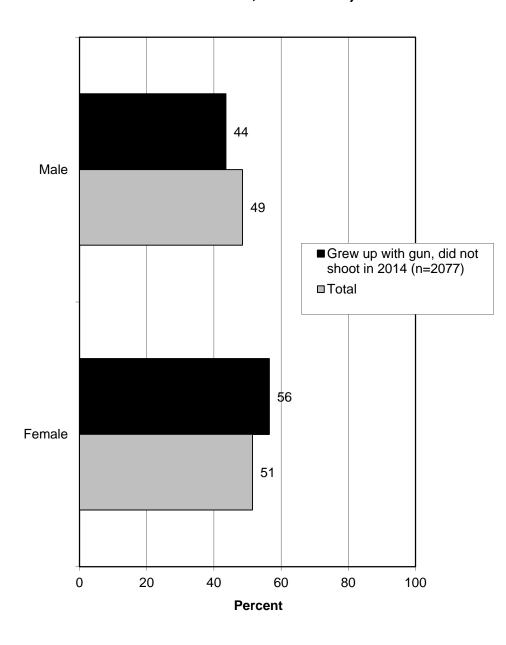
Another aspect of shooting that was analyzed was how growing up with a firearm in the house affects target/sport shooting participation. Shooters are much more likely to have grown up with a firearm, compared to non-shooters. The survey asked all respondents if they had grown up with a firearm in their household, and those who shot in 2014 were much more likely to say yes: 78% to 52%. While this is a fairly obvious finding, the question allows the identification of defined market groups, as discussed in the following pages.



When you were growing up, did your family own any firearms?

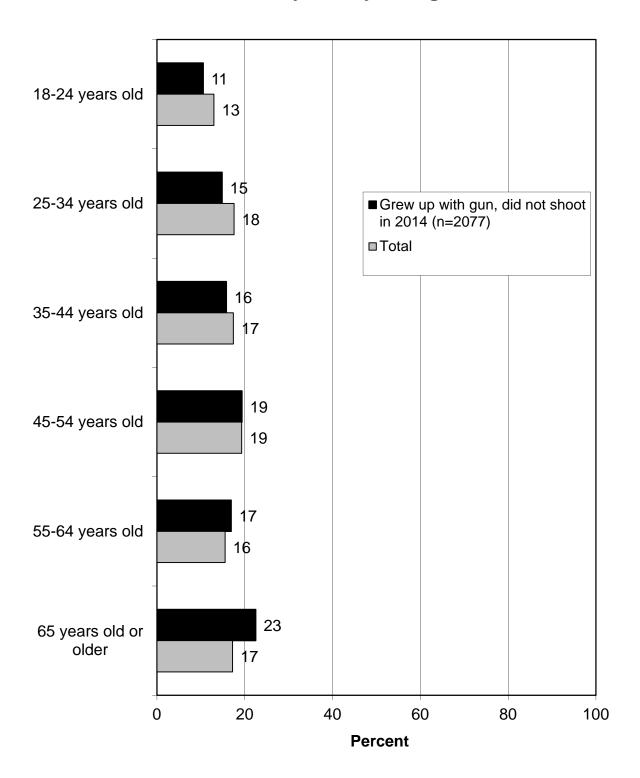
There are two groups of interest in the previous graph. One group is of people who would seem predisposed to show interest in target/sport shooting—those who grew up with a firearm—but did not go target/sport shooting in 2014. They make up 52% of those who did not shoot in 2014. They are examined first, then the second group will be examined.

The graph below shows the gender of those non-shooters who grew up with a firearm compared to the entire sample (i.e., all Americans). This group has slightly more women than the population as a whole.

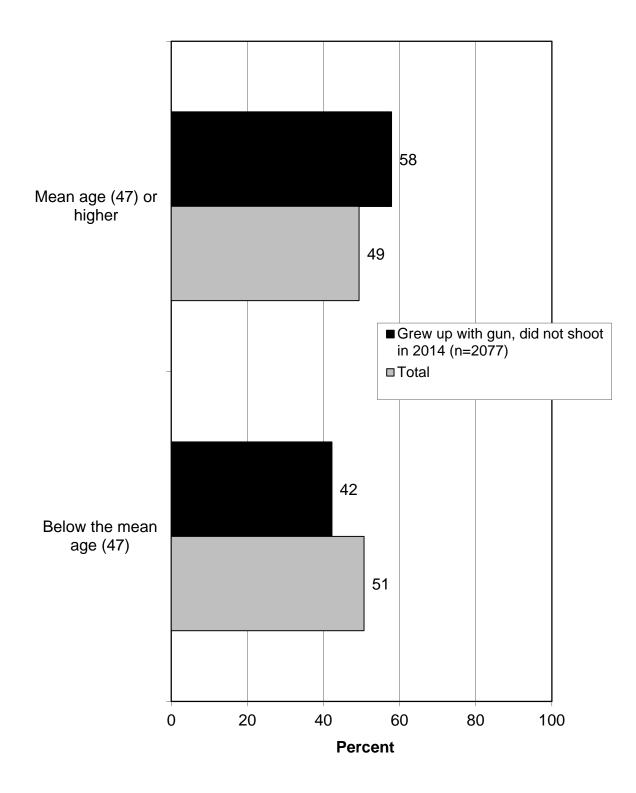


Respondent's gender (observed by interviewer; not asked).

Non-shooters who grew up with a firearm are a bit older, compared to the population as a whole, as demonstrated by the two age crosstabulations.



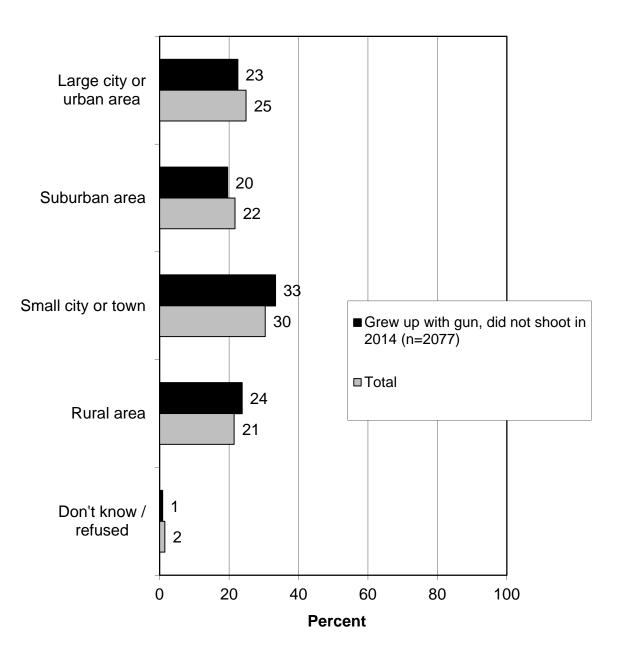
May I ask your age?



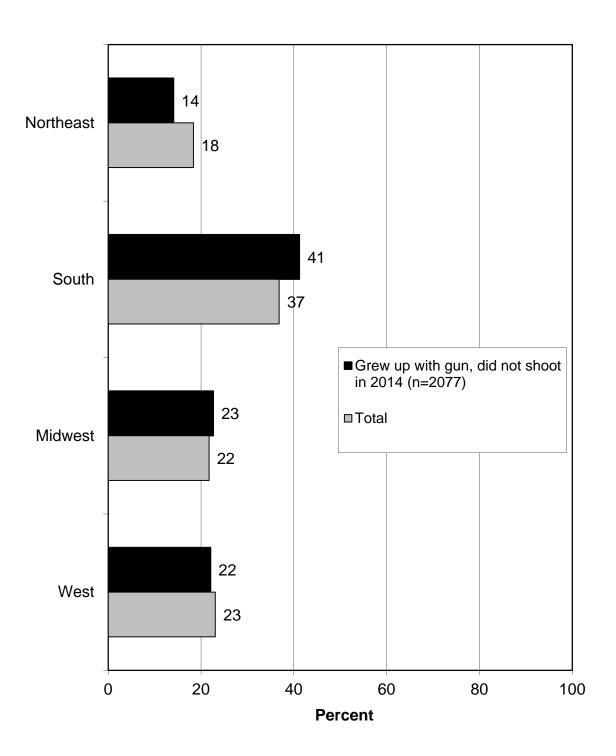
Mean split of age.

There are no marked differences in where they reside (on the rural to urban scale) among those non-shooters in 2014 who grew up with a firearm, compared to the population as a whole.

Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm or ranch, or a rural area not on a farm or ranch?



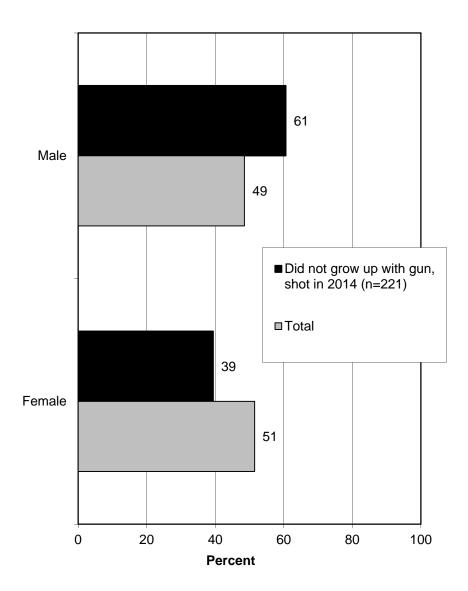
The regional differences, although slight, suggest that those from the South are more likely than the population as a whole to have grown up with a firearm yet not gone target or sport shooting in 2014.



U.S. Census Region.

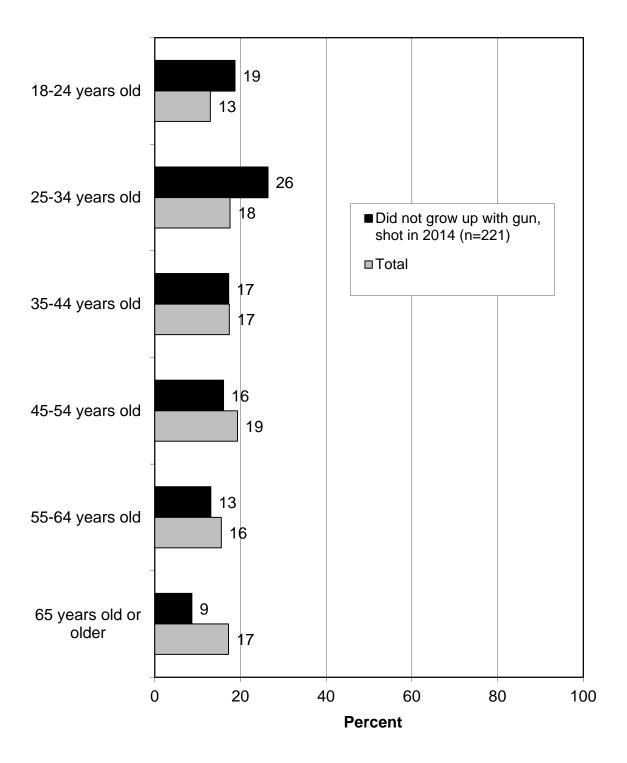
The second group of interest consisted of those who went shooting in 2014 but did *not* grow up with a firearm. These would be people who appear to have entered the sport of shooting in a non-traditional path (the "traditional" path is being initiated into shooting as a child by a family member). The following shows some of the demographic characteristics of this group.

Although there has been a noted influx of women into the shooting sports in recent years, it is still males who make up the majority of those who did not grow up with a firearm but nonetheless went target or sport shooting in 2014 (61% are men, while 39% are women), and males are more *likely* than females to not grow up with a firearm yet have gone shooting in 2014 (compare the 61% in the group as opposed to 49% overall).

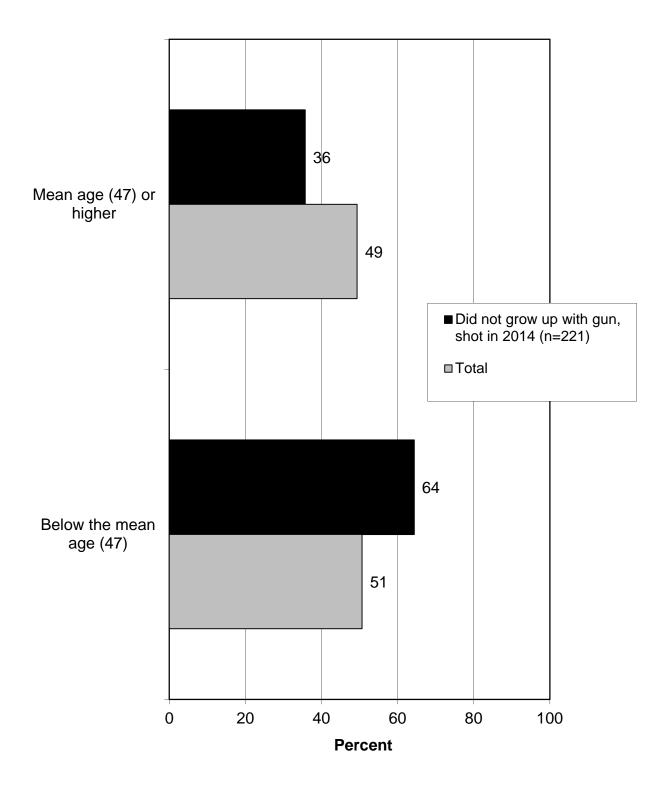


Respondent's gender (observed by interviewer; not asked).

Those shooters in 2014 who came into shooting in a non-traditional way tend to be younger than the population as a whole: the two youngest age categories below show this. A split by mean age is also shown.



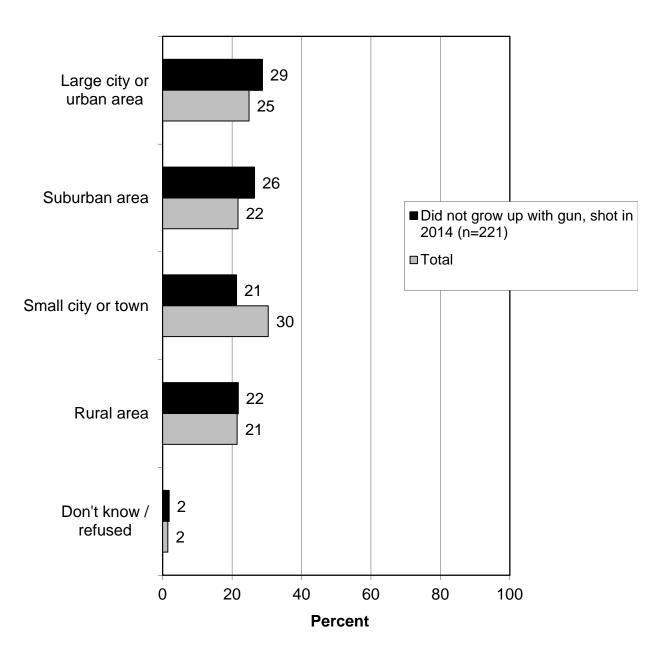
May I ask your age?



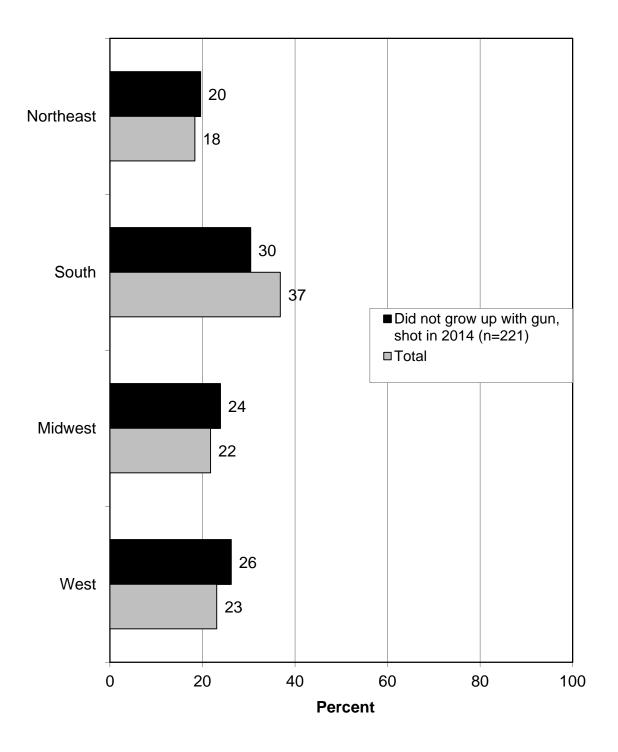
Mean split of age.

These 2014 shooters from a non-firearm background tend to be more urban than the population as a whole.

Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm or ranch, or a rural area not on a farm or ranch?



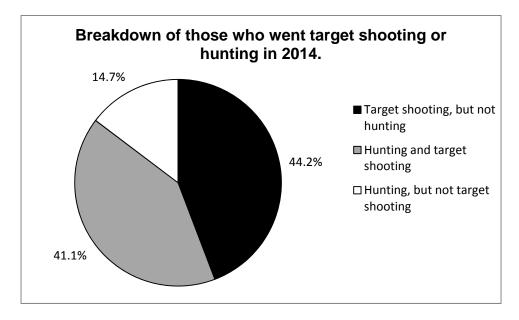
The final crosstabulation in this section shows the regions; the South is underrepresented in the group who shot in 2014 yet did not grow up with a firearm, compared to the population as a whole.



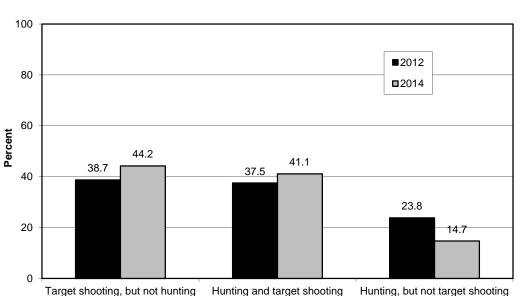
U.S. Census Region.

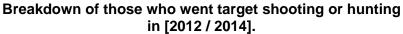
OVERLAP OF PARTICIPATION IN TARGET SHOOTING AND HUNTING

The survey also obtained information on participation in hunting, and the pie graph below shows the proportions of target shooters, hunters, and those who do both. The entire pie consists of those who *either* hunted (with firearms or archery) or went target/sport shooting. About 2 in 5 of those who either hunted or went target/sport shooting did both activities.



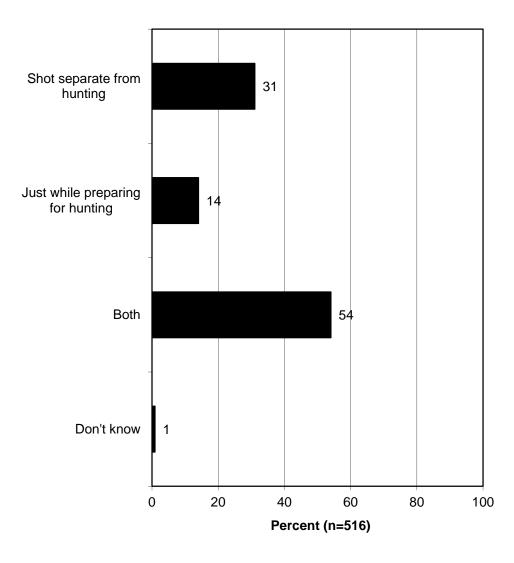
A trend graph shows that hunting exclusive of target/sport shooting has declined from 2012 to 2014.





Another interesting finding is that very few who indicated participating in both hunting with a firearm and target/sport shooting indicate that their target/sport shooting was done "just while preparing for hunting." In other words, most of those who do both firearm hunting and target/sport shooting generally spend some of their time simply shooting separate from their hunting. (Note that in the graph below, those hunters who used only archery equipment were not asked the question.)

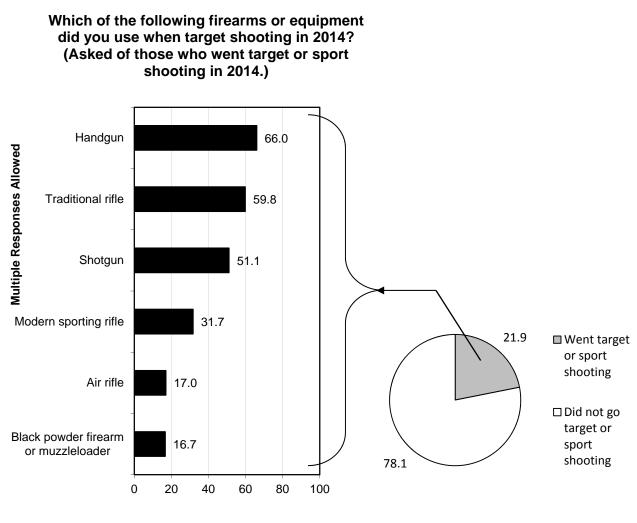
Would you say you went target shooting separate from hunting, or just while preparing for hunting, or both? (Asked of those who went sport shooting and hunting in 2014.)



TYPES OF FIREARMS USED IN TARGET/SPORT SHOOTING AND HUNTING

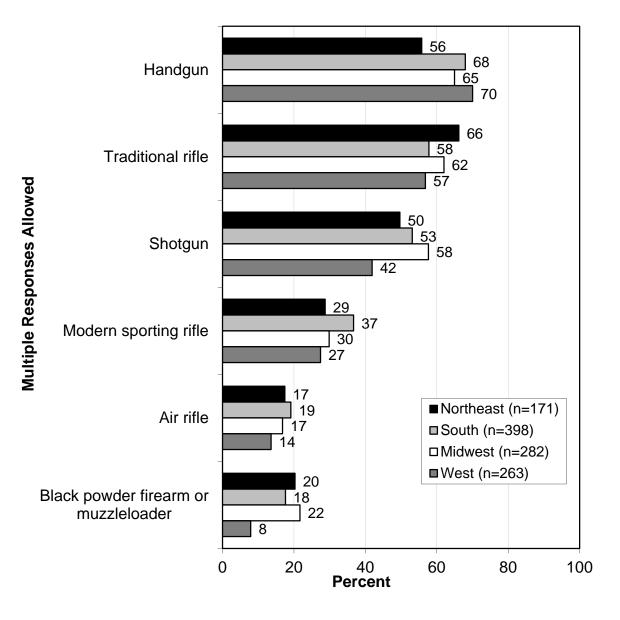
The graph below shows the percentages of target or sport shooters using various types of firearms (in total, 21.9% of all U.S. residents went target or sport shooting). Handguns and traditional rifles top the list, closely followed by shotguns. For each of these three types, a majority of those who go target or sport shooting use it. Graphs of regional results and trends follow.

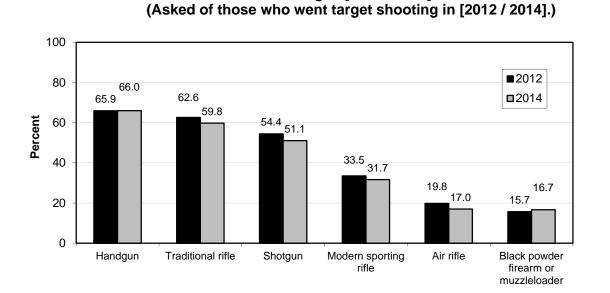
Note that two questions in the survey asked about equipment, such as handguns or modern sporting rifles. In the first, respondents were asked if they had participated in various activities, such as "target shooting with a handgun" or "target shooting with a modern sporting rifle." A later question simply asked all target or sport shooters to name all the types of firearms that they had used in 2014 for any activities. Typically, these percentages are slightly more than those who reported that they "went target shooting" with the type of firearm. This discrepancy is accounted for by those who may have done other activities with these firearms (e.g., plinking, hunting) but not "target shooting" with them.



Percent (n=1114)

Which of the following firearms or equipment did you use when target shooting in 2014? (Asked of those who went target or sport shooting in 2014.)





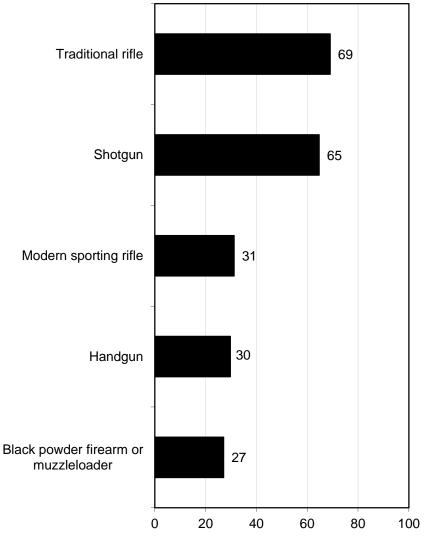
The trends suggest much consistency in the choice of firearms from 2012 to 2014.

Which of the following firearms or equipment did you use when target shooting in [2012 / 2014]?

Multiple Responses Allowed

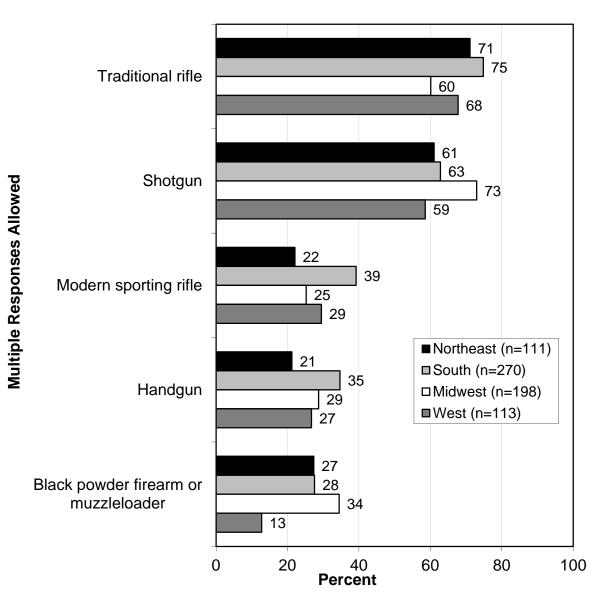
The survey also asked those who hunted to indicate the various firearms they used while hunting in 2014. While traditional rifles and shotguns top the list (69% and 65%, respectively), about a third use modern sporting rifles and handguns as part of their hunting (31% and 30%, respectively). A regional graph is included.

Please indicate which of the following firearms you used for hunting in 2014. What about...? (Asked of those who went hunting with firearms in 2014.)



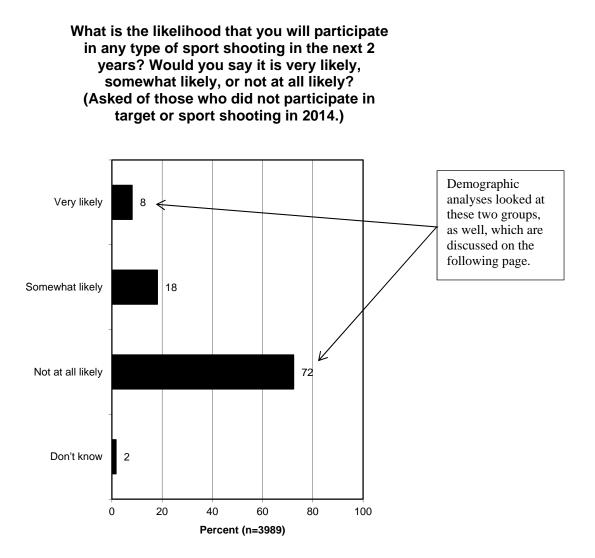
Percent (n=692)

Please indicate which of the following firearms you used for hunting in 2014. What about...? (Asked of those who went hunting with firearms in 2014.)

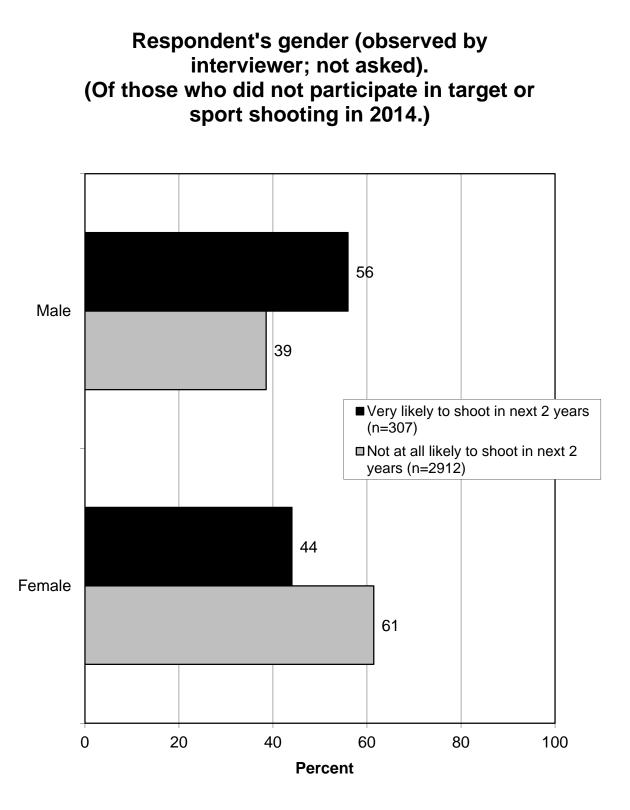


LIKELIHOOD TO GO TARGET OR SPORT SHOOTING IN THE FUTURE

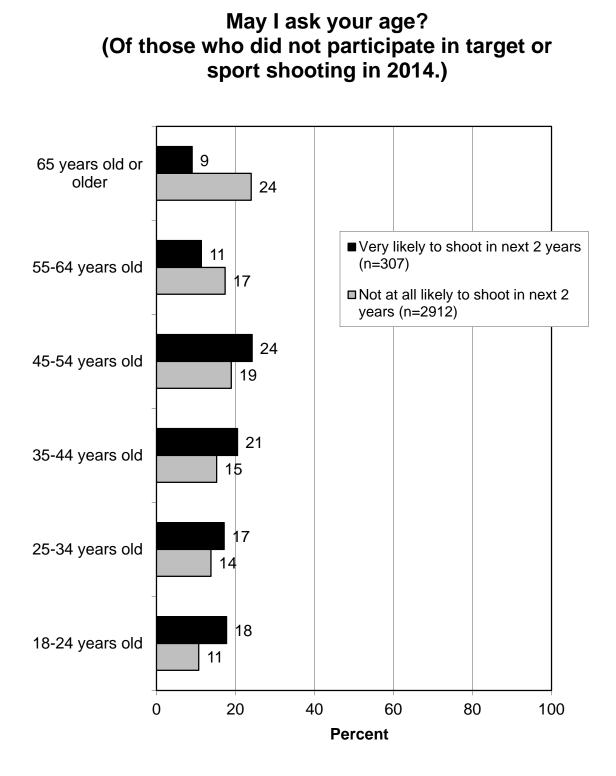
There appears to be some interest in target or sport shooting among those who did not go target or sport shooting in 2014: 8% of those who did *not* participate in target or sport shooting in 2014 said that they would be *very* likely to participate in target or sport shooting in the following 2 years (see graph below). Demographic analyses compare those who say that they are *very* likely to those who are *not at all* likely, thereby giving a little insight into who these people are.

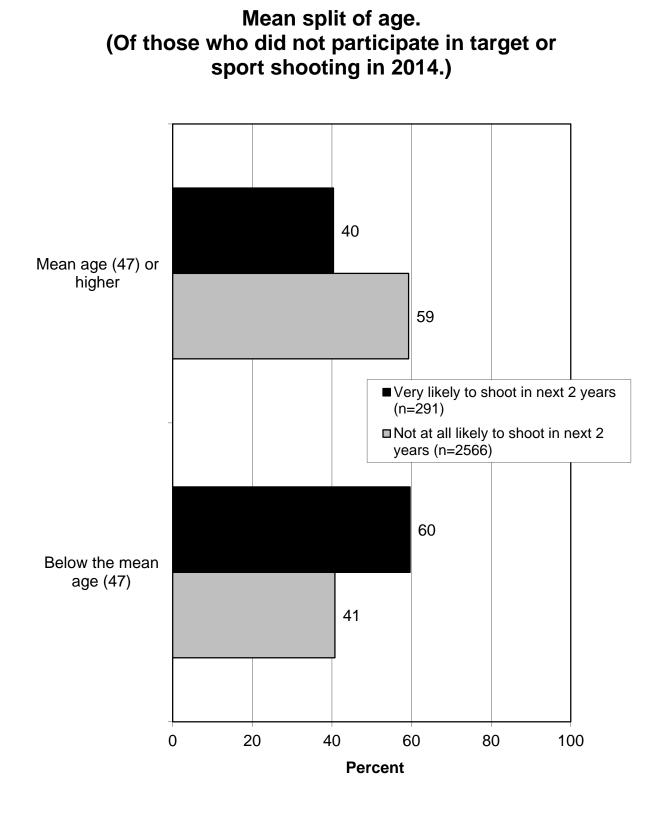


Men show a bit more interest in target/sport shooting, among people who did not shoot in 2014: they make up 56% of those *very* likely to shoot but only 39% of those *not at all* likely to shoot in the next 2 years (note that this is among non-shooters in 2014).



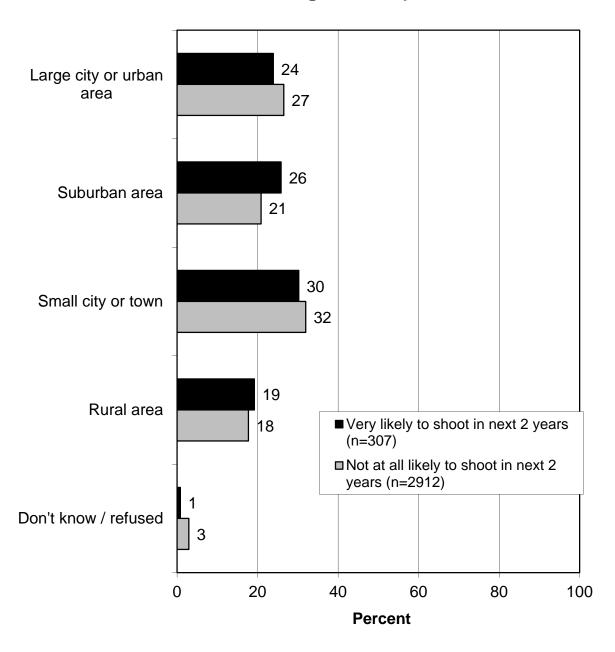
The age crosstabulations suggest that younger people have a greater propensity to be likely to go target/sport shooting in the next 2 years: note the difference in the two oldest categories and the remaining four younger categories.



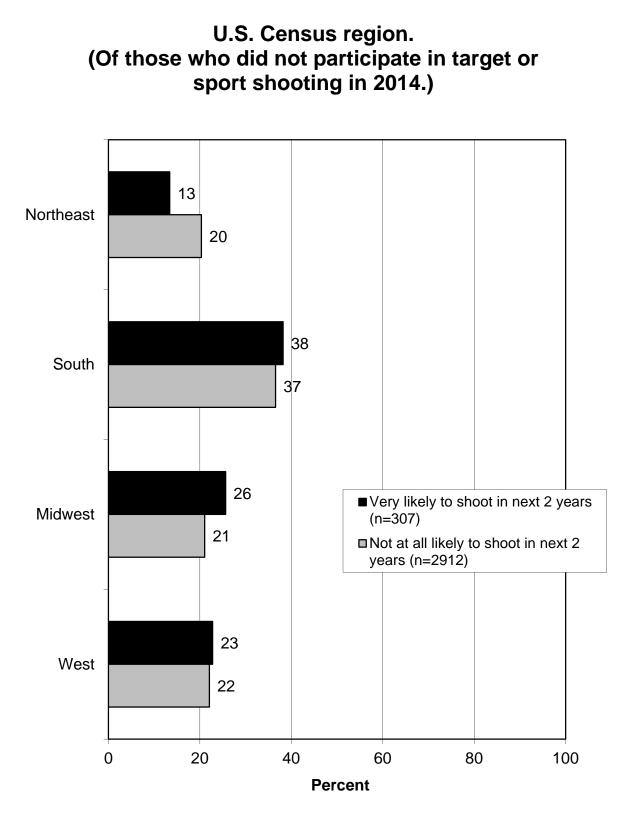


Although all differences are slight on this graph, there appears to be slightly more propensity to indicate being likely to target/sport shoot among suburban residents.

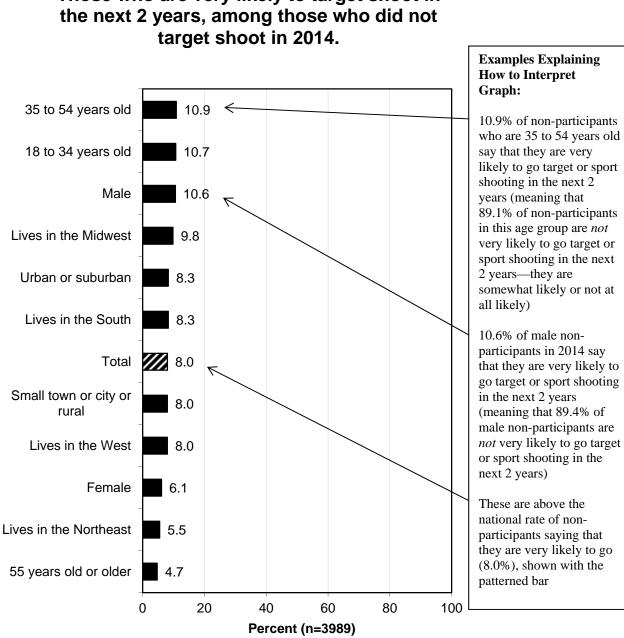
Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm or ranch, or a rural area not on a farm or ranch? (Of those who did not participate in target or sport shooting in 2014.)



Non-shooters in the Northeast are markedly less interested in shooting, compared to the other regions, particularly the Midwest Region.

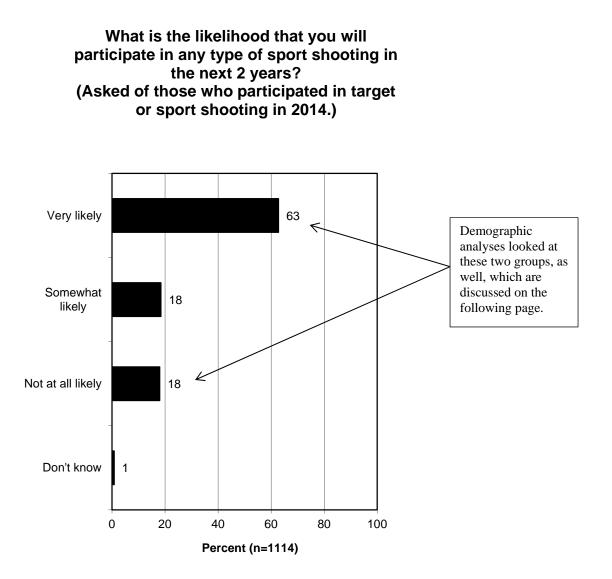


The graph below looks at those who did not shoot in 2014 but who said that they are very likely to go target or sport shooting in the next 2 years. The findings presented on one graph reinforce the results reported immediately above: young people, males, and those from the Midwest are all correlated with being very likely to go target or sport shooting.



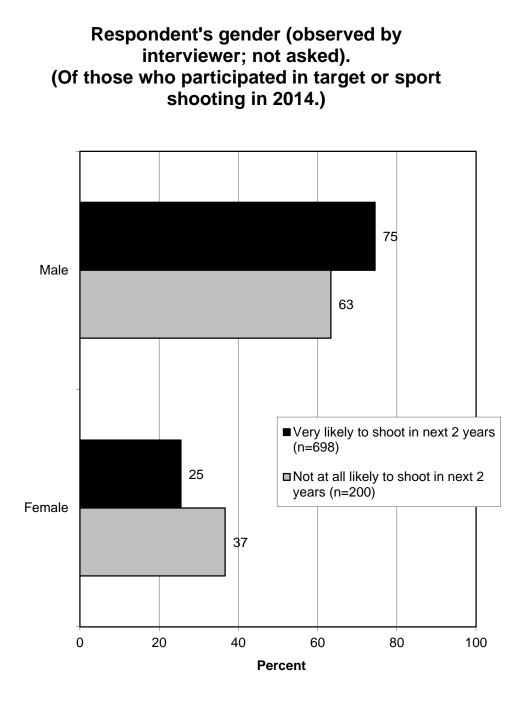
Those who are very likely to target shoot in

The above looked at those who had *not* participated in target or sport shooting; however, the same question was also asked of those who *had* participated. Of 2014 sport shooting participants, 63% are very likely to go sport shooting in the following 2 years, and 18% are somewhat likely (a sum of 81% who plan to continue in the sport). The same demographic analyses were run comparing those who are *very* likely to those who are *not at all* likely.

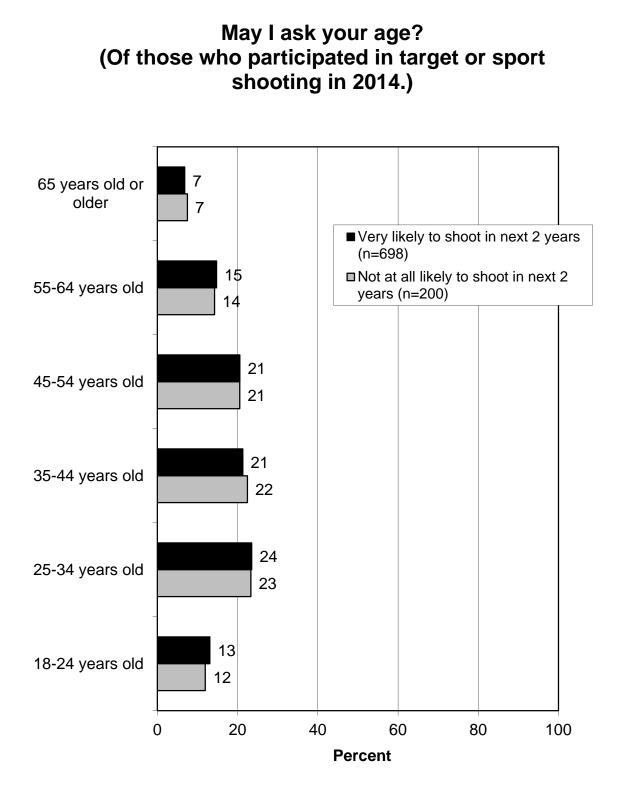


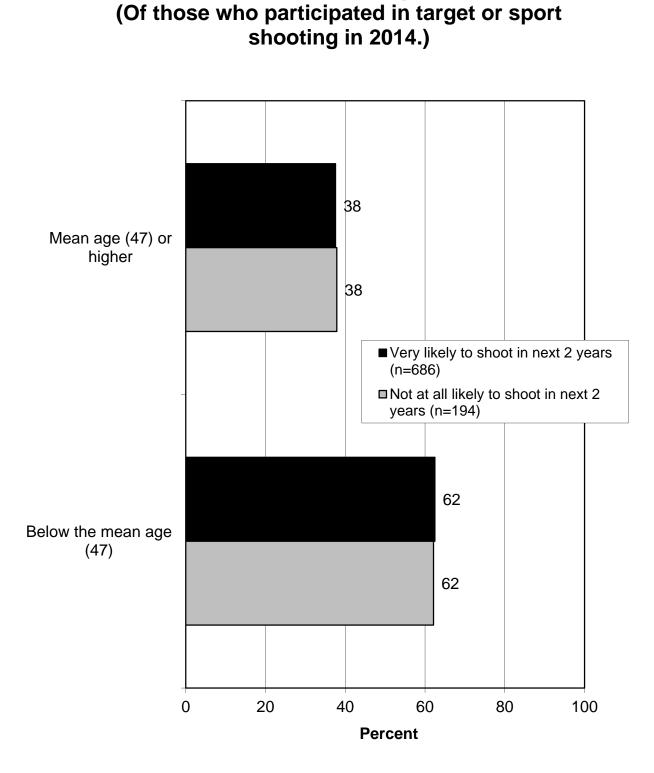
There were 63% of 2014 sport shooters who indicated being *very* likely to shoot in the upcoming 2 years, and 18% who indicated being *not at all* likely. Each of these groups makes up a distinct target market, so demographic analyses were conducted to look at each of the groups.

The gender crosstabulations found that women appear to be more likely to drop out of target/sport shooting: females make up only 25% of those who had shot in 2014 and are *very* likely to shoot in the next 2 years, while they make up 37% of those who had shot in 2014 but are unlikely to shoot in the next 2 years.



The finding from the age graphs on this page and the next is simply that those 2014 shooters who plan to continue shooting are about the same ages as those 2014 shooters who plan to discontinue shooting.

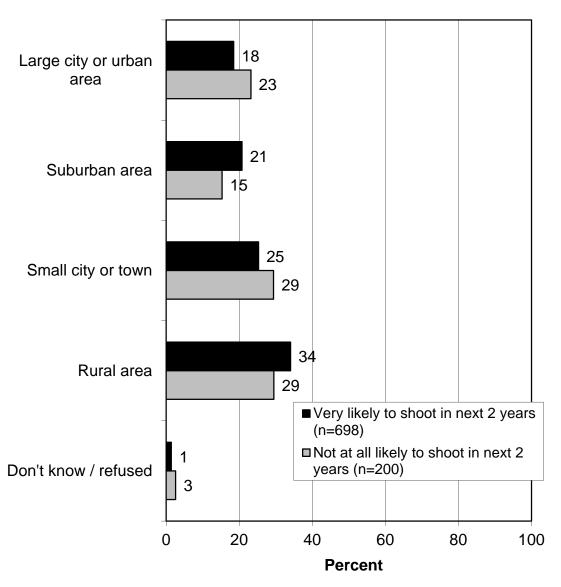




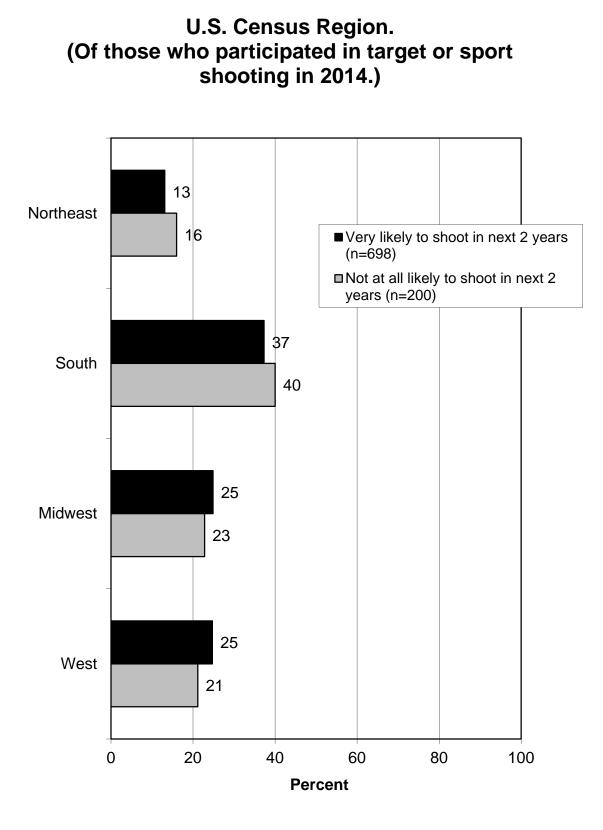
Mean split of age.

The place of residence crosstabulation finds only small differences, but it suggests that those from the large urban areas and small cities/towns may be dropping out of shooting at a slightly greater rate than those from suburban areas or rural areas.

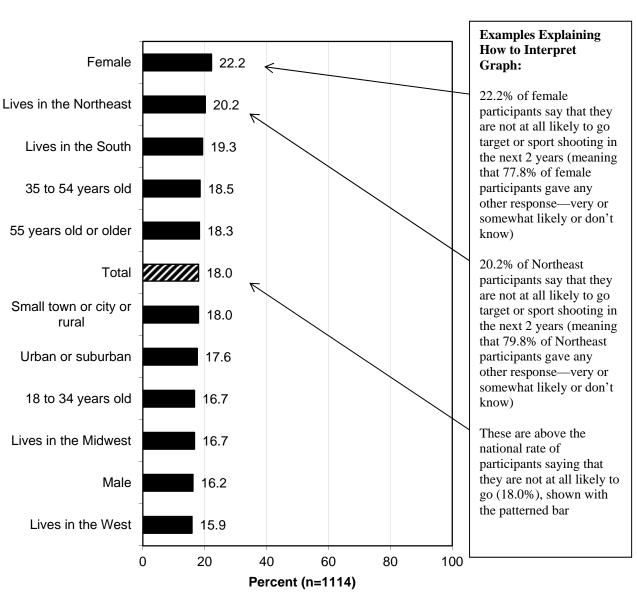
Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm or ranch, or a rural area not on a farm or ranch? (Of those who participated in target or sport shooting in 2014.)



Finally, the regional crosstabulation finds no marked differences between those likely to shoot and those not likely to shoot in the next 2 years.

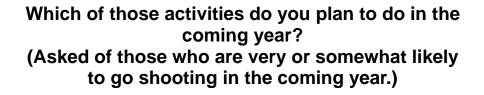


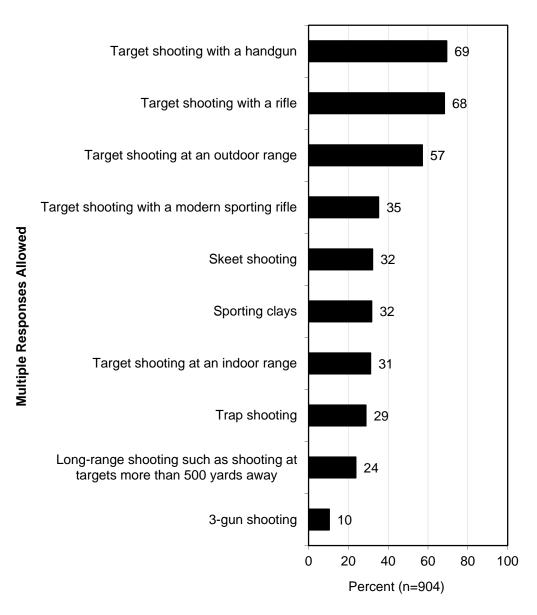
The graph below looks at those who shot in 2014 but who said that they are *not at all* likely to go target or sport shooting in the next 2 years—those who are dropping out. The findings presented on one graph reinforce the results reported previously: females, living in the Northeast or South, and being in the older age brackets are all correlated with being *not at all* likely to go target or sport shooting.



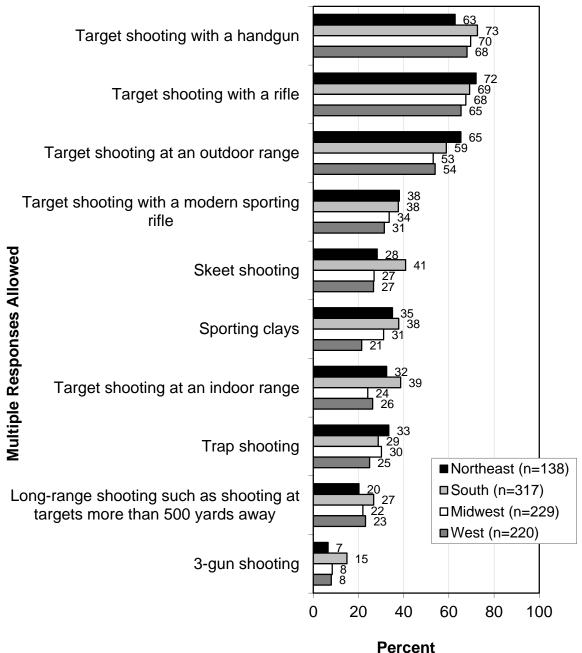
Those who are not at all likely to target shoot in the next 2 years, among those who target shot in 2014.

Those who had shot and who indicated being likely to target or sport shoot in the next 2 years were asked to indicate which shooting activities that they plan to do. They most commonly say that they plan to participate in target shooting with a handgun, target shooting with a rifle, and target shooting at an outdoor range. A regional graph is included, as well (following page).



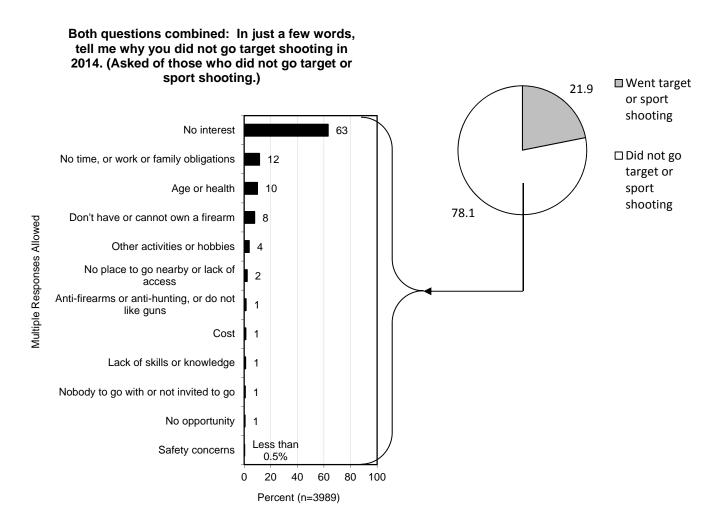


Which of those activities do you plan to do in the coming year? (Asked of those who had shot in 2014 and are very or somewhat likely to go shooting in the coming year.)



REASONS FOR NOT PARTICIPATING IN TARGET OR SPORT SHOOTING

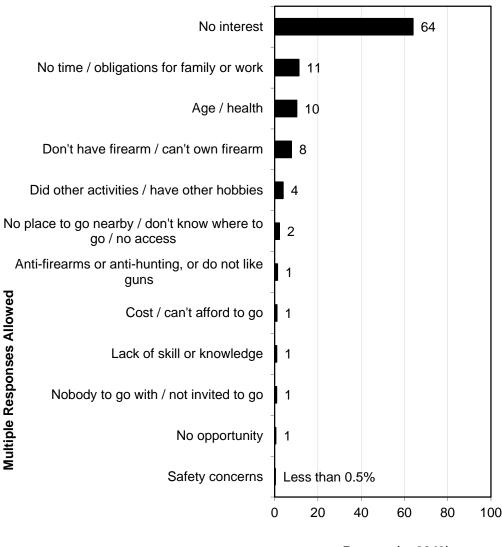
The survey asked those who did not participate in target/sport shooting for their reasons for not doing so (78.1% of U.S. residents did not go target or sport shooting in 2014). While simple lack of interest is, by far, the top reason (63% of those who did not target or sport shoot), other important reasons include lack of time because of family or work obligations (12%), age/health (10%), and lacking a firearm (8%). Other than lack of interest, the most typical reasons are social constraints over which agencies and the shooting industry may have little influence.



Note that this question was actually asked of two separate groups, with the results being combined for the graph above. Nonetheless, the results are of interest separately. One group that did not target/sport shoot also did not participate in archery, while another group that did not target/sport shoot had participated in archery. Their reasons for not target/sport shooting are a little different from each other, in the graphs that follow.

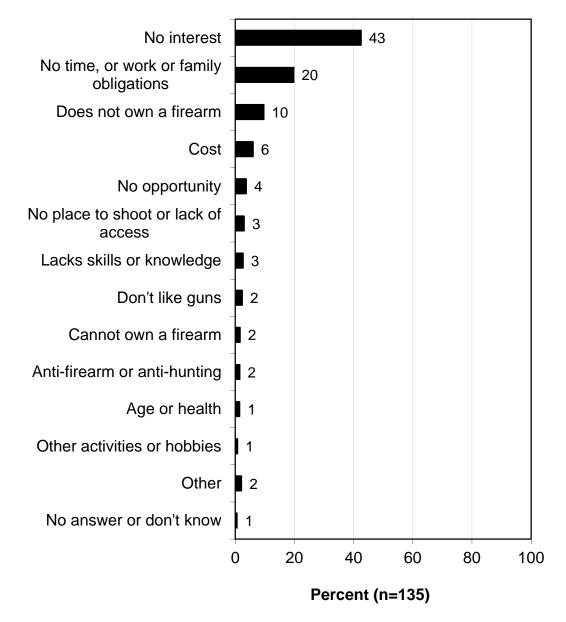
Among those who did not participate in either target/sport shooting or archery, 64% indicated having no interest whatsoever in target shooting (graph on this page), while those who had participated in archery but not target/sport shooting had a lower rate of saying that they had no interest (following page). This suggests that archery shooters who have not target/sport shot would be more likely to go, if other constraints were lessened.

In just a few words, tell me why you did not go target shooting in 2014. (Asked of those who did not go target / sport shooting or participate in archery in 2014.)



Percent (n=3849)

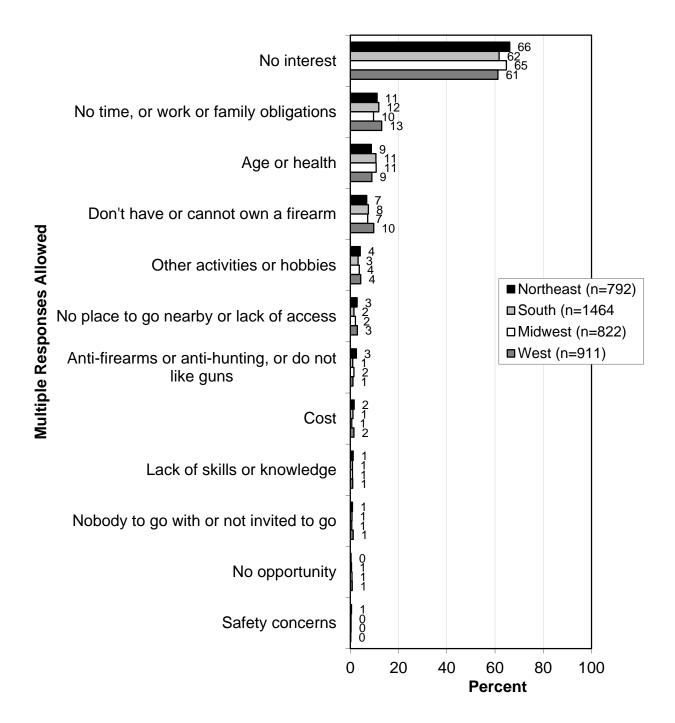
In just a few words, tell me why you did not participate in target shooting or sport shooting with a firearm in 2014. (Asked of those who did not target / sport shoot with firearms but participated in archery shooting.)



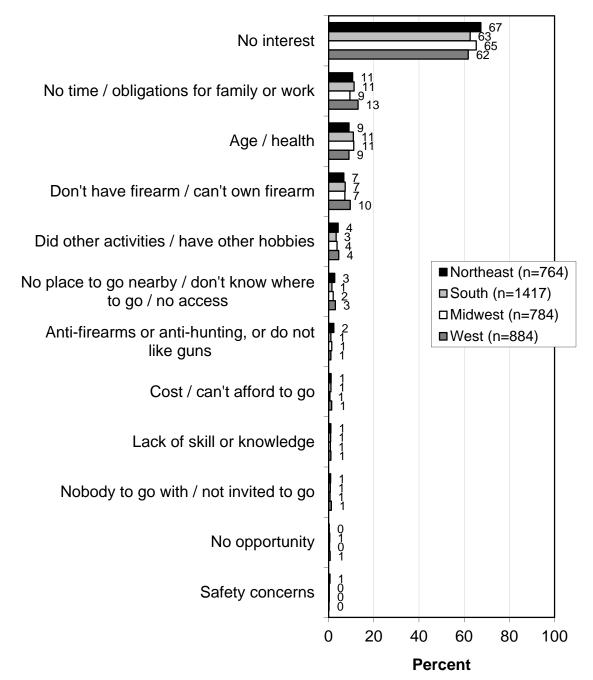
Multiple Responses Allowed

These questions on reasons for not participating are also shown regionally.

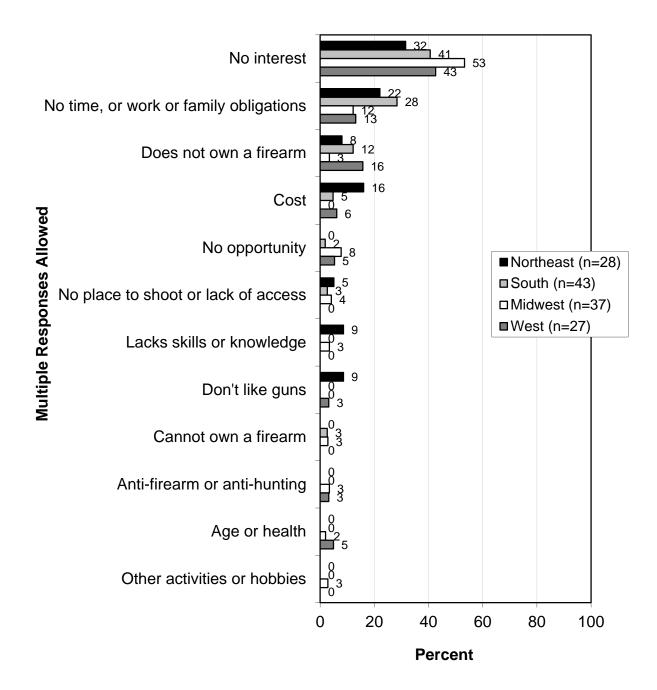
Both questions combined: In just a few words, tell me why you did not go target shooting in 2014. (Asked of those who did not go target or sport shooting.)



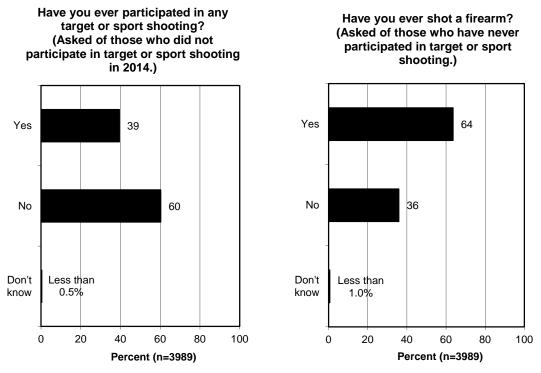
In just a few words, tell me why you did not go target shooting in 2014. (Asked of those who did not go target or sport shooting or participate in archery in 2014.)



In just a few words, tell me why you did not participate in target shooting or sport shooting with a firearm in 2014. (Asked of those who did not go target or sport shooting with firearms but participated in archery shooting.)



It is noteworthy that 39% of those who had not target or sport shot in 2014 had at one time in their lives gone target or sport shooting (see graph below), and 64% of them had shot a firearm at some time while not reaching the level that they feel that they participated in target or sport shooting. As the 39% who had shot at some time in the past are of interest in recruitment efforts—they would seem predisposed to like sport shooting—some demographic analyses were run of these people.



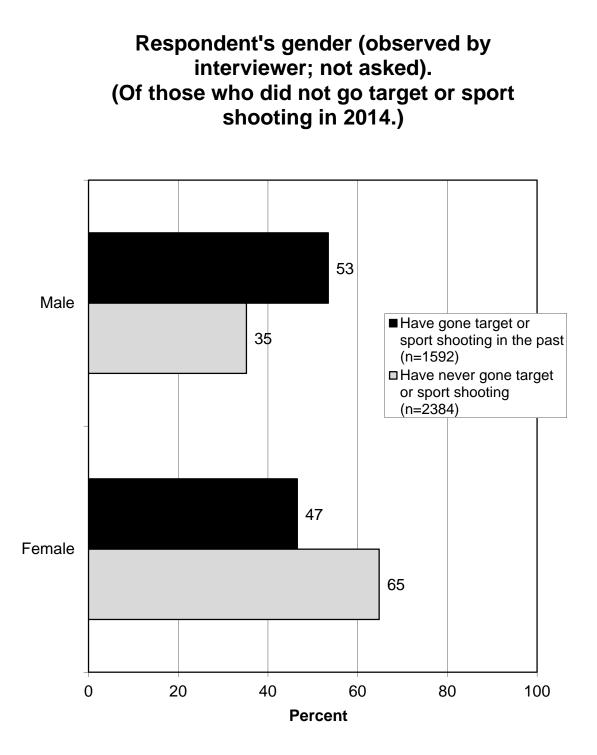
Note: These questions were asked only of those who did not shoot in 2014.

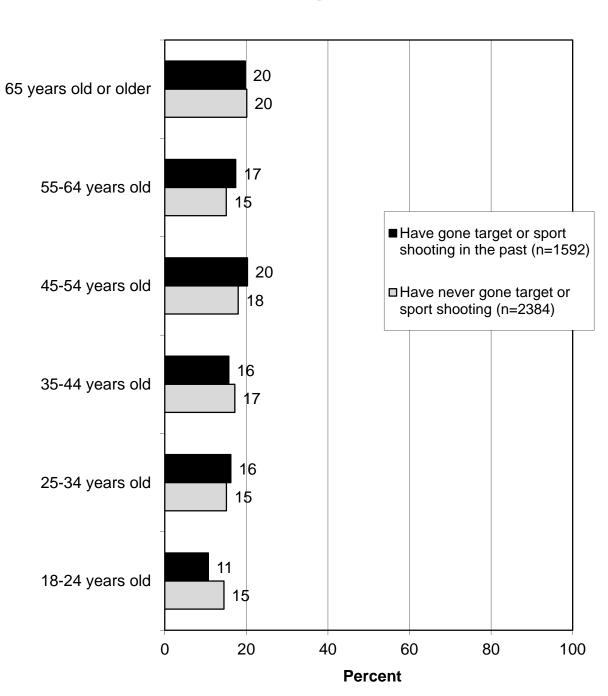
The graphs that start on the following page show the demographic characteristics of those 39% (in the graph on the left) who did not target or sport shoot in 2014 but did so at some time in the past. The gender crosstabulation shows a fairly even split in males to females among those who shot in the past but not in 2014 (53% of this group are males; 47% are females); it also points out the not surprising fact that men are more likely than women to have gone target or sport shooting in the past.

The age crosstabulation does not show any marked differences between those non-shooters in 2014 who had or had not target/sport shot in the past, when looking at the full range of age categories. However, when looking only at the mean age split, those who shot in the past but not in 2014 tend to be a little older than the mean age (the mean age among adults, which is not the mean age overall when children are included).

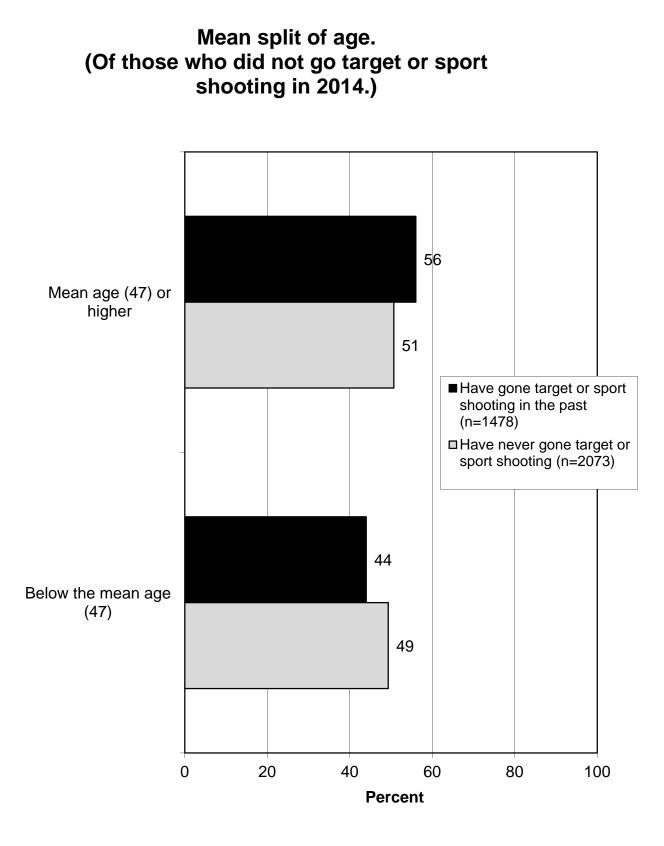
The final graphs show the rural-urban crosstabulation—which appears inconclusive—and the regional crosstabulation—with the West positively correlated to having shot in the past but not in 2014.

Note that all of these crosstabulations are among only those who did *not* shoot in 2014, consisting of those who went target/sport shooting at some time in the past and those who never did.

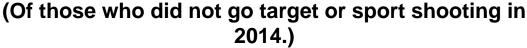


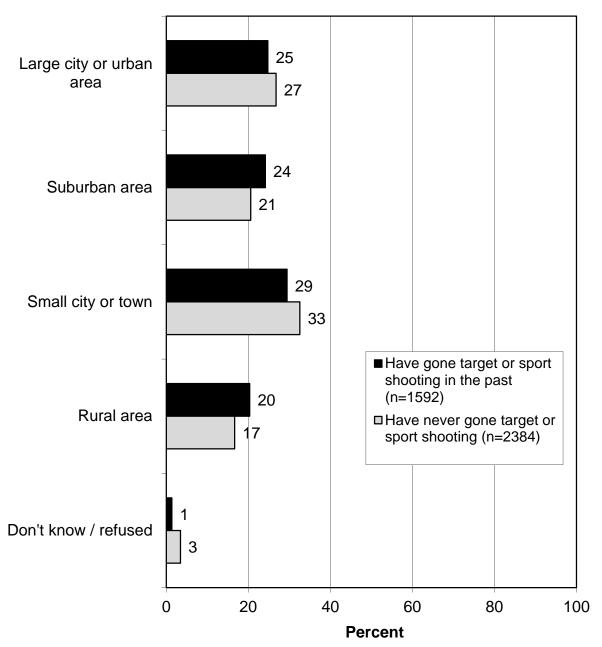


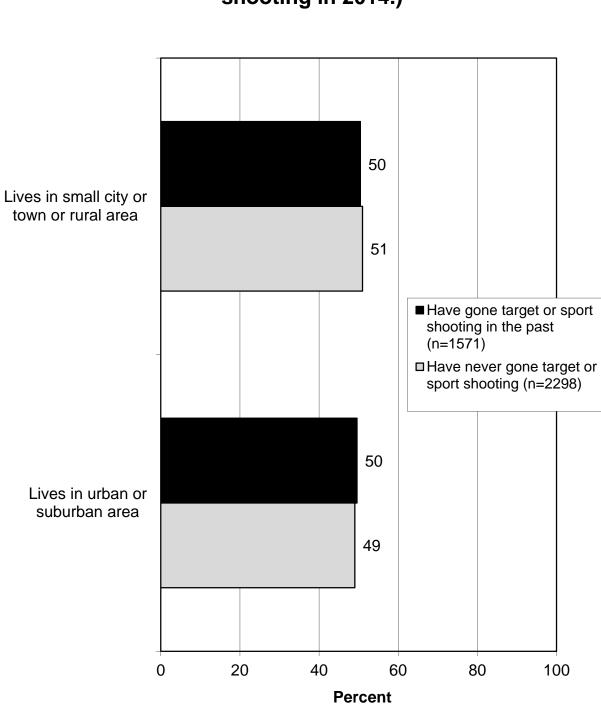
May I ask your age? (Of those who did not go target or sport shooting in 2014.)

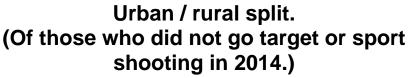


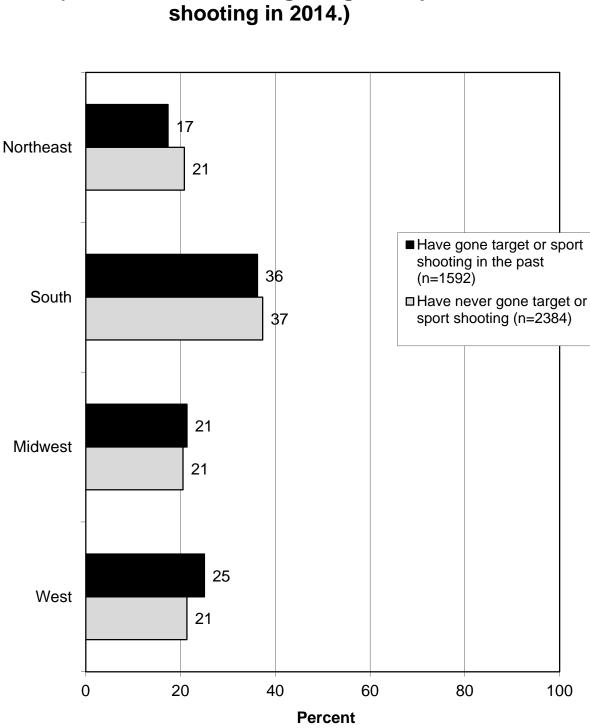
Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm or ranch, or a rural area not on a farm or ranch?

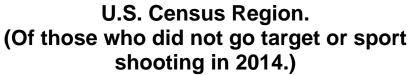












PUTTING RESPONSIVE MANAGEMENT'S PARTICIPATION DATA INTO CONTEXT

This section of the report discusses the quality of Responsive Management's data collection efforts and its resulting participation data, and the section also compares Responsive Management's survey findings with other research on participation.

REVIEW OF SURVEYING METHODS

As in the previous years, the 2015 study entailed a survey of U.S. residents ages 18 years old and older. Each survey was conducted via telephone using random digit dialing, a scientific and highly reliable data collection methodology that is routinely used to predict the outcomes of presidential elections down to the electoral vote.¹

Telephones were selected as the sampling medium for each participation survey because of the high reliability and validity of telephone surveys using scientifically chosen random samples and because of the almost universal ownership of telephones among the general population. The methodology for the 2015 survey used a dual-frame sample consisting of a random sample of landline telephones and a random sample of cell phone numbers. These numbers were then called in their proper proportions, which ensured that all people in the pool of telephone users had an approximately equal chance of being called. A target number of interviews was obtained in each state from both landlines and cell phones in their proper proportions, so that the number of respondents in each state in the sample was exactly proportional to the state's population and, by extension, within the United States population as a whole.

The survey questionnaire was developed cooperatively by Responsive Management and the National Shooting Sports Foundation (NSSF), based on previous similar surveys conducted for the NSSF. As in the previous studies on sport shooting participation, a "ruse" line of questioning was used at the beginning of the survey. This was done because the main objective of the survey was to determine national and regional participation rates in the shooting sports, and the survey was worded to avoid bias that would arise from the tendency for those who do *not* shoot to refuse to participate in a survey about shooting. Therefore, the survey started by asking about some general activities, mixing shooting and hunting participation in with participation in other non-shooting activities such as watching television and dining at a restaurant.

OVERALL SPORT SHOOTING PARTICIPATION RATE

Responsive Management's 2015 survey found that 21.9% of the U.S. adult population, or an estimated 51 million adults, participated in any type of target or sport shooting in 2014. This participation rate marks an increase over the 15.1% rate among Americans in 2009 and 17.4% in 2012.

¹ Silver, Nate. "Which Polls Fared Best (and Worst) in the 2012 Presidential Race," *The New York Times*, 10 November 2012: <u>http://www.nytimes.com/2010/07/28/health/policy/28obesity.html?_r=1</u>.

QUALITY OF RESPONSIVE MANAGEMENT'S SURVEY DATA

One of the most important indicators of the quality and reliability of a survey's findings is how closely the raw survey data reflect the population under study. Researchers collect samples from populations in order to make inferences about the overall population. In doing so, researchers strive to ensure that the demographic characteristics of the sample accurately reflect the demographic characteristics of the broader population; in other words, the gender, age, and ethnic proportions of the sample should roughly match those of the overall population.

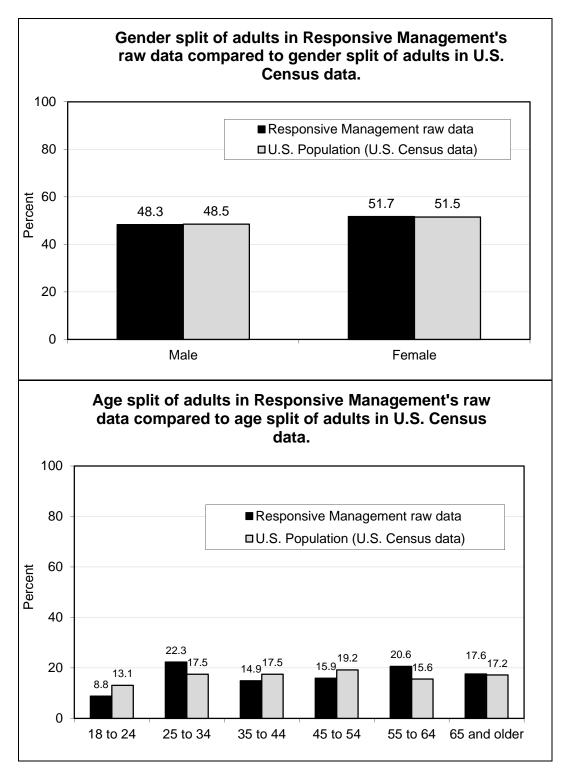
The process of using known population characteristics to systematically adjust raw survey data to match the population is known as weighting. If it is known, for example, that the gender split of the U.S. population is approximately 50% male and 50% female, a survey sample whose gender split is 40% male and 60% female can be weighted to correct for the imbalance: the impact of the responses from females is reduced in order to boost the impact of the responses from males—as a result, the weighted data more accurately reflect the overall U.S. population.

While research firms routinely weight survey data to some degree to correct for certain demographic imbalances in their samples, excessive weighting carries certain risks. A survey sample of 90 females and 10 males, for instance, could be weighted to ensure that the responses from males would equal the cumulative responses of females. However, this now means that fewer males are being used to represent males' opinions in general, and each single male's opinions have greater sway over the total male opinion in the sample. Concurrently, there is greater likelihood that the males in the sample, because there are so few of them, do not accurately represent the actual opinion in the population.

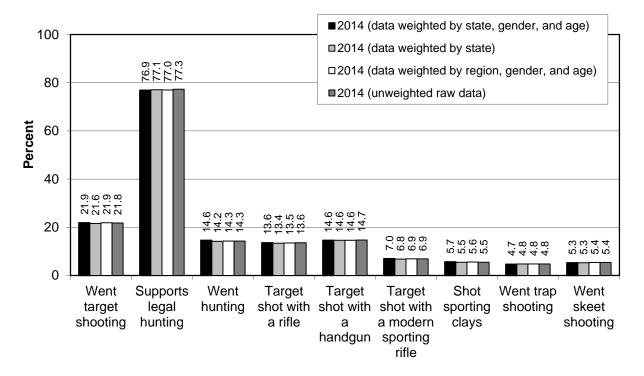
Because of this, the decision to weight a sample is a delicate balance between increasing the sample's accuracy in reflecting the population while not excessively increasing the influence of individual respondents. Of course, the closer the raw data reflects the actual proportions of demographic characteristics in the population, the less need there is to weight the data. In an ideal scenario, there would be no need for weighting, as the survey sample would simply be collected in such a way as to exactly mirror the demographic proportions of the overall population.

Notably, Responsive Management's 2015 participation study was based on a substantial sample size (5,103 completed interviews) that also accurately reflected the demographic characteristics of the U.S. population *prior to any weighting of the data*. In fact, the 5,103 survey interviews Responsive Management collected so closely matched the U.S. population that post-survey weighting made little difference in the overall results. While Responsive Management did apply weighting to ensure that the results accurately matched population demographic characteristics on a regional basis, the weighting variables applied were minimal, an indication of the high quality of the raw data.

The graphs that follow provide a comparison of Responsive Management's raw survey data (i.e., the survey results as collected, before any weighting was applied) to the demographic data from the most recent U.S. Census in 2010. As is evident in the comparisons, the gender and age of the raw survey sample were highly reflective of the U.S. general adult population.



When survey data are weighted following the initial data collection, the eventual results run the risk of portraying the population inaccurately, particularly if large differences exist between the data as originally collected and the data as eventually presented. However, weighting did not markedly alter Responsive Management's 2015 data. An analysis was conducted in which Responsive Management's data were weighted in several ways to see if marked changes in the final data occurred. In the case of Responsive Management's 2015 participation study, the data, after being weighted in several different ways, essentially continued to show the same results (this is illustrated in the graph below, which compares the raw survey data to the data weighted by various factors). This graph shows the reliability of Responsive Management's findings due to the fact that only slight differences were observed between the data collected and the data reported after weighting. (Note that Responsive Management's data were weighted in the report by region, gender, and age to match the methods used in the previous surveys.)



Comparison of unweighted raw survey data and survey data weighted by key demographic characteristics.

DATA FROM OTHER SOURCES THAT PROVIDE INSIGHT REGARDING THE ACCURACY OF RESPONSIVE MANAGEMENT'S DATA

The following is an overview of key external data and other information supporting the findings from Responsive Management's three participation surveys that sport shooting participation in the United States is on the rise.

Number of Americans With Access To a Firearm

It is instructive to view Responsive Management's target shooting participation findings in light of the 98,516,910 individuals in just over 51 million U.S. households who have access to a firearm. The overall number of American adults with access to a firearm is estimated using current U.S. Census data on the size of the U.S. adult population (234,564,071 individuals) and the average number of adults per household (1.93 individuals). These data are then applied to the percentage of Americans who report having a firearm in their home (42%, according to a 2014 Gallup telephone survey).²

Based on the number of U.S. adults with access to a firearm and the estimation from Responsive Management's participation survey that 21.9% of the U.S. adult population (an estimated 51,228,793 people) went target shooting in 2014, it can be inferred that approximately 52% of those with access to a firearm went target shooting at least once in 2014. From this perspective, the overall sport shooting participation rate determined by the survey is certainly in line with expectations.

It should be noted that the estimation provided here regarding the number of individuals with access to a firearm is limited to only those with a firearm *in their household*; it does *not* include those who may have had access to a firearm outside of their household. Given the social nature of target shooting, it might reasonably be assumed that at least a portion of target shooters in 2014 did not personally own a firearm.

Firearms and Ammunition Sales

While information on the amounts of firearms and ammunition sold is difficult to determine with certainty, reliable indicators such as federal background checks conducted for transactions involving firearms and excise tax receipts for sales of firearms and ammunition help to clarify broad trends. These indicators suggest that firearms activity has increased recently.

Reports of Firearms Sales. Production numbers, used here as a proxy for sales, indicate that 28 million firearms were manufactured for the personal use market during the entire 8 years of the Bush administration, while 26 million were manufactured during the first 4 years alone of the Obama administration (2009-2012). In short, it appears that more firearms are being sold in the personal use market now than in the recent past.³

² McCarthy, Justin. "More Than Six in 10 Americans Say Guns Make Homes Safer," Gallup, 7 November 2014: <u>http://www.gallup.com/poll/179213/six-americans-say-guns-homes-safer.aspx</u>.

³ Wilber, Del Quentin. "Record U.S. Gun Production as Obama 'Demonized' on Issue," Bloomberg.com, 20 February 2014: <u>http://www.bloomberg.com/news/articles/2014-02-20/record-u-s-gun-production-as-obama-demonized-on-issue</u>.

As an example from within the industry, one of the largest publicly traded firearms manufacturers, Sturm Ruger & Company, saw a 44% jump in sales in just nine months in 2013 over the previous year's sales (sales climbed from approximately \$350 million in all of 2012 to approximately \$500 million during the aforementioned time period in 2013).⁴

National Instant Criminal Background Checks. Another indicator of firearms sales is the number of National Instant Criminal Background checks, which are performed by the Federal Bureau of Investigation to determine the eligibility of a person attempting to purchase a firearm in a store. According to current data, these checks increased from 19.59 million in 2012 to 21.09 million in 2013, which is an increase of 7.7%. While the number of background checks and participation in sport shooting are not one and the same, they would logically be positively correlated. Certainly, some of that increase is made up of new sport shooters, who would add to the total numbers of sport shooters (particularly if the net addition if new shooters offsets the attrition rate).

Excise Tax Receipts on Firearms and Ammunition. Another measure suggesting increased participation in the shooting sports is the trend in gross receipts from the Federal Aid in Wildlife Restoration Act (also called the Pittman-Robertson Act) excise tax. The Pittman-Robertson Act provides funding for the restoration of wildlife and birds and their habitat through an 11% excise tax on sporting arms, ammunition, and archery equipment, and a 10% excise tax on handguns. Excise tax gross receipts from the past 9 years are tabulated below:

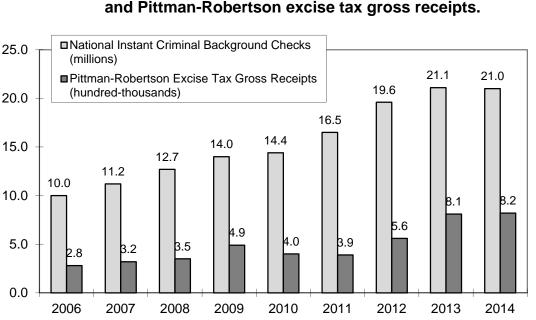
Wildlife Restoration Gross Receipts (thousands of dollars)									
	FY 06	FY 07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Pistols - Revolvers	57,697	73,571	76,903	124,928	106,351	102,323	160,050	223,160	219,148
Firearms	107,619	115,960	120,446	162,005	112,791	110,626	178,856	286,218	250,717
Ammunition	84,261	98,235	114,904	166,058	141,484	131,213	172,479	252,271	298,903
Bows and Arrows	28,667	33,797	36,574	32,147	36,115	44,054	44,384	50,896	55,132
Total Gross Receipts	278,244	321,563	348,827	485,138	396,741	388,216	555,769	812,545	823,900

Source: http://wsfrprograms.fws.gov/Subpages/GrantPrograms/WR/WR-ReceiptsForecast.pdf

Again, this is only an indication of participation, not a perfect match, but it seems reasonable that some of the increase in excise taxes from Fiscal Year 2012 to Fiscal Year 2014 is from a general increase in participation in sport shooting.

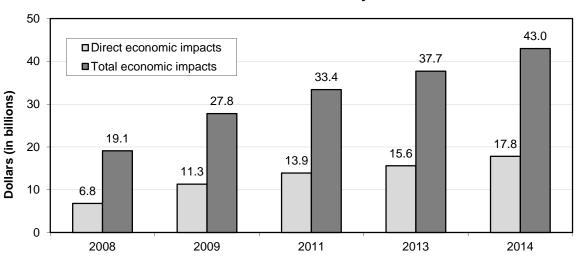
National Instant Criminal Background checks and Pittman-Robertson excise tax gross receipts over the past decade are graphed together on the following page, showing a clear upward trend in both.

⁴ Carter, Zach. "Gun Sales Exploded In The Year After Newtown Shooting." Huffington Post, 6 December 2013: <u>http://www.huffingtonpost.com/2013/12/06/gun-sales-newtown_n_4394185.html</u>.



Trends in National Instant Criminal Background checks and Pittman-Robertson excise tax gross receipts.

Economic Impact of Firearms and Ammunition Industry. A report made available by the NSSF regarding the economic impacts of sport shooting activities also establishes a clear upward trend, consistent with previous indications of robust participation and continued growth. This report, which calculates both the direct and total economic impacts of the firearms and ammunition industry, showed a 162% increase in direct impacts and a 125% increase in total impacts between 2008 and 2014 (see graph that follows).



Direct and total economic impacts of the firearms and ammunition industry.

Source: NSSF / John Dunham and Associates, Inc. "Firearms and Ammunition Industry Economic Impact Report 2014": <u>http://www.nssf.org/impact/EconomicImpactofIndustry.pdf</u>

Verification of Responsive Management's Findings Using Other Research

The accuracy of Responsive Management's study is further demonstrated through verification of its participation findings by way of comparisons with other high-quality studies. One such comparison involves the hunting participation rate. Responsive Management found a hunting rate of 14% among Americans in 2014. While this is higher than the hunting rate found in the U.S. Fish and Wildlife Service/U.S. Census Bureau's *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* in 2011 (6%), it is commensurate with the rate of self-identification as an active hunter found in the 2013 Cornell National Social Survey (17%).⁵

METHODOLOGICAL IMPLICATIONS OF PARTICIPATION STUDIES

The survey research landscape is in a state of flux, with Internet and panel surveys now being considered alongside traditional methods such as telephone, mail, and intercept surveys as a viable means of assessing participation in recreational activities. Unfortunately, findings purporting to measure participation for the same activity during the same time period often vary considerably, leaving questions about the methodological implications and reliability of the data.

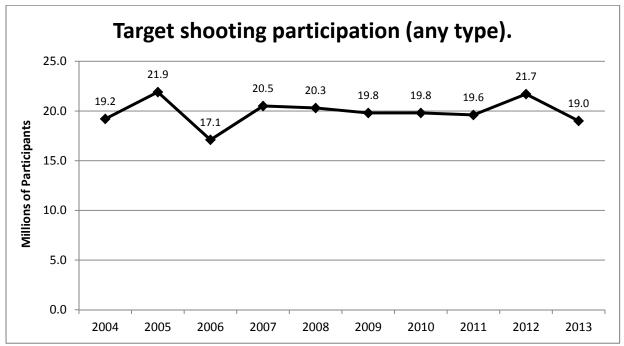
Whereas Responsive Management conducted each of its participation studies using scientific telephone surveying methodology, the National Sporting Goods Association (NSGA) beginning in 2010 assessed participation in outdoor activities by interviewing members of an online panel maintained by TNS (a marketing company). In its survey methodology, the NSGA notes that survey data collected from the panel are weighted accordingly to adjust for demographic characteristics (note that some of the same potential hazards on weighting covered previously in this document applies to the NSGA data).

While each mode of data collection offers unique advantages and disadvantages, the guiding principle in selecting an appropriate data collection methodology for any participation study should be the obligation to obtain statistically valid data that accurately represent the study population. Although sample records for telephone surveys sometimes must be obtained through third-party vendors, the benefits of telephone surveys are considerable: they typically provide much higher response rates, allow for markedly better quality control over the data collection and the overall quality of the data, and have a much faster turnaround time.

Appropriately designed Internet-based surveys are most successful when the survey sample consists of *known* respondents guaranteed to have web access (such as in an internal survey of an agency or organization in which all potential respondents have Internet access through their workplace). Internet surveys are also effective in augmenting response rates when respondents contacted through another medium desire an alternative method of responding. At the same time, an Internet-based questionnaire may prove unreliable when attempting to survey members of the general population, and this shortcoming must be kept in mind when considering the results of online surveys measuring participation in outdoor recreation, particularly those that employ a panel data collection methodology.

⁵ Decker, Stedman, Larson, and Seimer. "Hunting for Wildlife Management in America." *Wildlife Professional*, v. 9, no. 1, 2015.

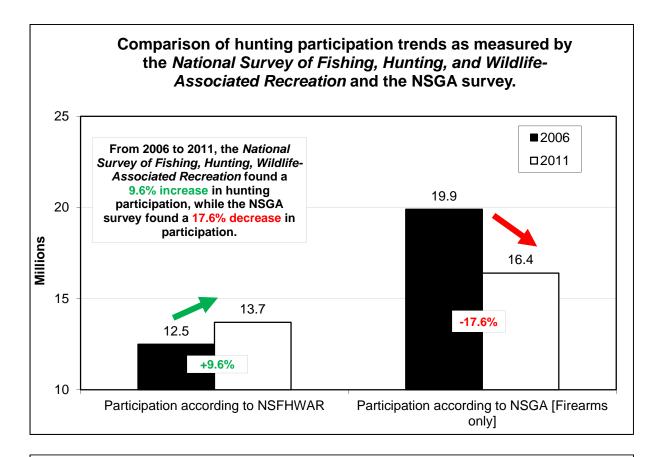
One indicator of trends in target shooting participation comes from the NSGA, which published data indicating that 19.0 million Americans aged 7 or older in 2013 went target shooting, a drop from the 21.7 million estimated by the NSGA in 2012. However, the number in 2013 is within the range of values of the previous 9 years (from 17.1 million to 21.9 million)—see the graph that follows. It seems unlikely that the 2013 number determined by the NSGA represents the start of a long-term decrease; rather, it seems more likely that it is simply reflective of the typical year-to-year variation in the NSGA data.

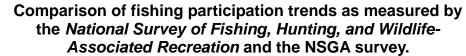


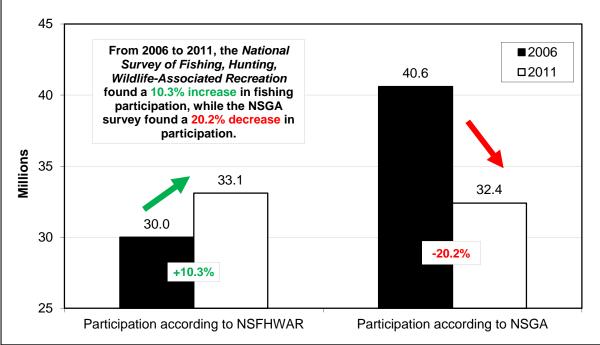
Source: National Sporting Goods Association

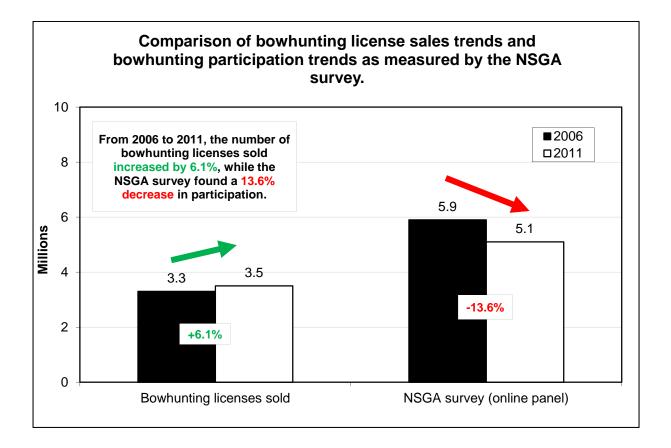
It is worth commenting on the fact that the NSGA data for 2013 shows a lower number than in 2012, which is at odds with Responsive Management's rates determined in 2012 and 2014 that suggest an increase. In short, an increase seems logical based on other measures or proxy measures of participation, as discussed previously.

Participation trends documented by the NSGA also tend to differ rather substantially from other established participation studies. For example, as shown in the graphs that follow, trends in hunting and fishing participation as documented by the *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* and by the NSGA survey paint starkly different pictures. Additionally, bowhunting license sales data and the NSGA data again appear to be in conflict.



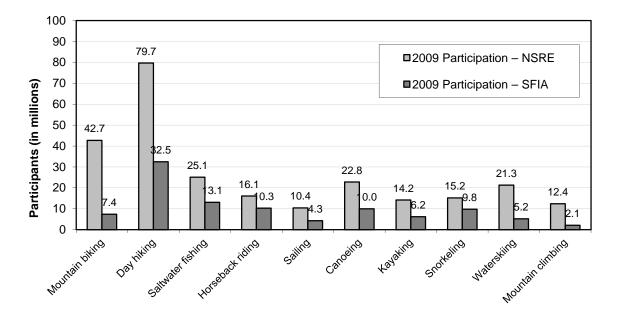






USE OF INTERNET PANEL SURVEYS TO ASSESS PARTICIPATION RATES

One Internet panel survey found drastically lower participation numbers when compared to a telephone survey of randomly selected respondents. Responsive Management conducted a review of participation studies in 2012 for the Archery Trade Association that revealed widely divergent numbers of participants in a range of outdoor activities, as measured by a scientific telephone survey (conducted for the U.S. Forest Service's *National Survey on Recreation and the Environment* by the University of Georgia) and by interviews with members of an online panel (conducted for the Sports and Fitness Industry Association's [SFIA] Sports, Fitness and Leisure Activities Study). As depicted in the graph that follows, the numbers of participants measured through the online panel survey are consistently and dramatically lower than the numbers of participants measured through the telephone survey.



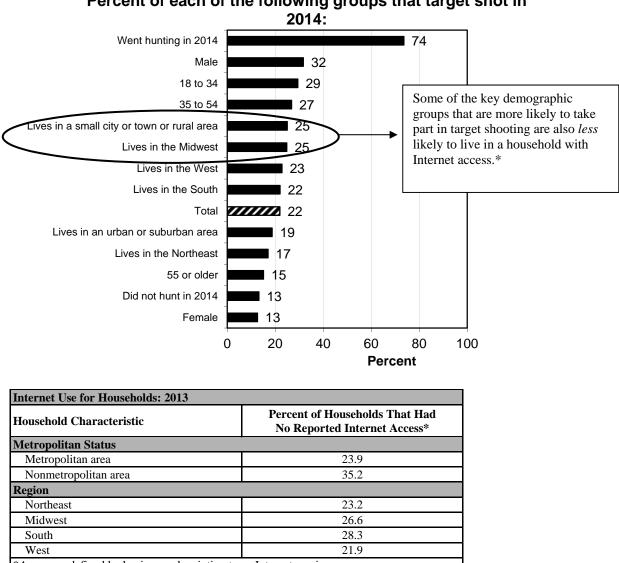
Comparison of activity participation numbers as measured by the NSRE telephone survey and the SFIA online panel.

Note that the NSRE participation numbers are among U.S. residents 16 years old and older, while the SFIA numbers are among U.S. residents 6 years old and older. One would expect that, because the SFIA measures participation across a broader range of individuals, the numbers would generally be higher since more potential participants are included.

A further consideration of Internet panel surveys is the potential for the very demographic groups that are most likely to engage in the activity(s) in question to be underrepresented or even excluded from the sample. This is particularly relevant when contrasting the demographic groups most likely to participate in target shooting and the demographic groups most likely to live in a household with Internet access.

In looking at the potential pool for Internet panel samples, a substantial number of people are excluded from the outset—those without Internet access. Some of those most likely to participate in sport shooting activities are individuals who live in small cities or towns or rural areas (i.e., nonmetropolitan areas) and people from the Midwest Region of the United States—demographic characteristics that coincide with low Internet access (see graph and tabulation on the following page). It is also worth pointing out that hunting participation is strongly correlated with target shooting participation, and the typical demographic characteristics of hunters are consistent with those previously described for shooters. These participatory characteristics have been documented both in Responsive Management's survey as well as the wider body of literature concerning shooting participation and firearm ownership.⁶

⁶ Morin, Rich. "The Demographics and Politics of Gun Owning Households." Pew Research Center, 15 July 2014: http://www.pewresearch.org/fact-tank/2014/07/15/the-demographics-and-politics-of-gun-owning-households/



Percent of each of the following groups that target shot in

*Access as defined by having a subscription to an Internet service

Source: U.S. Census Bureau's 2013 American Community Survey; www.census.gov/history/pdf/2013computeruse.pdf

There is a potential, because of the exclusion of potential respondents from the sample (those without feasible Internet access), that participation studies that employ online panels to assess participation rates are systematically minimizing involvement from the very individuals who are most likely to participate in certain activities, particularly target shooting and hunting.

CONCLUSION

Responsive Management's data collection methods were compared to a variety of other data collection methods, and its data were compared to other data. The evidence also helps to validate the accuracy of Responsive Management's research on these sports.

ABOUT RESPONSIVE MANAGEMENT

Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing our in-house, full-service telephone, mail, and web-based survey facilities with 50 professional interviewers, we have conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communication plans, needs assessments, and program evaluations.

Clients include the federal natural resource and land management agencies, most state fish and wildlife agencies, state departments of natural resources, environmental protection agencies, state park agencies, tourism boards, most of the major conservation and sportsmen's organizations, and numerous private businesses. Responsive Management also collects attitude and opinion data for many of the nation's top universities.

Specializing in research on public attitudes toward natural resource and outdoor recreation issues, Responsive Management has completed a wide range of projects during the past 25 years, including dozens of studies of hunters, anglers, wildlife viewers, boaters, park visitors, historic site visitors, hikers, birdwatchers, campers, and rock climbers. Responsive Management has conducted studies on endangered species; waterfowl and wetlands; and the reintroduction of large predators such as wolves, grizzly bears, and the Florida panther.

Responsive Management has assisted with research on numerous natural resource ballot initiatives and referenda and has helped agencies and organizations find alternative funding and increase their membership and donations. Additionally, Responsive Management has conducted major organizational and programmatic needs assessments to assist natural resource agencies and organizations in developing more effective programs based on a solid foundation of fact.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management has also conducted focus groups and personal interviews with residents of the African countries of Algeria, Cameroon, Mauritius, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe.

Responsive Management routinely conducts surveys in Spanish and has conducted surveys in Chinese, Korean, Japanese and Vietnamese and has completed numerous studies with specific target audiences, including Hispanics; African-Americans; Asians; women; children; senior citizens; urban, suburban, and rural residents; large landowners; and farmers.

Responsive Management's research has been upheld in U.S. District Courts; used in peer-reviewed journals; and presented at major natural resource, fish and wildlife, and outdoor recreation conferences across the world. Company research has been featured in most of the nation's major media, including CNN, *The New York Times, The Wall Street Journal*, and on the front pages of *USA Today* and *The Washington Post*. Responsive Management's research has also been highlighted in *Newsweek* magazine.

Visit the Responsive Management website at: www.responsivemanagement.com



11 Mile Hill Road Newtown, CT 06470-2359 T: 203.426.1320 F: 203.426.1087 nssf.org

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8/15 Item #3700

PROMOTE

PROTECT



Tab 7

Economic Analysis

Financial Impact Estimating Conference: Required Economic Analysis

Office of Economic and Demographic Research July 30, 2019

CS/CS/HB 5: Ballot Measures

This is the first FIEC called since the passage of CS/CS/HB 5 which among other things—made a number of changes to the FIEC's traditional process. Most importantly, the bill made the following adjustments:

- Specifies a 75-day timeframe instead of 45 days from start to finish.
- Expands the maximum length of the financial impact statement from 75 words to 150 words.
- Requires an additional analysis of the estimated economic impact on the state and local economy. This requirement broadens the analysis from the more limited review of public sector impacts previously considered.
- Requires an additional analysis of the overall impact to the state budget.

"... the Financial Impact Estimating Conference shall complete an analysis and financial impact statement to be placed on the ballot of the estimated increase or decrease in any revenues or costs to state or local governments, <u>estimated economic impact on the state</u> <u>and local economy, and the overall impact to the state budget</u> resulting from the proposed initiative."

Economic Analysis

- A comprehensive policy analysis technique that evaluates the direct, indirect and induced economic impacts of a policy change, where:
 - <u>Direct economic effects</u> are the changes in expenditures made by the industry(ies) directly impacted by a change in policy. Most analyses by the various estimating conferences focus on direct effects, which are generally static, immediate and "first round" effects.
 - <u>Indirect economic effects</u> are the changes in expenditures made by industries that supply goods/services to the directly impacted industry(ies).
 - <u>Induced economic effects</u> are most commonly measured as the changes in
 expenditures by households whose income is changed by the direct and indirect activity; however, other examples exist.
- In this case, the goal is to predict and quantify the probable path of economic responses over time to the change brought about by the petition initiative.
 - Projections are relative to a forecast of the expected path of the economy absent the change caused by the petition; this is referred to as the economic baseline.
 - In some cases, there will be no discernible or probable effects.

Tool: Statewide Model

- The Statewide Model is a state-of-the-art, customized, dynamic computable general equilibrium model (CGE) originally developed for Florida by Monash University (Melbourne, Australia) in 2011. This model:
 - Contains a vast amount of data to replicate the Florida's economy, tax structure, and state budget.
 - Uses hundreds of mathematical equations to account for the relationships (linkages and interactions) between the various economic agents, as well as likely responses by businesses and households to changes in the economy. Started with 388 equations with 1,699,000 total elements within those equations.
 - Has a time dimension that adheres to the state fiscal year (July 1 to June 30) to be useful in the state government budgeting process.
 - Allows different programs to be evaluated on the same footing.
 - Can be modified to reflect research results and targeted developments specific to the analysis being performed.

Analysis

- When the Statewide Model is deployed to evaluate economic effects, the model is shocked using static analysis to develop the initial or direct effects attributable to the petition-induced change that is under review. In this analysis, the direct effects (shocks) will likely consider:
 - A reduction in the demand for and supply of assault weapons and the impact on directly related fields.
 - Potential changed distribution of state expenditures.
 - Potential reduction in sales tax revenues.

Standard Variables

The core economic variables that are available for reporting include:

- 1. <u>Population</u>...focuses on the change in population projections caused by altered economic circumstances.
- 2. <u>Jobs</u>...focuses on the change in employment projections caused by altered economic circumstances.
- 3. <u>Personal Income</u>...nearly two-thirds of this metric typically comes from compensation of employees.
- 4. <u>Household Consumption</u>...consumer spending.
- 5. <u>Gross Domestic Product</u>...the total value of goods and services produced within the state during one year; based on final output.
- 6. <u>Gross Output</u>...principally a measure of sales or revenue from production for most industries, although it is measured as sales or revenue less cost of goods sold for margin industries like retail and wholesale trade.
- 7. <u>Investment & Savings</u>...from a business perspective, this leads to an increase in the capital stock (physical and human) with the intent to increase productivity, efficiency and output of goods and services.
- 8. <u>State Government Revenues and Expenditures</u>...largely conditioned by Florida's tax policy.

Proposed Style of Model Results

- Relative to the economic baseline, the change in each of the eight Standard Variables will be reported numerically with the appropriate direction indicated (+ or -). Positive changes improve the economy relative to the baseline, while negative changes reflect a weakening of the baseline condition.
- In addition, each variable's change will be reported as a percentage of the variable's total value in order to provide context.

Key Protocols

- The Statewide Model almost always treats Florida as a single region...this means that typically the analysis will be generalized statewide. A specific local economy will only be considered in rare circumstances where the localized impact must be considered due to a unique feature of the proposed amendment under review (for example, the Slots amendment).
- Balanced budget requirement by fiscal year...however, this does not mean that the budget is strictly held to official forecasts (for example, the inclusion of federal dollars grows the available revenues for expenditure).
- The underlying model is calibrated for current budget policy and the official economic and revenue forecasts which comprise the baseline. All analyses performed in a given year will be compared to the same baseline.

Tab 8

Materials from the Sponsor



BILL GALVANO President of the Senate

THE FLORIDA LEGISLATURE



OFFICE OF ECONOMIC AND DEMOGRAPHIC RESEARCH

JOSE R. OLIVA Speaker of the House of Representatives

Gail Schwartz, Chairperson Ban Assault Weapons Now 6619 South Dixie Highway #148 Miami, FL 33143

Dear Ms. Schwartz,

I am writing to inform you that the petition initiative entitled "*Prohibits Possession of Defined Assault Weapons (19-01)*" has triggered the required Financial Impact Estimating Conference (FIEC) review, and the principals have now been appointed. I have attached the notice containing information regarding the upcoming meetings.

I attempted to reach you by phone, but—based on the voicemail message—it is not clear to me that I have your correct contact number. As you may know, the Legislature passed CS/CS/HB 5 regarding Ballot Measures on May 3, 2019, and it was subsequently signed by the Governor. This will be the fourth FIEC called after the passage of the new law. Among other things, it changes the FIEC process. One of the new provisions indicates that:

Immediately upon receipt of a proposed revision or amendment from the Secretary of State, the Coordinator of the Office of Economic and Demographic Research shall contact the person identified as the sponsor to request an official list of all persons authorized to speak on behalf of the named sponsor and, if there is one, the sponsoring organization at meetings held by the Financial Impact Estimating Conference.

In part, this letter is a formal request for you to make your designation in writing.

I also need to make you aware of an opportunity to participate in the process. To provide context, below you will find general information regarding the FIEC's work:

In 2004, a constitutional amendment passed that requires initiative petitions be filed with the Secretary of State by February 1st of each general election year in order to be eligible for ballot consideration. This has been interpreted to mean that all signatures have been certified by the local supervisors of election and that the other requirements for geographic distribution have been met. For 2020, the required number of valid signatures is 766,200.

Section 15.21, Florida Statutes, further requires the Secretary of State to "immediately submit an initiative petition to the Attorney General and to the Financial Impact Estimating Conference" once the certified forms "equal...10 percent of the number of electors statewide and in at least one-fourth of the congressional districts required by s. 3, Art XI of the State Constitution." For 2020, this means that there are at least 76,632 valid and qualifying signatures. Upon receipt, the Financial Impact Estimating Conference (FIEC) has 75 days to complete an analysis and financial

June 17, 2019 Page 2

impact statement to be placed on the ballot (s. 100.371, Florida Statutes). In practice, the 75-day window has begun when the Legislative Office of Economic and Demographic Research (EDR) received the official transmittal letter.

Each FIEC is responsible for the development of two products: (1) a ballot impact statement of no more than 150 words to be included after the ballot summary; and, (2) a detailed financial information statement, including a summary of not more than 500 words. In the past, each of the documents was limited to an analysis of the estimated increase or decrease in revenues or costs to state or local governments. This was modified by the new law to include an additional analysis of the estimated economic impact on the state and local economy and an additional analysis of the overall impact to the state budget. Governing the entire process, the Supreme Court has required that the statements must reflect only the "probable financial impact" of the amendment.

Typically, we set aside time at the first meeting (referred to as the Public Workshop) to hear directly from the sponsors of the proposed amendment. In this regard, you are welcome to bring one or more people to provide a presentation of material or handouts that you think would be relevant to the FIEC. We would be happy to provide any equipment related to the presentation. Just let us know if you plan to participate and what your needs are. You are also welcome to submit written materials to us at any time.

You can contact me by phone at (850)487-8272 or by email at <u>baker.amy@leg.state.fl.us</u>.

Sincerely,

Imy J. Baher

Amy J. Baker, Coordinator

Attachment

NOTICE OF WORKSHOPS AND CONFERENCE FINANCIAL IMPACT ESTIMATING CONFERENCE

The Financial Impact Estimating Conference (FIEC) will be holding workshops and a conference on the petition initiative entitled "*Prohibits Possession of Defined Assault Weapons*". Unless otherwise indicated on the schedule below, all meetings will held in Room 117, Knott Building, 415 W. St. Augustine Street, Tallahassee, Florida. Once begun, they will continue until completion of the agenda.

The FIEC is required by s. 100.371, Florida Statutes, to review, analyze, and estimate the financial impact of amendments to or revisions of the State Constitution proposed by initiative. In this regard, the FIEC is now in the process of preparing a financial impact statement to be placed on the ballot that shows the estimated increase or decrease in any revenues or costs to state and local governments resulting from the proposed initiative. Because the Legislature passed CS/CS/HB 5 during the 2019 Session and it is has now been signed into law (see <u>CHAPTER 2019-64</u>), the FIEC will also be considering the estimated economic impact on the economy and the overall impact to the state budget.

The purpose of the Public Workshop is to provide an opportunity for sponsors, interested parties, proponents and opponents of the initiative to make formal presentations to the FIEC regarding the probable financial and economic impact of the initiative. In addition to the workshop, information may be submitted at any time to the FIEC by contacting the Legislative Office of Economic and Demographic Research (contact information below).

Prohibits Possession of Defined Assault Weapons

- Public Workshop Tuesday, July 30th at 10:00 a.m.
- Principals' Workshop Friday, August 16th at 8:30 a.m.
- Principals' Workshop Thursday, August 22nd at 10:00 a.m.
- Formal Conference Friday, September 6th at 8:30 a.m.

For additional information regarding the meetings, please contact the Florida Legislature's Office of Economic and Demographic Research at (850) 487-1402.

Address for submitting information to the FIEC:

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us FAX: (850) 922-6436

For additional information regarding the Financial Impact Estimating Conference process and the Initiative Petition process, please visit the Florida Legislature's Office of Economic and Demographic Research's website at: <u>http://edr.state.fl.us/Content/constitutional-amendments/index.cfm</u> and the Florida Department of State, Division of Elections' website at: <u>https://dos.elections.myflorida.com/initiatives/</u>



Gail Schwartz Chairperson, Ban Assault Weapons Now 6619 South Dixie Highway #148 Miami, FL 33143 (954) 298-2115 gailbarb@comcast.net

July 28, 2019

Amy Baker Coordinator, Office of Economic and Demographic Research 111 West Madison Street, Suite 574 Tallahassee, FL 32399 (850) 487-8272 baker.amy@leg.state.fl.us

Ms. Baker,

I am writing today in response to your correspondence dated June 17, 2019 regarding the petition initiative entitled "*Prohibits Possession of Defined Assault Weapons (19-01)*". As the chairperson of this petition initiative's sponsoring organization, I hereby designate the following individuals to speak on behalf of the organization (in addition to myself) in connection with the work of the Financial Impact Estimating Conference: Jon Mills, Brendan Olsen, Eric Johnson, Ben Pollara, Ashley Walker.

Additionally, I wish to state in advance of the Financial Impact Estimating Conference's public workshop scheduled for July 30, 2019 that Ban Assault Weapons Now does not anticipate any substantial change in state or local revenue nor any impact to state and local economies as a result of the passage of this initiative. Furthermore, Ban Assault Weapons Now does not anticipate any substantial financial impact to the state budget as a result of its passage. I trust this will be taken into consideration as the Financial Impact Estimating Conference drafts its reports on both the ballot impact summary and the financial information statement. As Ban Assault Weapons Now expects no substantial impact, the organization will not be sending representatives to Tallahassee to participate in this Tuesday's public workshop.

Finally, I request that the telephone number used in any future correspondence related to this petition initiative be updated to (954) 298-2115.

We look forward to maintaining contact with the committee as it continues its work.

Sincerely,

Gail Schwartz, Chairperson

Florida Assault Weapons 2020 Ballot Initiative Overview

Introduction

Assault-style rifles and high capacity magazines played a significant role in many recent mass shootings, including Parkland, El Paso, Las Vegas, Sutherland Springs, Orlando, San Bernardino, Fort Hood, Aurora, and Newtown. Regulating assault weapons, weapons that are designed to be maximally lethal, and limiting the number of rounds those weapons fire can help save lives.

An Effective Approach to Regulating Assault Weapons

Previous attempts at regulating assault weapons have often defined those firearms in large part by the presence of specific features (eg., a pistol grip on a rifle) and by enumerating specific dangerous models. This approach, generally known as a "features test," has proven at times difficult to enforce, as it has been exploited by manufacturers who have found a way to design around these definitions and market unregulated firearms that are every bit as dangerous. For example, the rifle used in the Newtown shooting had been designed by Bushmaster to subvert an assault weapons prohibition on the books in Connecticut.

Rather than focus on cosmetic features and enumerated models, regulation of assault weapons should be based on the essential elements that increase lethality. Assault style rifles are generally capable of firing far more bullets, far faster than manual action hunting rifles--and each round has a muzzle energy much higher than a bullet shot from a handgun. This means that each round of an assault style rifle inflicts greater damage to the human body than a round from a typical handgun -- and these guns can fire many, many of these high-powered rounds extremely fast.

This approach provides clear standards about the type of firearms that are covered, focusing on the inherent capabilities of the firearm rather than cosmetic features it possesses or features which can be added later. This not only improves the efficacy of the prohibition, generally preventing subversion of the initiative via after-market accessories or manufacturing, it eases the regulatory burden on gun owners and manufacturers by providing clear and easily followable standards.

<u>Features of the Proposed Constitutional Amendment to Prohibit Possession of Defined Assault</u> <u>Weapons in Florida:</u>

Types of Firearms Covered

The proposed constitutional amendment prohibits the possession of the following types of firearms as assault weapons: 1) All semi-automatic rifles and shotguns that are capable of accepting a detachable magazine or other ammunition-feeding device; 2) all semi-automatic rifles and shotguns that are equipped with a fixed magazine with a capacity over 10 rounds.

The proposed constitutional amendment does not prohibit possession of the following types of firearms: 1) manual-action rifles or shotguns, including firearms that operate via lever-action, bolt-action, or breech-loading; 2) semi-automatic rifles and shotguns with fixed magazines with a capacity under 10

rounds; 3) semi-automatic rifles and shotguns incapable of accepting detachable magazines over 10 rounds, such as internal box magazines; and 4) pistols and other handguns.

Uses of Firearms Covered

The proposed constitutional amendment prohibits possession of all new assault weapons, other than for military, law enforcement, or federal use. Possession includes manufacture and transfer.

Grandfathering

Any person who possesses an assault weapon at the time the constitutional amendment takes effect would be allowed to continue to possess the firearm, so long as that person registers the firearm with Florida Department of Law Enforcement within the first year that the prohibition is in effect. A person who lawfully possesses an assault weapon would be prohibited from transferring the firearm to another person or entity. Guns that do not need to be registered unless either the gun or its loading device is substantially reworked and/or remanufactured:

- 1. Beretta A300
- 2. Beretta A400
- 3. Beretta Extrema I
- 4. Beretta 1301
- 5. Beretta Tx4
- 6. Browning SA-22
- 7. Browning A5
- 8. Browning A-500
- 9. Benelli M1
- 10. Benelli M2
- 11. Benelli SBE
- 12. Benelli M4
- 13. Benelli M1014
- 14. FN SLP
- 15. Remington Model 552
- 16. Remington 1100
- 17. Remington Versa Max
- 18. Winchester SX2
- 19. Winchester Sx3
- 20. Winchester SX4
- 21. Franchi Affinity Shotgun
- 22. Mossberg 930
- 23. Mossberg 590A1
- 24. Stoeger 3000
- 25. Stoeger 3020
- 26. Stoeger Model 3500

Guns that do not need to be registered because the loading device is a rotary magazine which cannot be remanufactured:

- 1. Ruger 10/22
- 2. Winchester Wildcat 22
- 3. Savage A17
- 4. Thompson/Center T/CR22

Guns that do not require registration because they are not semi-automatic:

1. Ruger American Rifle

Guns that would require registration:

- 1. Ruger PC Carbine
- 2. Ruger Mini-14
- 3. Ruger Mino-30
- 4. Remington Nylon 66 not manufactured after 1989.
- 5. Remington Model 597
- 6. Rossi RS22
- 7. Mossberg 702 Plinkster
- 8. Savage 64F
- 9. Tactical Solution X-Ring X-22

National and Florida-Specific Costs of Gun Violence

Gun violence in America costs an estimated \$229 billion dollars annually.¹ This estimate was calculated by leading subject matter expert, Ted Miller, PhD, of the nonpartisan nonprofit, Pacific Institute of Research and Evaluation (PIRE), using data from the 1980s through 2012. It accounts for direct costs to individuals who survived or died from bullet wounds (i.e., emergency services, law enforcement investigations, medical and mental health care, and court and prison expenses) and indirect costs (i.e., lost income, employer losses, quality of life).

Direct costs of gun violence account for \$8.6 billion annually, with long term prison costs contributing the most significantly to this expense (\$5.2 billion). Mental health costs alone amount to an estimated \$140 million annually.² Indirect costs of gun violence account for \$221 billion, with quality of life and lost income primarily driving this value (\$169 billion and \$49 billion, respectively). In total, each gun death costs an average of \$6 million, and each gun injury requiring hospitalization costs an average of \$583,000. An estimated 87 percent of these costs are covered by taxpayers, with gun violence costing each American more than \$700 per year.

This estimate does not account for long term (i.e., over seven years) medical or disability expenses for those without spinal cord or traumatic brain injuries, nor does it account for community trauma, or fear. Further, these estimates have not yet been parsed by state nor type of gun--though Everytown for Gun Safety and Dr. Miller are currently working toward this goal. Relative to Florida, however, Dr. Miller has estimated that the 2016 mass shooting in Orlando's Pulse Nightclub cost an estimated \$385-390 million, not including the mental health expenses accrued by others who were affected but not shot (i.e., those who were present, those whose loved ones were injured).³ In yet another example, Dr. Miller estimated that the 2017 Las Vegas Route 91 Harvest Festival shooting— where the shooter had access to 24 firearms, including a revolver, a bolt action rifle, 8 AR-10 rifles, and 14 AR-15 rifles enhanced with bump stocks—to cost \$600 million in medical bills, follow-up care, and quality of life.⁴

According to Giffords Law Center, gun violence in Florida costs an estimated \$14.1 billion annually.⁵ Giffords generated this estimate in 2018, accounting for annual costs of healthcare (\$228 million) law enforcement and criminal justice (\$383 million), employer losses (\$29 million), income losses (\$4.4 billion), and reduced quality of life (\$9.1 billion). In Florida, 85 percent of these costs are covered by taxpayers.

¹ Follman, M., Lurie, J., Lee, J., and West, J.. The true cost of gun violence in America. *Mother Jones*. April 15, 2015. <u>https://www.motherjones.com/politics/2015/04/true-cost-of-gun-violence-in-america/</u> ² <u>https://www.pire.org/documents/GSWcost2010.pdf</u>.

³ Aboraya, A. The costs of the Pulse nightclub shooting. *NPR*. July 30, 2016. <u>https://www.npr.org/sections/health-shots/2016/07/30/486491527/the-costs-of-the-pulse-nightclub-shooting</u>.

⁴ Galvin, G.. Las Vegas shooting will likely cost millions. *U.S. News*. October 5, 2017. <u>https://www.usnews.com/news/articles/2017-10-05/las-vegas-shooting-victims-facing-millions-of-dollars-in-medical-expenses</u>.

⁵ Giffords Law Center. The economic cost of gun violence in Florida. <u>https://lawcenter.giffords.org/wp-content/uploads/2018/03/Cost-of-Gun-Violence-in-Florida-03.08.2018.pdf</u>. Published March 2018.

On July 1, 2016 an assault rifle ban took effect in Massachusetts. It was very similar to the Florida initiative except that the AR was defined a little more specifically – it had to be a semiautomatic firearm with capacity of more than 10 rounds and at least one aesthetic ornament (flash hider, pistol grip, etc.) on the gun. The ban grandfathered in currently-owned guns, but did not allow for the transfer of such guns either through public or private sale or bequest. It did not require registration because Massachusetts already had a registration law covering any gun transfers either through public or private sale.

The background check data published each month by the FBI is a very good indicator of the trend of gun sales because no gun can be transferred from a licensed dealer to a customer without a background check. This means that the monthly numbers show us a complete picture of purchases at the retail level and, therefore, a clear picture of the impact both on gun retailing and state revenues derived from retailing. Revenues from gun sales are typically 80% of all gun store revenues. Please find the FBI-NICS compilation as a supplementary attachment.

From August 1, 2014 through July 31, 2015, there were 92,332 FBI-NICS gun checks conducted in MA. This number swelled to 115,200 from August 1, 2015 through July 31, 2016, with January and March of that year being the only months in which checks surpassed 7,000. This reflects the fact that the ban was first announced in January but did not take effect until July. Hence, the 2016 numbers were a typical response to any gun regulation, namely, purchases made because guns might not be available after a certain date. The number for August 1, 2016 through July 31, 2017 were 109,531. The number of total NICS checks from August 1, 2017 through July 31, 2018 were 92,387.

In other words, after the rush to buy weapons as the ban date grew close, the retail gun industry went right back to the level at which it had been operating before the ban was announced. These numbers make it very difficult to argue that the retail gun business and state tax revenues would be impacted in any major way if the Constitutional amendment were approved and take effect.

MEMORANDUM

TO: FIEC

FROM: Ban Assault Weapons Now

DATE: Monday, 9/2/2019

SUBJ: Supplement Re: Definition of "Assault Weapons" in Proposed Constitutional Amendment

I. Introduction: An Effective Approach to Regulating Assault Weapons

Previous attempts to regulate assault weapons often defined those firearms largely by the presence of specific features (e.g., a pistol grip on a rifle) and by enumerating specific dangerous models. That approach, known as a "features test," has proven difficult to enforce, as it has been exploited by manufacturers who found ways to design around those definitions and to market unregulated firearms that were every bit as dangerous. For example, the rifle used in the Newtown shooting had been designed by Bushmaster to subvert an assault-weapons prohibition in Connecticut.

Rather than focus on cosmetic features and enumerated models, regulation of assault weapons should be based on the essential elements that increase a firearm's lethality. Assault style rifles are generally capable of firing far more bullets, far faster than manual action hunting rifles—and each round has a muzzle energy much higher than a bullet shot from a handgun. This means that each round of an assault style rifle inflicts greater damage to the human body than a round from a typical handgun—and assault style rifles can fire many, many high-powered rounds extremely fast.

The proposed amendment's approach provides clear standards about the type of firearms that are covered, focusing on a firearm's inherent capabilities rather than its cosmetic features or on features that could be added later. This approach improves the efficacy of the prohibition. Because the definition prohibits possession of a weapon whenever it meets the standards, this definition prevents subversion of the initiative via after-market accessories, modifications, or manufacturing. By providing clear and easily followable standards, the approach also eases the regulatory burden on gun owners and manufacturers.

II. Plain Meaning of Proposed Amendment Prohibits Possession of *Only* Weapons that Qualify as "Assault Weapons."

A. Courts Apply Plain Meaning Doctrine When Interpreting Constitutional Provisions.

Courts apply the Plain Meaning Doctrine when interpreting constitutional language. The doctrine states that words will be given their common meaning in the context of the constitutional or statutory provision,. A court will not add words to a constitutional unless something in the provision (e.g., a definition) expresses the intent for a word to be given a technical or other

meaning provision and will not create ambiguity where there is none.¹ When determining the plain or ordinary meaning of a word, courts refer to common dictionary definitions.²

The Plain Meaning doctrine is consistent with the test used by the Florida Supreme Court in determining whether a proposed constitutional amendment complies with the statutory requirements that a ballot provision provide voters with a fair question that is not misleading. The purpose of the requirements is "to provide fair notice of the content of the proposed amendment so that the voter will not be misled as to its purpose, and can cast an intelligent and informed ballot."³

B. Plain Meaning of Proposed Amendment's Text

The text of the proposed amendment's definition of "assault weapons" is as follows:

a) Assault Weapons - For purposes of this subsection, any semiautomatic rifle or shotgun <u>capable of holding more than 10 rounds of ammunition at once</u>, either in a fixed or detachable magazine, or any other ammunition feeding device. This subsection does not apply to handguns.

The definition's text *does not* contain any words addressing (1) the modification of a weapon or (2) a weapon's possible future attributes.

Instead, the definition's text applies to the present—i.e., the moment that a weapon is assessed for the purpose of applying the law. The plain meaning of the definition is that a semiautomatic weapon would qualify as an "assault weapon" *only* when the weapon is capable of holding more than 10 rounds. Therefore, if a semiautomatic weapon is not capable of holding more than 10 rounds, that weapon (1) would not qualify as an "assault weapon" and (2) would not be unlawful.

Based on the definition's plain meaning of the definition of "assault weapons," the proposed constitutional amendment *prohibits the possession of only* the following types of firearms:

- 1) All semi-automatic rifles and shotguns that are capable of accepting a detachable magazine or other ammunition-feeding device with a capacity of more than 10 rounds and
- 2) All semi-automatic rifles and shotguns that are equipped with a fixed magazine

¹ *E.g., Advisory Opinion to Governor--1996 Amendment 5* (Everglades), 706 So. 2d 278, 282 (Fla. 1997) ("[T]he words and terms of a Constitution are to be interpreted in their most usual and obvious meaning, unless the text suggests that they have been used in a technical sense" citing <u>*City of Jacksonville v. Continental Can Co.*</u>, 113 Fla. 168, 172, 151 So. 488, 489–90 (1933)).

² *E.g.*, *Lawnwood Med. Ctr., Inc. v. Seeger*, 990 So. 2d 503, 511 (Fla. 2008) ("Historically, this Court has resorted to dictionary references in defining terms contained in constitutional provisions" citing <u>Myers v. Hawkins</u>, 362 So.2d 926, 930 (Fla.1978)).

³ E.g., Advisory Op. to Att'y Gen. re Term Limits Pledge, 718 So.2d 798, 803 (Fla. 1998).

with a capacity over 10 rounds.

Similarly, based on the definition's plain meaning, the proposed constitutional amendment *does not prohibit* possession of the following types of firearms:

- 1) Manual-action rifles or shotguns, including firearms that operate via lever-action, bolt-action, or breech-loading;
- 2) Semi-automatic rifles and shotguns with fixed magazines with a capacity under 10 rounds;
- 3) Semi-automatic rifles and shotguns incapable of accepting detachable magazines over 10 rounds, such as internal box magazines; and
- 4) Pistols and other handguns.

III. Dictionary Definitions and Grammatical Analyses Confirm the Plain Meaning of "Capable" in the Definition of "Assault Weapons."

As discussed in Section II-A, courts often consult dictionaries when determining a word's ordinary or plain meaning. Below are relevant definitions of "capable" from five ordinary, English dictionaries:

Oxford American: **"having** the ability, fitness, or quality necessary to do or achieve a specified thing."⁴

<u>Webster</u>: "**having** attributes (such as physical or mental power) required for performance or accomplishment."⁵

American Heritage: "having the ability required for a specific task or accomplishment."

Dictionary.com: "having power and ability."7

<u>Cambridge Dictionary Online</u>: "**having** the ability, power, or qualities to be able to do something."⁸

All five dictionary definitions contain the word "having," which is the *present* participle of "have." A participle is a form of a verb that—without additional words—makes the verb

⁴ "Capable," New Oxford American Dictionary (2d Ed., 2005).

⁵ "Capable," *Merriam-Webster Dictionary*, 2019. <u>https://www.merriam-webster.com/dictionary/capable</u> (last visited August 28, 2019).

⁶ "Capable," *American Heritage Dictionary of the English Language*, 2019, <u>https://www.ahdictionary.com/word/search.html?q=capable</u> (last visited August 28, 2019).

⁷ "Capable," *Dictionary.com*, 2012, <u>https://www.dictionary.com/browse/capable?s=t</u> (last visited August 28, 2019).

⁸ "Capable," *Cambridge Dictionary*, 2019, <u>https://dictionary.cambridge.org/us/dictionary/english/capable</u> (last visited August 28, 2019).

function as an adjective: i.e., a word that modifies a noun or noun-substitute.⁹ The *present* participle applies in the present.

The five dictionaries *do not* define "capable" in terms of a future ability or future attribute. Instead, through the present participle "having," those dictionaries define "capable" as signifying abilities or attributes that are *already possessed* as of a present moment. If something is "capable of" doing something, it has the present ability to do it.

Applying those dictionaries' definitions of "capable" to the proposed amendment's definition ("assault weapons"), the plain meaning is that—**regardless of** a weapon's possible, future abilities or attributes—a semiautomatic weapon would be:

- (a) lawful if it cannot hold more than 10 rounds and
- (b) unlawful if it can hold more than 10 rounds.

In common parlance, it would be inaccurate to say that an ordinary car is "capable of" going 200 mph if the car had to be modified with a larger engine to do so. Similarly, it would be inaccurate to say that a weapon is "capable of" holding more than 10 rounds if the weapon would have to be modified in order to hold more than 10 rounds.

Furthermore, ordinary adjectives (as opposed to participles) do not have tense; thus, they—on their own, without other words—typically do not signify past or future. Consider the following examples:

- (1) The <u>healthy</u> child. . . .
- (2) The child will be healthy.

In Example 1, the adjective "healthy"—without additional words—addresses only the child's present health.

In contrast, Example 2 shows one way to change Example 1's text so that it addresses the child's future health: the adding of words the words "will" and "be" to indicate a time in the future.

Similar to Example 1, the proposed amendment's definition ("assault weapons") contains an ordinary adjective but *does not* contain a verb or other word signifying the weapon's future abilities or future attributes.

• The woman works. (verb).

⁹ Deborah Cupples and Margaret Temple-Smith, *Grammar, Puntuation & Style: A Quick Guide for Lawyers and Other Writers*, 11 (West, 2013); "Participle," *New Oxford American Dictionary* (2d Ed., 2005). For example, the verb "work" (an action) can become an adjective when "ing" is added:

[•] The working woman (present participle functioning as adjective describing "woman").

Thus, according to common grammatical principles discussed in this section, the definition's text signifies a semiautomatic weapon *would not* qualify as an "assault weapon" if that the weapon could not hold more than 10 rounds.

IV. Potential Misinterpretations of Definition of "Assault Weapons" are Inconsistent with the Plain Meaning of the Proposed Amendment.

The proposed amendment's text is clear. It has been suggested that the current language actually includes any weapon that could be modified to accept more than 10 rounds even if it has not been modified. This misinterpretation, in effect, adds the words "could be capable" to the existing text. As the descriptions of the plain meaning of the text above show, the text does not include a weapon that merely *could be* capable of holding more than 10 rounds after some future modification.

Inserting "could" makes the phrase's verb subjunctive. The subjunctive mood of a verb expresses "what is imagined or wished or possible."¹⁰ The actual text of the proposed amendment's definition **does not contain** any subjunctive verbs or other words signifying future possibilities. This misinterpretation would include a weapon that is currently not capable of holding more than 10 rounds but that *could be made* capable through modification. This interpretation is in direct conflict with the definition's text and plain meaning that requires a semiautomatic weapon to be capable of holding more than 10 rounds to qualify as an assault weapon. Therefore, under this misinterpretation, any weapons that could be modified to become "assault weapons" would be illegal. This interpretation could include almost any weapon and is in direct conflict with the proposed amendment's text.

There also has been a suggestion that the definition could be improved by adding the words "capable from the factory". The insertion of this language would dramatically change the meaning of the current language. The result of this language would be to exclude from the definition of assault weapon any weapon that was modified to accept more than 10 rounds after it left the factory. This interpretation would not restrict direct modification of weapons that would make them capable of holding more than 10 rounds. Therefore, all weapons modified to become an "assault weapons" after leaving the factory would be legal under this alternative language. This addition is completely contrary to the meaning of the actual proposal.

The courts' standard for constitutional interpretation is not whether a party can create a confusing interpretation or whether there are illogical options for interpretations contrary to the plain text and meaning of a provision. The standard for interpretation is firmly based in reading the actual language, context and common meaning of a constitutional provision. The actual language of this proposed amendment expresses a clear, unambiguous, and bright-line test for defining "assault weapons."

¹⁰ "Subjunctive," *New Oxford American Dictionary* (2d Ed., 2005). See also Deborah Cupples and Margaret Temple-Smith, *Grammar, Puntuation & Style: A Quick Guide for Lawyers and Other Writers*, 22 (West, 2013).

Tab 9

Materials from Proponents

August 14, 2019

The Florida Legislature Office of Economic and Demographic Research Attn: Ms. Amy J. Baker, Coordinator 111 West Madison, Suite 574 Tallahassee, FL 32399-6588

Dear Ms. Baker:

I am the leader of the assault weapons working group of the Florida Veterans for Common Sense (FLVCS). FLVCS is a group of military veterans and supporters that was formed in 2002 to voice concerns about the anticipated invasion of Iraq. Since that time we have taken active measures to support veterans and have taken positions on various issues that we feel are a threat to our national security. One of those issues is the presence of weapons of war (assault weapons) in our society. We have taken the position, as a group, that those weapons should be banned within the general populace. We are proponents of the proposed amendment to Florida's Constitution to ban assault weapons. It is for that reason that I am writing this letter. Will you please read it into the record?

We understand that the purpose of your committee is to gather evidence that will shed light on the potential economic impact to the Florida budget and to the Florida economy, if the amendment is passed. I know you are considering things like potential reduction in sales tax revenue and manufacturing revenue and the cost for FDLE to set up and administer a database of registrants, among other things. Essentially, you have been focusing on economic costs.

My purpose here is to ask you to consider the other side of "economic impact", which is the economic benefit side. What positive potential economic effects will the passage of this amendment have?

If we use the Parkland and the Pulse shootings for projection/analysis purposes we have some basis to reasonably project the benefit of banning the type of weapons used in those shootings. In the Parkland shooting, 17 people were killed and 17 were wounded. In the Pulse shooting, 49 people were killed and 53 were wounded.

Using the total combined number of people killed (66) we can begin to make some reasonable projections. Much like a personal injury attorney does in a case in which his client is killed or injured, we can make some projections regarding the lifetime earnings of those 66 murder victims. A large percentage of those earnings would have been spent in the economy had the victims lived. Using even extremely conservative numbers the result is eye opening. If those 66 people would have averaged a 30-year work period, with an average annual income of \$50,000, we can see that each person would have earned \$1,500,000 during the course of his/her working career. For 66 people that amounts to \$99,000,000 over those years. Of

course, those are only the people who were killed and the loss is only reflected for a 30 year period. Many of them would have earned a good deal more than \$50,000 each year and some would have longer working careers. Most of them would have amassed some savings and some retirement income, all of which would have been spent during their retirement years.

Now consider the loss for the 70 people who were injured. Some only incurred minor injuries and will return to the work force relatively soon, but others might never have an ability to work. What amount of economic loss is reasonable to project for them?

What would be the economic benefit of having 66 people not killed and 70 people not wounded?

The second major area to consider is the future potential cost of mass shootings. Once again, if you consider the Parkland and Pulse shootings for numbers projection purposes, you can begin to come up with a reasonable number. One major portion of the total cost will be the medical costs. How much did it cost to medically attend to each victim? How much did it cost to medically treat and then to bury those 66 people? How much did/will it cost to medically treat (initially and ongoing) the 70 people who were wounded? How much will it cost for psychological treatment for those victims and their families and the witnesses to those shootings? What were the law enforcement/first responder costs?

What about the cost of the inevitable law suits that will be filed? Florida House Bill 123 was introduced in the spring of 2019. The bill called for establishing a trust fund to cover civil settlements of lawsuits filed by the victims of the Marjorie Stoneman Douglas shooting. The proposed amount of the trust fund in that bill was \$120,000,000. There were also Florida Senate bills, which were introduced, that dealt with the same thing.

FLVCS believes that all of these types of issues should be studied and analyzed and considered in your report.

Thank you.

Respectfully submitted for FLVCS by

Dave Siegwald (USMC Viet Nam) DaveSiegwald@gmail.com

Florida Veterans for Common Sense, Inc. P.O.Box 2311 Sarasota, FL 34230 FloridaVeteransForCommonSense.org

Tab 10

Materials from Opponents

As calls for gun control mount, firearms industry is a \$1B business in Florida

By SKYLER SWISHER and JOHN MAINES South Florida Sun Sentinel MAY 25, 2018 | 5:30 PM

https://www.sun-sentinel.com/news/florida/fl-florida-school-shooting-gunindustry-20180522-story.html

For some, it's a symbol of American freedom. For others, it's a horrific killing machine. The AR-15, a civilian version of the military's M16 rifle, isn't a single gun as much as a family of guns that operate similarly and are produced by a variety of manufacturers.

When Andrew Rencich wanted to show his support for Donald Trump, he built a custom "Make America Great Again" AR-15 rifle and painted it red, white and blue.

Rencich is one of the dozens of small firearms manufacturers that have spread through Florida in recent years, fueled by gun owners' fears during the Obama administration and by friendly treatment from the Sunshine State.

From small shops tucked away in strip malls to factories churning out tens of thousands of guns, the arms and ammunition industry now employs more than 7,000 people in Florida, producing a \$1 billion economic impact, according to the National Shooting Sports Foundation, a trade association for the firearms industry.

In comparison, the state estimates that tourism supports more than 875,000 jobs, producing \$53 billion in wages. Still, only Texas has more gun manufacturers licensed with the Bureau of Alcohol, Tobacco, Firearms and Explosives.

"Florida is not just about tourism," Rencich said. "The firearms industry is a big part of Florida as well."

Gun-friendly Florida

Florida politicians have embraced the gun industry, offering money to entice firearms manufacturers to do business here. It's also aided the industry by making it easier for Floridians to own and shoot guns, reducing the cost of a concealed-carry permit and funding a large shooting park in Palm Beach County.

ATF's 2008 production report shows 38 gun manufacturers and exporters in Florida. That number climbed to 155 in the 2016 report, according to a South Florida Sun Sentinel analysis of ATF records.

In the 2016 report, Florida manufacturers reported producing 729,064 guns, making Florida the No. 5 state in terms of production. Massachusetts was the top-producing state, making 2.7 million guns, followed by New Hampshire, Arizona and New York, according to the Sun Sentinel's analysis.

In terms of total economic output, Florida's firearms industry ranks No. 3 behind only California and Texas, according to the National Shooting Sports Foundation's 2018 report. At a time when blue-collar work has been strained by globalization, jobs in the firearms industry are paying an average of nearly \$50,000 a year in wages and benefits, according to the trade group.

The firearm industry's historic home is known as Gun Valley — a chain of large factories and suppliers that extends from Smith & Wesson's headquarters in Springfield, Mass., to Colt in West Hartford, Conn.

But gunmakers — particularly smaller and mid-size operations — are moving from the Northeast and the West to states in the South, which have a reputation as being low-tax and gun friendly, said Dan Zimmerman, managing editor of The Truth About Guns Internet blog, which follows the firearms industry.

"You can understand the reluctance to do business in a state that severely regulates or outright bans your product line," he said. Osceola County **spent \$500,000 renovating a building to entice** <u>**Colt</u></u>to locate a regional headquarters in Kissimmee, and the state promised to chip in \$250,000 more in incentive money for a project expected to generate 63 high-paying jobs. The county was to retain the building and charge Colt a mere \$1 in rent for the first five years.</u>**

Gov. Rick Scott hailed the deal in 2011 as sending a message that "Florida is both open for business and a defender of our right to bear arms."

Colt backed out of the deal and repaid \$50,000 of the incentive money as required by its contract for failing to hit its job-creation benchmark.

Working with the state, **Broward County commissioners approved a** <u>\$162,000 incentive package</u> in June 2015 for Kalashnikov USA, which produces Russian-style AK-47 rifles at a factory in Pompano Beach.

That <u>deal has come under scrutiny</u> with U.S. Rep. Ted Deutch, D-West Boca, asking the Treasury Department to examine whether Russian sanctions enacted by the Obama administration were violated. A federal grand jury in Miami is also examining the matter.

Company officials have denied wrongdoing, saying they do not have a business relationship with Kalashnikov Concern, the Russian arms manufacturer targeted by U.S. sanctions.

A review of state records shows that Florida provided \$15,000 to Kel-Tec CNC Industries Inc., a Cocoa-based manufacturer, to train its workers.

The state has been willing to assist the industry in myriad other ways. The state Legislature approved \$3 million this year to help build a 150acre <u>shooting park in Palm Beach County</u> that is supported by the National Rifle Association. State lawmakers exempted gun and shooting club membership fees from the sales tax in 2015, a move that cost the state an estimated \$1.2 million in revenue. The state has lowered concealed-carry permit fees three times in the past six years, saving people \$20 when applying for or renewing a license.

Powerful NRA lobbyist Marion Hammer has wielded influence in Tallahassee, getting a law passed that stripped the authority of local government boards to regulate firearms, such as banning guns in parks or prohibiting backyard shooting ranges. Hammer pushed for 2005's "stand your ground" law, which made it easier for people to claim self-defense when using deadly force in public.

Smaller manufacturers

Smaller operations, such as Rencich's, have fueled much of the growth in the number of producers in Florida. Two-thirds of Florida's gunmakers produce fewer than 25 guns a year, according to the 2016 ATF production report.

Rencich's shop in Crestview, a rural community in Florida's Panhandle, is a family affair. Rencich, 32, said he runs the business with his wife, and his 14-year-old daughter teaches a concealed-carry class.

Andrew Rencich, 32, shows off his 'Make America Great Again' AR-15. (Submitted photo)

Buyers like to design guns as retirement gifts, he said. Competitive shooters want guns with lighter parts and other features. Part of the appeal, Rencich said, is a firearm that looks different than the "run-of-the-mill" gun.

Although Rencich is not operating an assembly line churning out guns, he still needs a manufacturing license to make the types of custom guns his customers want.

Rencich said he wanted to present his customized AR-15 to Donald Trump, but he wasn't able to arrange it. He's working on a custom handgun for Trump's 2020 re-election that will serve as a companion piece.

Manufacturers have been dealing with what has been called the "Trump slump." FBI background checks — a common measurement of gun purchases — retreated in 2017 from record highs as the prospect of gun control regulations lessened with Trump's election.

But after the Parkland school shooting, <u>background checks for the</u> <u>month of March spiked</u> to 2.7 million, a sign that fear-based buying could be returning as calls for gun control mount. "That can only result in more guns being sold," Zimmerman said. "That only fuels people's desire to buy."

Despite slower sales and calls for an assault-weapons ban, Rencich said he is expanding from a 1,200-square-foot building to a new 7,200-square-foot shop, which he said represents a more than \$1 million investment.

In South Florida, The Biker Shop in Margate makes guns while offering motorcycle repairs. American Herald Weaponry in Davie advertises, "We can build the perfect <u>AR-15</u> for you because you will design it!" CSC Arms — another Davie manufacturer — sells guns named "War Fighter" and "Head Shot."

But gun-friendly Southeastern states also have been jostling for bigger production facilities. South Florida's largest gunmaker — Miami-based Taurus — <u>announced last month that it is moving</u> to Bainbridge, Ga., just up the road from Tallahassee in southern Georgia.

David Blenker, president and CEO of Taurus USA, said in a statement that the decision was made as part of a "long-term growth" strategy. Georgia Gov. Nathan Deal hailed the deal as producing more than 300 jobs and representing a \$22.5 million investment.

Enticed by an incentive package, another larger gunmaker, Daytona Beachbased SCCY Industries, decided last year to move its operations to Maryville, Tenn.

Company president Wayne Holt <u>told The Knoxville News Sentinel</u> he was looking for "intelligent and industrious people," which he said he found to be lacking in Florida.

Florida remains home to sizable gunmakers such as Kel-Tec, which produces tens of thousands of pistols and rifles at its facility in Cocoa. I.O. Inc. builds American-Made AK-style rifles at its plant in Palm Bay. Apopkabased Spike's Tactical bills its product line as "the finest AR-15s" on the planet.

Rifle	HERITAGE MANUFACTURING	МІАМІ	199,905
Pistol	SCCY INDUSTRIES LLC	DAYTONA	160,676
	TAURUS		
Pistol	INTERNATIONAL	MIAMI	125,418
Misc	SPIKE'S TACTICAL LLC	АРОРКА	96,534
Pistol	KEL TEC CNC INDUSTRIES INC	СОСОА	57,802
Shotgun	KEL TEC CNC INDUSTRIES INC	COCOA	29,329
Rifle		PALM BAY	17,523
-	KEL TEC CNC		
Rifle	INDUSTRIES INC	COCOA	10,003
Rifle	ADAMS ARMS LLC	ODESSA	8,408
Rifle	SPIKE'S TACTICAL LLC	АРОРКА	5,772
Rifles Exported	KEL TEC CNC INDUSTRIES INC	COCOA	2,804
Shotguns Exported	FUSION PRECISION ENGINEERING LLC	VENICE	1,911
Rifle	CENTRAL FLORIDA FIREARMS LLC	WEST MELBOURNE	1,467
Rifle	KNIGHTS MANUFACTURING CO	TITUSVILLE	1,322
Misc	GHOST FIREARMS LLC	DAYTONA BEACH	929
Rifle	ARES DEFENSE SYSTEMS INC	MELBOURNE	754
Misc	KEL TEC CNC INDUSTRIES INC	COCOA	721
Shotguns Exported	KEL TEC CNC INDUSTRIES INC	COCOA	613
Rifle	WMD GUNS LLC	STUART	590
Mine			469
Misc	MANUFACTURING CO TAURUS INTERNATIONAL MANUFACTURING	TITUSVILLE	409
Misc	INC	MIAMI	451
Pistol	ADAMS ARMS LLC	ODESSA	394
Rifle	SERBU FIREARMS	ТАМРА	323
Rifle	DEFINITIVE ARMS LLC	SAINT PETERSBURG	286
Misc	AMERICAN VINTAGE GUN AND PAWN, INC	BRADENTON	271
Pistol	SPIKE'S TACTICAL LLC	АРОРКА	235
Misc	RAFAL DEFENSE INC	ORLANDO	207
Rifle	WHITE, FRANK C	ALFORD	202

Rifle	AMMO DUMP INTERNATIONAL LLC	MADISON	192
Rifle	IN GUNS WE TRUST	FORT MYERS	188
Rifle	AMERICAN METAL FINISHING CORPORATION	ORLANDO	176
Rifle	KNIGHT, CHARLES REED JR	TITUSVILLE	164
Rifle	NOUS DEFIONS LLC	FREEPORT	158
Rifle	RENCICH, ANDREW S	CRESTVIEW	158
Rifle	IRON SIGHTS PRECISION LLC	BOYNTON BEACH	115
Rifle	SWUB ENTERPRISES	DEBARY	109
Misc	JERICHO SERVICES LLC	PINELLAS PARK	95
Rifle	DIV 3 INC	ORANGE CITY	85
Rifle	SPECIAL OPS TACTICAL LLC	АРОРКА	80
Misc	THOMPSON, DWAIN U	MARIANNA	80
Misc	NORTH AMERICAN SURVEILLANCE SYSTEMS INC	TITUSVILLE	72
Misc	AMTEC LESS LETHAL SYSTEMS INC	PERRY	66
Rifle	BLACKSIDE TACTICAL INC	MELBOURNE	56
Misc	CODE JOCKEYS LLC	NAPLES	52
Misc	TITAN IND LLC	ST AUGUSTINE	50
Misc	SCCY INDUSTRIES LLC	DAYTONA BEACH	50
Rifles Exported	I O INC	PALM BAY	49
Rifle	PROJECT GUNS LLC	BOCA RATON	48
Rifle	FLORIDA FIREARMS ACADEMY LLC	ТАМРА	44
Rifle	NATIONAL ARMORY LLC	POMPANO BEACH	43
Pistol	FUSION PRECISION	VENICE	42
Rifle	HAMMER ARMS LLC	NICEVILLE	42
Misc	GO2 WEAPONS INC	TITUSVILLE	41
Rifle	RANGER PROOF ARMS LLC	SEMINOLE	38
Rifle	HARDLINE CUSTOM	JACKSONVILLE	34
Rifle	GO2 WEAPONS INC	TITUSVILLE	33
Rifle	AQUILA ARMS LLC	HALLANDALE	30

Rifle	TAURUS INTERNATIONAL MANUFACTURING	MIAMI	20
Rille	INC SAFETY HARBOR	MIAMI	30
Misc	FIREARMS INC	SAFETY HARBOR	28
Rifle	SUNCOAST WEAPONS AND TACTICAL LLC	VENICE	26
Misc	ADEQ FIREARMS COMPANY	ТАМРА	26
Rifles Exported	KNIGHTS MANUFACTURING CO	TITUSVILLE	26
Rifle	CSC ARMS LLC	DAVIE	25
Rifle	RAFAL DEFENSE INC	ORLANDO	25
Misc	ARTEMIS ENTERPRISES OF ORANGE COUNTY LLC	ORLANDO	25
Pistol	RAFAL DEFENSE INC	ORLANDO	23
Rifle	DRAGON FIRE ARMORY LLC	WINTER HAVEN	23
Rifle	SSHV INC	PANAMA CITY	23
Rifles Exported	DRAGON FIRE ARMORY LLC	WINTER HAVEN	23
Rifle	CODE JOCKEYS LLC	NAPLES	21
Rifle	GFT ARMS LLC	JACKSONVILLE	21
Rifle	SIMS, RONALD PAUL	BRADENTON	21
Misc	TWISTED INDUSTRIES INC	MERRITT ISLAND	21
Rifles Exported	CENTRAL FLORIDA FIREARMS LLC	WEST MELBOURNE	21
Rifle	ARSENAL SUPPLY LLC	LARGO	20
Rifle	EAST COAST CUSTOM TACTICAL LLC	WILDWOOD	20
Rifle	KYLE GROHMANN ENTERPRISES INC	WEST PALM BEACH	20
Pistol	EAST COAST CUSTOM	WILDWOOD	19
Pistol	IN GUNS WE TRUST	FORT MYERS	19
Rifle	GREY TACTICAL OUTFITTERS LLC	DESTIN	19
Rifle	KARVASALE, MARK AUGUSTUS	MOUNT DORA	19
Misc	ARES DEFENSE SYSTEMS INC	MELBOURNE	19
Rifle	SLR RIFLEWORKS LLC	WINTER GARDEN	18
Rifle	A D J ENTERPRISES LLC	DAYTONA BEACH	16

	CARBONTECH ARMS		
Rifle	LLC	ORMOND BEACH	16
Rifle	DNS SIGNS & LIGHTING INC	SAINT PETERSBURG	15
Pistol	CENTRAL FLORIDA FIREARMS	WEST	14
Pistol	PD PRODUCTS LLC	PALM BAY	14
Rifle	BLACK WIDOW GUNS AND AMMO UNLIMITED INC	UMATILLA	13
Rifle	FIREBASE TACTICAL	GROVELAND	13
Rifle	PATRIOT TACTICAL USA LLC	JACKSONVILLE	13
Shotgun	IRON SITE GUN SHOP INC	LARGO	13
Pistol	RENCICH, ANDREW S	CRESTVIEW	12
Rifle	BLACKHAWK CUSTOM LLC	PORT SAINT LUCIE	12
Rifle	GRAY MATTER ARMS	LAKELAND	12
Rifle	JAN GUN WORKS LLC	JACKSONVILLE	12
Rifle	SABAL ARMS INC	MIAMI	12
Rifle	VERITAS TACTICAL	ORLANDO	12
Misc	BUIS INC	CLEARWATER	12
Misc	FUSION PRECISION ENGINEERING LLC	VENICE	12
Misc	RANGER PROOF ARMS LLC	SEMINOLE	12
Pistol	WMD GUNS LLC	STUART	11
Rifle	ADEQ FIREARMS COMPANY	ТАМРА	11
Rifle	BUIS INC	CLEARWATER	11
Rifle	CORE SHOOTING LLC	BAKER	11
Rifle	PCP TACTICAL LLC	VERO BEACH	11
Rifle	RWMD LLC	ТАМРА	11
Rifle	WOMACK, SCOTT AARON	LYNN HAVEN	11
Pistol	DEFINITIVE ARMS LLC	SAINT	10
Rifle	B HUEY SERVICES	JACKSONVILLE	10
Rifle	BRIGADE MANUFACTURING INC FAIRBANKS AND	MIAMI	10
Rifle	FAIRBANKS AND FAIRBANKS INC	PENSACOLA	10
Rifle	GTGJFE LLC	JACKSONVILLE	10
Rifle	HOLE IN THE WALL GUN SHOP LLC	DAYTONA BEACH	10
Rifle	IRON SITE GUN SHOP	LARGO	10

Rifles Exported	GTGJFE LLC	JACKSONVILLE	10
Pistol	CHARLES W JENKINS	VERO BEACH	9
Pistol	CPR TRAINING CENTER TAMPA	LAND O LAKES	9
Pistol	SABAL ARMS INC	MIAMI	9
Rifle	BALLISTIC ADVANTAGE LLC	АРОРКА	9
Rifle	PARADISE WEAPON WORX MFG INC	KEY LARGO	9
Rifle	WARREN, ROBERT WAYNE	COTTONDALE	9
Misc	HOFFMAN, RICHARD C	LONGWOOD	9
Rifle	SOUTHEAST ARMS	PRINCETON	8
Pistol	SPECIAL OPS TACTICAL LLC	АРОРКА	7
Rifle	FAIRBANKS AND FAIRBANKS INC	PENSACOLA	7
Rifle	AESIR ARMS LLC	STUART	7
Rifle	AK-USA MANUFACTURING INC	FORT MYERS	7
Rifle	GHOST FIREARMS LLC	DAYTONA BEACH	7
Rifle	GUN FIRE INC	PORT ORANGE	7
Pistol	RMW XTREME INC	MYAKKA CITY	6
Rifle	NIGHT OPS LLC	PONCE DE LEON	6
Rifle	ORNDOFF, WILLIAM & COREY	PALM BAY	6
Rifle	PFC INDUSTRIES LLC	CANTONMENT	6
Rifle	RHINO GUNS LLC	SAINT JOHNS	6
Rifle	THE BIKER SHOP INC	COCONUT CREEK	6
Rifle	TRIDENT ARMS LLC	ТАМРА	6
Pistol	ANTTACTICAL LLC	PORT SAINT	5
Pistol	BUNKER, BRANDAN	ELLENTON	5
Pistol	HARDLINE CUSTOM	JACKSONVILLE	5
Pistol	NOUS DEFIONS LLC	FREEPORT	5
Rifle	411 TACTICAL INC BALLISTIC	LAKE PARK	5
Rifle	ADVANTAGE LLC	ΑΡΟΡΚΑ	5
Rifle	CHARLES W JENKINS	VERO BEACH	5
Rifle	ELEVATED SILENCE	SANTA ROSA BEACH	5
Rifle	PISTOL PETE THE GUNSMITH LLC	ΜΙΑΜΙ	5
Rifle	SHOOTERS WORLD LLC	ТАМРА	5

	SURGEONEERING		
Rifle	LLC	FORT WALTON BEACH	5
Misc	GFT ARMS LLC	JACKSONVILLE	5
Shotguns Exported	KNIGHTS MANUFACTURING CO	TITUSVILLE	5
Pistol	ADEQ FIREARMS COMPANY	ТАМРА	4
Pistol	CODE JOCKEYS LLC	NAPLES	4
Pistol	DRAGON FIRE ARMORY LLC	WINTER HAVEN	4
Pistol	FAIRBANKS AND FAIRBANKS	PENSACOLA	4
Pistol	GO2 WEAPONS INC	TITUSVILLE	4
Pistol		NICEVILLE	4
Pistol	SWUB ENTERPRISES INC COASTAL AFFAIRS	DEBARY	4
Rifle	LLC FORDS CUSTOM	ORMOND BEACH	4
Rifle	PLATING & SERVICES	CRYSTAL RIVER	4
Rifle	RMW XTREME INC	MYAKKA CITY	4
Rifle	SUPERIOR PRECISION RIFLES LLC	CRAWFORDVILLE	4
Misc	NATIONAL ARMORY	POMPANO BEACH	4
Misc	DRAGON FIRE ARMORY LLC	WINTER HAVEN	4
Rifles Exported	KNIGHT, CHARLES REED JR	TITUSVILLE	4
Rifles Exported	HOPLITE SYSTEMS LLC	HIALEAH	4
Pistol	GHOST FIREARMS LLC	DAYTONA	3
Pistol	HARRY BECKWITH GUNS & PARADISE WEAPON	MICANOPY	3
Pistol	WORX	KEY LARGO	3
Rifle	ACCURATE DEFENSE GROUP LLC	ROCKLEDGE	3
Rifle	GUNS-N-MORE TACTICAL SUPPLY LLC	HASTINGS	3
Rifle	STOPPED COLD LLC	DELRAY BEACH	3
Rifle	WRP ENTERPRISES	WINTER PARK	3
Misc	LEMON, LARRY	PORT SAINT LUCIE	3
Misc	TAURUS INTERNATIONAL MANUFACTURING INC	MIAMI	3

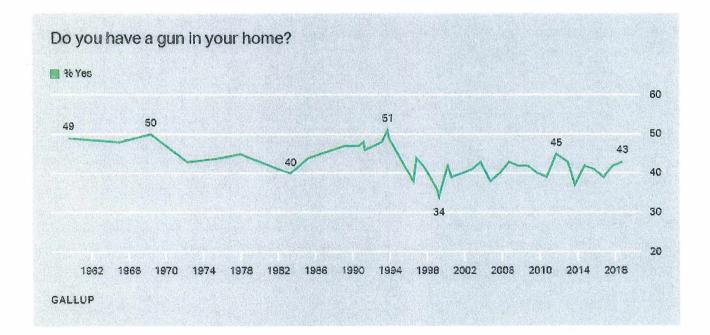
	ADVANCED		
	WEAPONS &		
Pistol	FIREARMS LLC	NEW SMYRNA	2
	AMERICAN VINTAGE		-
Pistol	GUN AND	BRADENTON	2
Pistol	B HUEY SERVICES	JACKSONVILLE	2
Pistol	CSC ARMS LLC	DAVIE	2
Pistol	TRIDENT ARMS LLC	ТАМРА	2
Rifle	HANDHELD WEAPONRY INC	DAVIE	2
		DAVIE	£
	AMERICAN VINTAGE		
Rifle	GUN AND PAWN, INC	BRADENTON	2
	BRIGGS, WILLIAM		
Rifle	HARRY SR	TALLAHASSEE	2
D'fl.	CPR TRAINING		0
Rifle	CENTER TAMPA LLC	LAND O LAKES	2
Rifle	ECR FLORIDA LLC	WAUCHULA	2
	FIRE-LINE		
Rifle	AMMUNITION &	FORT MYERS	2
Rifie	FIREARMS INC	FURTIMIERS	2
	GLOBAL ARMS		
Rifle	INTERNATIONAL LLC	DORAL	2
	GUNSMITHS	DOTAL	-
Rifle	GALLERY LLC	SARASOTA	2
	HEARTLAND		
Rifle	AMMUNITION LLC	WEST MELBOURNE	2
	MARSHALL'S		
DI	FIREARM SERVICE		
Rifle	AND REPAIR LLC	OLDSMAR	2
Rifle	RHOADES CONSULTING LLC	MELROSE	2
	WEAPONS WORLD	MEEROOE	2
Rifle	INC	CLEARWATER	2
	WESTWOOD ARMS		
Rifle	LLC	TALLAHASSEE	2
	X RING ACCURACY &		
Rifle	DESIGN INC	PORT CHARLOTTE	2
	ARSENAL SUPPLY		
Pistol		LARGO	1
Pistol	FIRE-LINE AMMUNITION &	FORT MYERS	1
	KARVASALE, MARK	IUNIWITERS	1
Pistol	AUGUSTUS	MOUNT DORA	1
Pistol	L&L ARMS LLC	SORRENTO	1
		JOINLENIO	1
Pistol	MVB INDUSTRIES INC	DEERFIELD	1
	PISTOL PETE THE		
Pistol	GUNSMITH	MIAMI	1
	RANGER PROOF		
Pistol	ARMS LLC	SEMINOLE	1
Distal	RELIABLE POLICE		
Pistol	SUPPLY INC	DAVIE	1

	SHARK COAST		
Pistol	TACTICAL LLC	SARASOTA	1
Pistol	SLR RIFLEWORKS LLC	WINTER	1
Rifle	AA CUSTOMS INC	CRESTVIEW	1
Rifle	AACTION TRANSMISSION OF PORT ST LUCIE INC	PORT SAINT LUCIE	1
Rifle	AD TEK OF TALLAHASSEE INC	TALLAHASSEE	1
Rifle	ADVANCED WEAPONS & FIREARMS LLC	NEW SMYRNA BEACH	1
Rifle	B&S FIREARMS INC	BRADENTON	1
Rifle	BRAZOS ARMS LLC	PANAMA CITY BEACH	1
Rifle	BRB TACTICAL SYSTEMS INC	CRYSTAL RIVER	1
Rifle	THOMPSON, DWAIN U	MARIANNA	1
Rifle	THORSEN MACHINING INC	WEST PALM BEACH	1
Rifle	TITLE II MANUFACTURING LLC	ELLENTON	1
Rifle	VENGEANCE INTERNATIONAL INC	LONGWOOD	1
Misc	BRIGADE MANUFACTURING INC	MIAMI	1
Misc	L&L ARMS LLC	SORRENTO	1
Rifles Exported	AACTION TRANSMISSION OF PORT ST LUCIE INC	PORT SAINT LUCIE	1
Rifles Exported	VENGEANCE INTERNATIONAL INC	LONGWOOD	1
Rifles Exported	TITLE II MANUFACTURING LLC	ELLENTON	1
Shotguns Exported	AMTEC LESS LETHAL SYSTEMS INC	PERRY	1
Rifle	SMITHEY JAMES RHETT	LAKE CITY	
Rifle	TRUSTY RONALD	BROOKSVILLE	
Shotgun	SMITHEY JAMES RHETT	LAKE CITY	
Shotgun	TRUSTY RONALD	BROOKSVILLE	
Misc	SMITHEY JAMES RHETT	LAKE CITY	
Misc	TRUSTY RONALD	BROOKSVILLE	
Misc	TRUSTY RONALD	BROOKSVILLE	

Misc	SMITHEY JAMES RHETT	LAKE CITY	
Revolvers Exported	TRUSTY RONALD	BROOKSVILLE	
Revolvers Exported	SMITHEY JAMES RHETT	LAKE CITY	
Rifles Exported	TRUSTY RONALD	BROOKSVILLE	
Rifles Exported	SMITHEY JAMES RHETT	LAKE CITY	
Shotguns Exported	TRUSTY RONALD	BROOKSVILLE	
Shotguns Exported	SMITHEY JAMES RHETT	LAKE CITY	
Shotguns Exported	TRUSTY RONALD	BROOKSVILLE	
Shotguns Exported	SMITHEY JAMES RHETT	LAKE CITY	

GALLUP°

Guns



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66

Assault weapons' menacing looks, coupled with the public's confusion over fully-automatic machine guns ver sus semi-automatic assault weapons --anything that looks like a machine gun is assumed to be a machine gun-- can only increase the chance of public support for restrictions on these weapons.



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•Assault weapons' menacing looks, <u>coupled</u> with the public's <u>confusion</u> over fullyautomatic <u>machine</u> guns <u>versus</u> semiautomatic <u>assault</u> weapons — anything that <u>looks</u> like a <u>machine</u> gun is <u>assumed</u> to be a <u>machine</u> gun-- can only <u>increase</u> the <u>chance</u> of <u>public</u> support for <u>restrictions</u> on <u>these</u> weapons. – Josh Sugarmann



Josh Sugarmann

Josh Sugarmann is the executive director and founder of the Violence Policy Center (VPC). Prior to founding the VPC, Sugarmann was a press officer in the national office of Amnesty International USA and was the communications director for the National Coalition to Ban Handguns

Joshua Sugarmann, Assault Weapons and Accessories in America (1988)

http://www.vpc.org/studies/awaconc.htm Assault Weapons and Accessories in America

Conclusion

Assault weapons are increasingly being perceived by legislators, police organizations, handgun restriction advocates, and the press as a public health threat. As these weapons come to be associated with drug traffickers, paramilitary extremists, and survivalists, their television and movie glamour is losing its lustre to a violent reality.

Because of this fact, assault weapons are quickly becoming the leading topic of America's gun control debate and will most likely remain the leading gun control issue for the near future. Such a shift will not only damage America's gun lobby, but strengthen the handgun restriction lobby for the following reasons:

It will be a new topic in what has become to the press and public an "old" debate. Although handguns claim more than 20,000 lives a year, the issue of handgun restriction consistently remains a non-issue with the vast majority of legislators, the press, and public. The reasons for this vary: the power of the gun lobby; the tendency of both sides of the issue to resort to sloganeering and pre-packaged arguments when discussing the issue; the fact that until an individual is affected by handgun violence he or she is unlikely to work for handgun restrictions; the view that handgun violence is an "unsolvable" problem; the inability of the handgun restriction movement to organize itself into an effective electoral threat; and the fact that until someone famous is shot, or something truly horrible happens, handgun restriction is simply not viewed as a priority. Assault weapons-just like armor-piercing bullets, machine guns, and plastic firearms-are a new topic. The weapons' menacing looks, coupled with the public's confusion over fully automatic machine guns versus semi-automatic assault weapons-anything that looks like a machine gun is assumed to be a machine gun-can only increase the chance of public support for restrictions on these weapons. In addition, few people can envision a practical use for these weapons.

 Efforts to stop restrictions on assault weapons will only further alienate the police from the gun lobby. Until recently, police organizations viewed the gun lobby in general, and the NRA in particular, as a reliable friend. This stemmed in part from the role the NRA played in training officers and its reputation regarding gun safety and hunter training. Yet, throughout the 1980s, the NRA has found itself increasingly on the opposite side of police on the gun control issue. Its opposition to legislation banning armor-piercing ammunition, plastic handguns, and machine guns, and its drafting of and support for the McClure/Volkmer handgun decontrol bill, burned many of the bridges the NRA had built throughout the past hundred years. As the result of this, the Law Enforcement Steering Committee was formed. The Committee now favors such restriction measures as waiting periods with background check for handgun purchase and a ban on machine guns and plastic firearms. If police continue to

PRESENTATION OF MARION P. HAMMER Representing the NRA and USF TO THE FISCAL IMPACT ESTIMATING CONFERENCE FRIDAY, AUGUST 16, 2019

Thank you for allowing me time to address some of the important issues relating to the economic impact of the gun ban amendment. I apologize for not appearing at your Workshop on July 30th.

I misunderstood what was to be discussed. Had I realized you would be addressing the nomenclature of firearms and some of the issues you touched upon, I would have been here.

Since it has a bearing on the issues we are about to address, I must address the recent attacks on Attorney General Ashley Moody by the sponsors and proponents of the proposed constitutional amendment to ban so-called "assault weapons." It is important because the Attorney General's evaluation has a direct influence on the economic impact of the proposed amendment.

Political attacks by people who either don't know anything at all about firearms or are simply angry because they don't like the truth are misplaced.

Despite accusations that AG Moody had "played politics," informed people know that the Attorney General is duty bound to accurately report the actual effects of the amendment language and she would not "play politics" with her sworn duties.

While other Cabinet members might use their office as a podium to play politics the Attorney General, an attorney and former judge who is this state's top law enforcement officer, would not do that.

When they attack her integrity, it speaks volumes about their lack of it.

In order to do an economic impact analysis, you have to know, definitively, exactly what is banned and the subsequent real-life impact.

First, there is no statutory or legal definition of assault weapon.

Whereas most definitions can be precise this is an imprecise term.

Assault weapon is an imaginary term that has no limit or boundary.

For example the term "assault rifle" is the formal federal definition that means a fully-automatic or selective fire rifle – in other words, a military machine gun.

Assault weapon is a term that can apply to any thing. For example if you had ever read police reports on crimes, you would have seen that they frequently say: the assault weapon was a baseball bat or the assault weapon was a tire iron, or the assault weapon was kitchen knife, etc.

In other words any object that is used as a weapon to attack another person or persons is an assault weapon. Assault means attack. Weapon means any object that is used to assault.

Previously, in failed legislative attempts to define assault weapons, proponents of banning semiautomatic firearms have listed a huge litany of semiautomatic firearms by name. This drafter took the easy way out and just banned all semiautomatic rifles and shotguns.

The amendment language is broadly crafted and is exceptionally deceptive. The general public, particularly voters reading it on election day, would have absolutely no idea what the language actually bans. The term "assault weapon" is a term intentionally created to be deceptive and confuse the general public, including average gun owners.

In fact Josh Sugarmann the Executive Director of the Violence Policy Center a national anti-gun think-tank is widely quoted as admitting:

"Assault weapons' menacing looks, coupled with the public's confusion over fully-automatic machine guns versus semi-automatic assault weapons – anything that looks like a machine gun is assumed to be a machine gun – can only increase the chance of public support for restrictions on these weapons."

Clearly the sponsors of the proposed amendment employed the strategy of hiding the intent by confusing the public when they chose to call it an "assault weapons" ban.

Professor Jon Mills, former Speaker of the Florida

House, now a professor at the University of Florida is reported to have drafted the amendment. I know Jon Mills and he is not stupid, so we can easily assume that this language is intentionally deceptive and devious. My presentation will expose part of the deception.

The Attorney General is correct, the amendment language will ban all semiautomatic rifles and shotguns.

At your previous meeting, you struggled with the meaning of the word "capable."

I don't think you realized how important that one word is. That one word – "capable" – with respect to fixed or detachable magazines, ASSURES that all semiautomatic rifles and shotguns will be banned if this amendment goes on the ballot and is passed.

So, it is critical that you understand what capable

actually means. Because in this context it is a multi -BILLION DOLLAR word.

It is important to review the exact definition in the proposed amendment. Under the language of the amendment, assault weapon means: " any semiautomatic rifle or shotgun CAPABLE of holding more than ten (10) rounds of ammunition at once, either in a fixed or detachable magazine or other ammunition feeding device."

The fact is, any rifle or shotgun that is "capable" of accepting or using, a detachable magazine that holds 10 rounds or less is "capable" of accepting a magazine of any size. Magazines with a capacity of 3 all the way up to 100 rounds are in common use throughout the United States.

Therefore ALL rifles and shotguns "capable" of using a detachable magazine of any size would be banned.

With regard to "fixed" magazines. Fixed magazines are not "fixed" in terms of the number of rounds one can hold. The term "fixed" means they are simply not detachable.

The capacity of a fixed magazine can be extended. A tubular magazine, for example is a fixed magazine. In the case of tubular magazines some can be extended by simply purchasing a readily available tube extension.

As an example, tube extensions for the Remington Model 1100 – one of the most popular semiautomatic shotguns ever made – are readily available. With a tube extension ALL Remington Model 1100 shotguns are "capable of holding more than ten (10) rounds" and therefore, would be banned.

More than 40 years ago, the Remington Model 1100 entered the market. It was one of the first affordable, semiautomatic shotguns that was perfect for hunting, target shooting and home defense.

Remington Model 1100 shotguns are a staple in youth training programs that teach youngsters gun safety and hunting as well as trap and skeet shooting.

According to Remington, easily over 6 million Remington Model 1100s have been sold.

I assure you Florida has more than its fair share of that 6 million Remington Model 1100 shotguns tucked away in gun safes and gun cases all over the state. This is a popular shotgun for both casual and serious shotgunners – it is commonly owned by average, everyday gun owners.

Then there are the more expensive semiautomatic shotguns like the Benellis. Rather than a price tag in the hundreds of dollars range they run in the thousands. They have a wide range of uses from recreational trap or skeet shooting, to formal competition to hunting and home defense.

All Benelli semiautomatic shotguns are "capable" of holding more than 10 rounds. Whether it's by using mini shells or magazine extensions or both, they are all "capable" of holding more than 10 rounds at once and would be banned.

How do you quantify the cost to the citizens of this state if these common, everyday shotguns are banned?

Any language about grandfathering is virtually useless because most people will not know what the ballot language says, much less what the actual impact is. The intentionally deceptive term "assault weapon" conjures up an image of military machine guns in the minds of many average gun owners. That is by design. Most gun owners will have no idea that their legally purchased, legally owned, legally used and legally possessed long guns fit the definition of "assault weapon" and that they have to either register them with the government within one year or give them up or risk felony prosecution.

There are an estimated 22 million residents currently living in Florida. A recent gallop poll shows that more than 40% of households admit that they own at least one gun.

Personally, I believe that number is significantly low because many gun owners will answer those surveys in the negative because they don't want anybody to know what they own. It's a privacy issue with many people.

Nonetheless the polling numbers are significant. If this amendment were to pass, how would you inform the citizens of Florida that property they legally purchased, legally owned, legally used and legally possessed for many years before the election is now banned and they must register it so that government knows they have it (and come and confiscate it any time they want to) or that it is a felony to continue to possess it?

How do you communicate with them? How do you inform over 40% of 22 million people that they are going to become unwitting felons? What will it cost to tell 9-10 million people that they are going to lose their guns?

How do you tell people that the amendment is ultimately about gun registration and gun confiscation. Give them up now or later.

So your job is actually to come up with the worst case scenario of the fiscal and economic impact. I can tell you it will be pretty bad. Short term, in addition to everything else, you have to consider the cost of creating and enforcing a gun registration system.

Long term you have to create a gun collection system to be in place no later than one year after the effective date. The amendment is silent on what people must do with their guns if they fail to get them registered.

What happens when a year passes and people didn't know they had to register their guns? Are they supposed to just turn them over to government?

Clearly the intent of this amendment is that people turn their guns over to the government or risk having law enforcement confiscate the guns and put them in prison for possessing them.

What amount of money must the state devote to educating citizens? Proponents of the ban may say

that the state has no statutory obligation to education citizens. But what about the duty?

Try telling a 68 year old retiree that his 20 gauge Remington Model 1100 shotgun is an assault weapon and that it is illegal to possess it unless he registers with the government.

He'll tell you that you're out of your mind. This is America and we don't do that sort of thing here.

Will people register their guns? Will people give up their guns? Will people go to prison because their Second Amendment rights have been trashed?

How do you quantify the cost to the criminal justice system of all these people who become instant felons on a date certain?

How do you quantify the cost to law enforcement of searching, arresting, detaining and prosecuting

people who own Ruger 10-22 rifles, Remington Model 1100 shotguns and ANY semiautomatic long gun – and didn't know they were so-called "assault weapons" and are illegal to possess?

How do you tell a 10-year-old little girl who got a Ruger 10-22 with a pink stock for her birthday that her rifle is an assault weapon and she has to turn it over to government or be arrested for felony possession?

Now, if I heard him correctly, at the last hearing, someone on this panel talked about using different calibers of ammunition in the same magazine to make it hold more cartridges.

Although it is technically possible in some calibers, it is generally not workable because you can't just arbitrarily change calibers in a magazine to make it hold more cartridges. For example, you cannot use .22 cartridges in magazine that holds .223 cartridges, although it's possible to extend the capacity size of a .40 S&W caliber magazine by using 9mm cartridges in them.

This is just one more reason of why it is effectively impossible to regulate firearms based on their magazine capacity.

However, with semiautomatic shotguns it is possible to change the length of a shell but not the caliber or gauge.

For example, a Benelli 12 ga shotgun that costs in excess of \$2000 will hold 5 shots in the magazine and one in the chamber. If you use mini shells (shorter shells) it will hold 12 shells. So it is capable of holding more than 10 rounds.

Magazine extenders are also available for Benellis that will add 7 standard size shells taking the magazine capacity up to 12 shells or 24 mini shells. Virtually all Benelli 12 ga shotguns have the same capacity from the \$2000 Benelli all the way down to the \$750 model.

Anybody who calls a Benelli shotgun an assault weapon is simply playing politics and doesn't know anything at all about guns or law-abiding gun owners.

One more thing that I would point out is that there is no exemption or grandfathering or a grace period if a person inherits a semiautomatic rifle or shotgun. So I would advise you to take a long hard look at the economic impact of that flaw.

Switching now away from the impact on the individual citizens of Florida:

This amendment would be devastating to the firearms industry in Florida.

Not only would it shut down the manufacturing,

distribution, and retail sales of all semiautomatic rifles and shotguns, it would also impact the manufacture, distribution and retail sales of all firearms, all ammunition and accessories since many businesses would be forced to cease operations or relocate outside of Florida.

Without question, the negative economic impact from the loss of jobs, property taxes from businesses that are forced to close or relocate, and the loss of sales taxes to the state and local governments is huge.

Additionally there are federal taxes at stake. The Pittman-Robertson Act imposes an 11% federal tax on rifles, shotguns and firearms ammunition. This tax is imposed and collected at the manufacturing level.

Those taxes are then apportioned back to the states for use with qualified sporting programs. The Florida

Fish and Wildlife Conservation Commission regularly uses Pittman-Robertson funds for their youth gun safety programs, their youth hunting programs and their adult hunter safety and training programs as well as construction and maintenance of their shooting ranges.

At the last hearing there was a question about when does a gun become a gun?

When parts become a gun is relevant to the manufacturing side. Technically, under federal definition, if you own a serialized receiver, regardless of whether or not you own the other parts (barrel, stock, etc) you own a gun.

The closest I can come to explaining it is to compare it to a car.

A serialized receiver is like an engine with a VIN number. It's not really a car but with a frame and

axles, some wheels, a body and a few other parts it can become a car.

A serialized receiver has no barrel, no stock, no trigger guard, no magazine, no sights, and a few other parts but in the eyes of the government, a serialized receiver is gun.

So once a manufacturer puts a serial number on the receiver, technically the manufacturer is in possession of a gun.

Let's be very clear, there is no exemption in this amendment for manufacturers. Period

Further, there is no exemption for Florida's Defense Contractors who manufacture rifles and shotguns for government - military – use.

And while IMPORTATION for use by military and law enforcement personnel is exempted, since the

proposed amendment bans possession and possession by those military and law enforcement personnel and agencies is not exempted, that poses serious questions as to whether the exemption is actually valid.

Clearly, the manufacture for EXPORTATION is not exempted. Therefore ALL manufacturers who manufacture semiautomatic rifles and shotguns would have to shut down their businesses and move out of state.

This coming after Governor Rick Scott's Enterprise Florida solicited and offered significant financial incentives to gun manufacturer's to come to Florida to bring more jobs and to increase Florida's economy.

In Broward County, a hotbed of anti-gun, gun-hating extremism, the Broward County Commission, voted to offer significant financial incentives to Kalashnikov USA to relocate from Pennsylvania to Pompano Beach.

Kalashnikov USA manufacturers the semiautomatic AK-47 pattern rifles. The AK is the ORIGINAL semiautomatic rifle targeted by gun banners with the fraudulent term "assault weapon."

It was reported that the Kalashnikov USA project would create 54 jobs with an average salary of \$51,266, which would be 115 percent of the county's average wage. County records estimated the project's total regional impact at \$20.2 million.

Kalashnikov USA did, in fact, move its manufacturing facility to Broward County where it currently manufacturers semiautomatic firearms.

According to an article in the Ft. Lauderdale Sun-Sentinel, 3 months ago, gun manufacturing is a BILLION dollar industry in Florida - that's billion with According to that article, in 2016, ATF reported that there were 155 MAJOR gun manufactures in Florida. There are actually over 700 Firearms Manufacturing License holders in Florida.

The manufacturing license covers manufacturing and gunsmithing. It includes major production of firearms in the hundreds of thousands to the custom manufacture of one or more per year.

In a 2016 report, Florida gun manufacturers reported producing over 3/4 of a million firearms, making Florida the No. 5 state in the nation in terms of firearms manufacturing production.

And in terms of total economic output, Florida's firearms industry ranks No. 3 in the nation behind only California and Texas, according to the National Shooting Sports Foundation's 2018 report. At a time when blue-collar work has been strained by jobs having gone out of our country, jobs in the firearms industry are paying an average of nearly \$50,000 a year in wages and benefits, according to the trade group.

When it comes to the Retail Dealers Firearms license, there are 2,187 type 01 (Dealer) Federal Firearms License holders (FFLs) in Florida as of June 2019.

I believe many retail dealers will tell you that over 50% of their firearms sales are long guns and ammunition and accessaries for long guns.

Of the retail dealers that I have personally spoken to, none of the "gun shops" will be able to stay in business. Losing the sale of long guns and ammunition for long guns will potentially put an end to stocking dealers in Florida. The only gun sellers that will be able to survive are the big stores that sell extensive clothing lines, fishing gear, boats, ATVs and a multitude of sports equipment.

The negative impact to Florida's economy would be huge if this amendment were to pass.

Bottom line, if this amendment goes on the ballot and passes, then 30 days after election day EVERY manufacturer, retail dealer, pawn shop and holder of a Federal Firearms License is in trouble.

Every semiautomatic rifle and shotgun that they had in their possession -- whether it was :

- 1.) manufactured, or
- 2.) purchased at wholesale to sell retail or
- 3.) taken in trade or
- 4.) taken on pawn or
- 5.) any other commercial purpose -

HAD BETTER HAVE BEEN MOVED OUT OF STATE or

they could be facing felony charges and their guns will be confiscated.

And what about their employees? They'll be out of a job the day after election day or packing up their families to move out of state to follow their jobs.

If I were the owner of one of these firearms manufacturing companies, I wouldn't wait to see what voters do and run the risk of having 30 days to shut down my business and get all of my guns out of state.

If this is allowed to go on the ballot, I'd say, I'm out of here – these people don't want our jobs, our taxes, and our contributions to the economy.

Florida incentivized manufacturers to move to Florida because we need jobs to strengthen our economy. But you can't run a business that is subject to the whim of zealots who plant their political podiums on a wave of emotion and blame products instead of people for criminal acts.

Clearly the fiscal and economic impact of this amendment is in the billions of dollars to the state and local communities not to mention the loss of legally owned property to millions of law-abiding gun owners in Florida.

I know that you have a difficult task in estimating the fiscal and economic cost of banning guns because bad people do bad things with guns.

I fear that if this amendment goes on the ballot and passes, you'll soon be required to do the same analysis on banning cars and pick-up trucks because people drive recklessly and kill other people. Or an analysis on banning matches and cigarette lighters because arsonists use them light fires to burn down buildings.

Or an analysis on banning forks and spoons because children use them to eat too much and get fat.

Respectfully, I don't envy you your task.

Thank you very much. I'll be happy to take any questions.



NATIONAL SHOOTING SPORTS FOUNDATION, INC.

Lawrence G. Keane SVP Gov't & Public Affairs Assistant Secretary & General Counsel

July 25, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588

<u>RE: Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of</u> <u>Defined Assault Weapons"</u>

The National Shooting Sports Foundation is the trade association for the firearms and ammunition industry. We represent the industry's manufacturers, distributors and retailers of firearms, ammunition and related products for hunting and the shooting sports, as well as shooting ranges and endemic media. In Florida alone, there are over 7,000 federally licensed firearms licensees (FFLs). We appreciate the opportunity to submit the following impact statement to the Florida Fiscal Impact Estimating Conference for the petition initiative entitled "Prohibits Possession of Defined Assault Weapons."

The petition initiative under consideration would ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. This broad, sweeping ban on the most popular models of firearms on the market today would have significant negative fiscal and economic impacts on the state. The implementation of such a ban ensures that some firearms manufacturers, distributors, and retailers will not be able to continue to operate effectively in the state and may be forced to reduce their number of employees or to close completely.

Large Market for Covered Firearms

The initiative language encompasses a broad market of rifles and shotguns. The term "modern sporting rifle" describes today's very popular semiautomatic rifle designs, including the AR-15 platform and its many variants. These rifles are used by recreational target shooters, big and small game hunters, competition shooters, and millions of Americans seeking home-defense guns. What has misleadingly been termed an "assault weapon" for political reasons is a simply a semi-automatic firearm that fires just one bullet with each pull of the trigger (versus a fully automatic firearm — machine gun — which continues to shoot until the trigger is released).

There are nearly 900,000 target shooters in Florida who report using rifles and shotguns in their sport, racking up a cumulative total of 11.8 million days of sport shooting each year.¹

The industry currently sells an estimated 162,348 modern sporting rifles and similar types of firearms, and 25,582 semi-automatic shotguns per year (along with accessories for them) that would be banned by various legislative proposals.² The loss of these sales will lead to notable losses in Florida's tax revenue, jobs, and economic activity.³

	Lost Jobs	Lost Wages	Lost Output
Direct	693	\$18,021,300	\$43,289,000
Supplier	148	\$8,914,900	\$32,458,500
Induced	301	\$13,992,200	\$44,475,000
Total	1,142	\$40,928,400	\$120,222,500
		Federal Business Taxes	\$11,404,000
		State Business Taxes	\$8,029,900
		Pittman–Robertson Excise Tax	\$164.800

Impact of Banning Modern Sporting Rifles and Semi-Automatic Shotguns in Florida²

The Firearms Industry and Its Suppliers are an Important Part of Florida's Economy

The firearms industry directly employs about 7,107 people and generates an additional 8,584 jobs in supplier and other firms.⁴ In total the firearms industry and its suppliers generate \$714.20 million in wages for employees in Florida. These are good jobs, paying an average of \$45,500 in wages and benefits.

In Florida, the industry and its employees pay over \$121.09 million in property, income, and sales taxes. They also pay \$209.96 million in federal taxes and \$30.11 million in federal excise taxes – which contribute to Federal domestic assistance programs.

Beyond creating jobs, in 2018 the industry was responsible for \$2.56 billion in total economic activity in Florida. This broader activity flows through businesses well beyond firearms. Industries as varied as banking, retail, accounting, metal working, and even in printing, all benefit from the firearms industry for their livelihood.

¹ Southwick Associates for National Shooting Sports Foundation, "Target Shooting in America: An Economic Force." 2018 Edition.

² Estimates on the number of firearms affected calculated using sales data provided by the National Shooting Sports Foundation and Bureau of Alcohol, Tobacco, Firearms, and Explosives. Due to unclear drafting of the proposed initiative, it is difficult to determine the exact models of guns which are affected. This model assumes all modern sporting rifles and semi-automatic shotguns.

³ Based on figures developed for the National Shooting Sports Foundation by John Dunham & Associates, 2018.

⁴ Direct jobs are those involved in the manufacturing, wholesaling, and retailing of firearms and related goods. Supplier jobs are defined as jobs that provide essential goods and services to the firearms industry, such as metal processors, engineers, and even janitors. Induced jobs are the result of spending of wages earned by employees in the direct and supplier sectors. These can range from jobs in restaurants that these employees frequent to movie theaters and retail outlets.

The Loss of Legal Sales Will Be Detrimental for Florida's Fiscal Situation

A ban on modern sporting rifles and semi-automatic shotguns could lead to 1,142 lost jobs and an estimated \$40.93 million in lost wages. These are not only people directly employed by the firearms industry but also those employed in industries far removed from the firearms industry.

In addition to jobs lost, an estimated \$11.40 million will be lost in federal business taxes and another \$8.03 million in state business taxes. The ban would also mean a reduction of about \$164,800 in Pittman-Robertson excise tax for wildlife conservation.

With the state unemployment rate at 3.4 percent, this means that there are already 350,000 people trying to find jobs and possibly collecting unemployment benefits.⁵ The loss of this segment of the industry will cause further unemployment problems for the state.

Full Impact Information Must be Communicated

Voters of Florida must be informed of the significant negative fiscal and economic implications for this petition initiative. NSSF stands ready to provide further information as needed to ensure the full impact is communicated to Florida taxpayers.

⁵ The Bureau of Labor Statistics. Available on-line at: www.bls.gov/lau/home.htm. Data for June 2019.

Follow-Up Presentation of MARION P. HAMMER Representing the NRA and USF TO THE FISCAL IMPACT ESTIMATING CONFERENCE Thursday, August 22, 2019

After sitting through and participating in the first half of the August 16th Workshop and watching and listening to the second half, I was compelled to return for a follow up presentation.

Some striking things happened at the August 16 Workshop that we can't overlook, and that clearly, in our opinion, need to be pointed out on the record.

The confusion – the raw, organic confusion – over this proposed amendment is unlike anything I've seen before.

Clearly, the sponsors of the "Assault Weapons" Ban Amendment are confused or else they are lying to confuse you and everyone else.

The fact is that no matter what people "think" the amendment says; no matter what they "want or don't want" the amendment to say, the proposed amendment is a disaster of confusion. Words matter and the words are both deceptive and confusing – if not outright deceitful.

Having been involved with these issues for over 40 years, and having seen the behavior and tactics of people who want to ban guns from civilians, I can tell you, without question, some are practiced liars whose stock and trade is deception, disorder, emotionalism and blatant deceit.

They count on – in fact they depend on – confusion to get the amendment passed. That is why they used the intentionally deceptive term, "assault weapon."

In this case they hope opponents will not be able to educate people on their treacherous tactics and deceptive language. They hide behind people who are emotionally connected to victims.

They plant their political podiums in tragedy hoping that people who are normally level-headed will succumb to emotion. They hope people will acquiesce to having their rights stripped away, out of fear of being called insensitive.

I was particularly concerned over the continued appearance of confusion among members of this panel over the word, "capable."

With all due respect, it doesn't matter what you think it might mean.

It doesn't matter what any definition in any other body of law or court opinion means. This is new language in an entirely new application and context and it is individual unto itself.

When you try to use the definition of a handgun that says a handgun is a firearm capable of being held in one hand, you are ignoring the obvious about the context in the amendment language. It simply does not matter what capable means in the handgun context.

What matters is that the amendment language says "capable of holding more than 10 rounds at once." Period.

It does not say capable as the firearm comes from the factory. It does not say capable without attaching a magazine extender. It does not say capable without inserting a larger capacity magazine.

It does not say capable without using mini shells.

It does not say capable without modification.

It does not say capable without using a different caliber ammunition.

It does not say capable without any internal or external modification by a gunsmith.

It only says CAPABLE period. There is no clarification, no qualifier,

and no modifier.

Anything that you can do to a semiautomatic rifle or shotgun to extend the capacity of rounds means it is "capable" of holding more than 10 rounds at once. In reality, with most semiautomatic rifles, it is simply a matter of pressing a button and dropping out a 10 round magazine and inserting a magazine of 15, 20, 25 or greater capacity.

So, as the Attorney General has already pointed out, all semiautomatic rifles and shotguns will be banned under this amendment.

Consider, please, that if you professionals can't agree on what capable means in this context, how on earth do you expect the average citizen to understand it? How do you expect law enforcement to understand it. How do expect anyone who has limited knowledge of firearms to understand it.

I am not criticizing your obvious confusion. I am compelled to highlight it. If you, as professionals who must analyze the amendment to determine the fiscal and economic impact, can't figure out what is banned – despite having multiple fact finding Workshops designed for the purpose – the average citizen will have no clue what is banned. A classic example of someone who doesn't understand it is Dr. Charles Tate who made the August 16th presentation on behalf of the Ban Assault Weapons Now Committee who is sponsoring the amendment and circulating petitions.

I'm sure Dr. Tate is a very nice man and is well intentioned but just because he owns guns and claims he is willing to give one of them up, doesn't mean he knows much at all about guns. He clearly doesn't know what the amendment actually bans.

For example, he actually bragged about his "beautiful" \$1600 Benelli Super Black Eagle semiautomatic shotgun and doesn't think it is an assault weapon that would be banned under this amendment. He doesn't think his Ruger 10/22 semiautomatic rifle is an assault weapon that would be banned under this amendment. Well, he is wrong on both counts. He said [quote] I know an assault weapon when I see one. [end quote] Well, obviously not one as defined in the amendment.

He boldly said he owns and would be happy to give up his "German made HK 91 assault RIFLE." I suspect he doesn't even know what he owns.

If his words were accurate then his HK 91 assault rifle is a fully-automatic machine gun. That is a Class III firearm and if he

owns one, it would not be banned under this amendment because he would be licensed by ATF to own it and it would have cost him a heck of lot more money than his beautiful \$1600 Benelli shotgun.

He probably owns the semiautomatic version of the HK 91 rifle. He is just confused or uninformed. I say that because he consistently used the wrong terminology through-out his presentation.

He repeatedly used the term "assault rifle" interchangeably with the term "assault weapon" which is the actual term used in the gun ban amendment If you recall, the federal definition of an assault rifle is a fully-automatic machine gun.

Further, Dr. Tate said that in order to extend the tube magazine on his Benelli Super Black Eagle shotgun he would have to [quote] "WELD a metal tube onto the current metal tube that holds five shells in order to extend that tube out and to allow for an additional 10 or 15 shells." [end quote] That alone shows his lack of knowledge or confusion.

In fact, all he really has to do is "Google" Benelli Super Black Eagle tube magazine extension and he can buy an extender of from 2 to 8 shell capacity from Midway USA or several other retailers for around 100 bucks. No welding required, period. I don't think he meant to mislead, he is just uninformed. He is confused and is spreading confusion. And if people who watched him make those statements believed him and later didn't register a Benelli shotgun, what are they going to say when arrested for illegal possession of an assault weapon?

Would saying that Dr. Charles Tate, a supporter of the amendment, doesn't think my Benelli shotgun should be banned, be a good defense?

With regard to the Ruger 10/22, which Dr. Tate also said he owns, he implied that it would not be banned because he claimed the 10 round magazine is difficult to insert and extract. He said it is very time consuming to take out and then re-insert another one. That is such nonsense.

Dr. Tate also said [quote] "I know an assault rifle when I see one and frankly a Ruger 10/22 is not one of them." [end quote] I don't know if he was playing word games here but that is a very deceptive statement. He used the term assault "rifle" again and obviously a Ruger 10/22 is not a machine gun but it unquestionably is an assault weapon under the definition in the amendment. Dr. Tate obviously has not a clue what is banned by this amendment.

I personally own a Ruger 10/22 semiautomatic rifle. I purchased it

in the early 1960s when they first came out. It is an exceptional plinking rifle and a great one for teaching youngsters gun safety and marksmanship. I have owned 5 round magazines, 10 round magazines, 20 round magazines and even a 100 round magazine and none of them are difficult to insert or extract. All Ruger 10/22s would be banned under this amendment.

What about the Marlin Model 60 .22 rifle? It comes – in the box – with a 14 round capacity. The model 60 has been around for more than 50 years and with over 11 million sold, it is one of the most popular .22 rifles ever sold. They fall under the definition of assault weapon and would be banned.

Dr. Tate's definition of "capable" is also misguided and just plain wrong.

He said that "capable" means that [quote]"it was manufactured in such a way as to allow with simplicity the rapid insertion of a clip or belt with bullets on it like a machine gun or something that would allow that weapon to be discharged and reloaded within seconds and reloaded and discharged. That's my definition of capable."[end quote]

Dr. Tate's lack of knowledge of firearms caused him to mislead this panel. With his talk of his "beautiful" Benelli Super Black Eagle and

his defense of the Ruger 10/22, it sounds like he thinks the only guns that will be banned are guns that the gun haters usually call ugly black guns. But the amendment says absolutely nothing about how a semiautomatic rifle or shotgun looks or what it costs.

If this amendment goes on the ballot and passes, Dr. Charles Tate is actually going have to register or lose at least 3 guns – not just one as he tried to claim.

I spoke with Charlie Strickland of Talon Range and Gun Shop after he had made his presentation on Aug. 16. He told me that one of the supporters brought in by the amendment sponsors of the assault weapons ban amendment who was in the audience, told him, "Charlie, I don't want to put you out of business." And he replied, "BUT YOU WILL" if this amendment passes.

The reason I came back today was to make sure we get it on the record that there is an abundance of erroneous information being peddled by the supporters of the amendment and there is great confusion about what this amendment actually does. I believe that even supporters are being mislead by the amendment sponsors.

What happens when you think it means one thing and law enforcement thinks it means something else. I'll tell you what

happens – YOU LOSE!

Anything this confusing is not fit for the ballot because voters will be confused and tricked by the deliberately deceptive language.

At the last Workshop, I discussed the fact that people would not know what the amendment bans and could innocently not register Ruger 10/22s or a Remington Model 1100 shotgun or a Benelli shotgun. In these cases they could end up being prosecuted and convicted of felony possession of an "assault weapon."

If that happens, once convicted of a felony, A PERSON WILL LOSE ALL OF THEIR GUNS because felons can't possess ANY GUNS, Period.

But the biggest FRAUD of all is that Dr. Tate, on behalf of the Ban Assault Weapons Now Committee, attempted to make you believe that this amendment would save billions of dollars in medical costs associated with public mass shootings. But the fact is, the amendment will not stop these atrocities. And they know it – and YOU KNOW IT.

I am not questioning the statistics they used about how much the medial costs have been as a result of public mass shootings. What I am saying is that claiming this amendment will stop these tragedies and save all that money is the stuff dreams are made of. It is unprovable and patently false.

Anyone who thinks otherwise is simply not understanding criminal behavior or acknowledging that public mass shooters are mentally unstable people.

No where in this country have gun control or gun ban laws stopped criminal behavior or public mass shootings.

All you have to do to find proof is look at areas with the some of the most gun control, like Chicago. If gun control stopped violent crime and shootings, Chicago would be one of the safest cities in America. Instead, Chicago has dozens of shootings every-end week. The week-end of Aug. 2-4, there were 32 shootings, killing 7 and injuring 52. In shootings the previous week-end 8 were killed and 40 were injured.

Dr. Tate and the Ban Assault Weapons Now cabal are spreading misinformation about the cost savings. Banning guns from the possession of law-abiding gun owners will not save taxpayers billions of dollars in medical costs from public mass shooting. The claim is false. To my knowledge, and we have researched it, there is no credible evidence – none – no study, no data, no proof that this gun ban will keep mentally unstable people from committing public mass shootings. I defy you to find any reliable data that proves that this amendment will stop these shootings and subsequently provide any beneficial impact to the economy.

My purpose today was to let you and everybody else know that this amendment is designed to be confusing and it is. Further, it is expansive far beyond what most people can comprehend.

Clearly, innocent, law-abiding people will be caught in a trap of confusion if this goes on the ballot. That confusion could lead to unintentional violations and subsequent felony convictions which would cost people their Second Amendment rights forever. Don't be fooled. This amendment is a fraud.

Thank you for allowing me make follow-up comments.

Schenker, Pamela

Charlie Strickland <charlie@talontraining.com></charlie@talontraining.com>
Thursday, August 22, 2019 2:20 PM
Baker, Amy
Schenker, Pamela
Clarifying Statement on Remarks

Ms. Baker & Ms. Schenker,

I came to my attention that after I left the hearing, at least one of my remarks may have been characterized incorrectly.

My comments on modifying a magazine or a tube extension to change the ammunition feeding devices capacity temporarily were not to be construed as meaning firearms with this modification would be allowed under the ban. I wish this were the case, clearly it is not.

There are hunting regulations on the books that require capacity restrictions while hunting certain game. However, this has nothing to do with the ballot language and the effect of the proposed amendment. Under this amendment, the issues with FWC regulations would be moot, since none of these semi-automatic firearms would be allowed anyway. Any FWC regulations would be rendered irrelevant as they would be superseded by the amendment, if passed.

To believe otherwise would mean that any semiautomatic long gun with a magazine that held less than ten rounds, on your person, at that time, in the absence of any higher capacity magazines would be allowed. That is clearly not the case in this amendment as the firearm is banned if the firearm is capable of accepting any feeding device that will hold more than ten. So, regardless of a person's intent, the mere fact the firearm can accept any feeding device to that end would render it illegal.

I spent my time this morning explaining how easy it is to make even the firearms the proponents are saying are not included, fit the definition of the banned items, and therefore, proving they are, in fact included in the ban. No reasonable person who reads this proposal and has any understanding of the functioning of a modern firearm would believe otherwise.

Thank you for your time this morning and your patience and efforts to understand this issue.

Charlie

Charlie Strickland, MBA CEO Talon Training/Talon Holsters President Talon Security 850-728-1535



Talon Training Group, LLC

301 Commerce Blvd. Midway, Fl 32343

850-728-1535

Tab 11

Materials from Interested Parties

From:	Amy Mercer
Sent:	Thursday, August 01, 2019 2:24 PM
То:	Schenker, Pamela
Subject:	FW: Financial Impact Estimating Conference (FIEC) for the Proposed Constitutional Amendment - Prohibits
	Possession of Defined Assault Weapons (19-01) Correction

Hello Pamela, thank you for the phone call and the email below. At this time, the FPCA would not be available to participate in your upcoming meeting. We do appreciate you reaching out. Thank you, Amy

Amy Mercer Executive Director The Florida Police Chiefs Association, FPCA 850-219-3631 www.fpca.com amercer@fpca.com Faithfully serving Florida Police Chiefs

From: Schenker, Pamela
Sent: Tuesday, July 30, 2019 3:22 PM
To: Amy Mercer
Subject: Financial Impact Estimating Conference (FIEC) for the Proposed
Constitutional Amendment - Prohibits Possession of Defined Assault Weapons (19-01) -- Correction

Ms. Mercer -

As a follow-up to our phone conversation earlier today

The principals of the Financial Impact Estimating Conference (FIEC) for the petition initiative entitled **"Prohibits Possession of Defined Assault Weapons (19-01)"** met today, Tuesday, July 30, 2019 and requested that I reach out to you regarding the proposed amendment. In particular, they are interested to know if the proposed amendment would have an impact on local police and law enforcement.

To summarize, the proposed amendment:

Prohibits possession of assault weapons, defined as semiautomatic rifles and shotguns capable of holding more than 10 rounds of ammunition at once, either in fixed or detachable magazine, or any other ammunition feeding device. Possession of handguns is not prohibited. Exempts military and law enforcement personnel in their official duties. Exempts and requires registration of assault weapons lawfully possessed prior to this provision's effective date. Creates criminal penalties for violations of this amendment.

The FIEC Notice of Workshops and Conference can be found at: <u>http://edr.state.fl.us/Content/constitutional-</u> <u>amendments/2020Ballot/FIECProhibitsAssaultWeaponsNoticeOfWorkshopsAnd</u> <u>Conference.pdf</u> The full text of the proposed amendment can be found at: <u>https://dos.elections.myflorida.com/InitiativeForms/Fulltext/Fulltext_1901_</u> <u>EN.pdf</u>

The next meeting is scheduled for Friday, August 16th, and the principals have requested that any impact on police chiefs be available for this meeting and that someone from your organization be available in case they have any questions. Our office typically distributes any information that is received to the principals a day prior to the meeting. However, you may either send information in advance or bring any handouts that you may have with you to the meeting.

We look forward to seeing you on August 16th, and please let me know if you have any questions regarding this request.

Thank you,

Pam Schenker

Florida Legislative Office of Economic and Demographic Research 111 West Madison Street, Suite 574 Tallahassee, FL 32399-6588 Office Phone: 850.487.1402 Pam Schenker - Direct Phone: 850.717.0471 Fax: 850.922.6436 http://EDR.state.fl.us

If you are not an intended recipient of confidential and privileged information in this email, please delete it, notify us immediately at postmaster@gtlaw.com, and do not use or disseminate the information.

From:	Schenker, Pamela
То:	Bell.Stephanie
•	FW: Financial Impact Estimating Conference (FIEC) for the Proposed Constitutional Amendment - Prohibits Possession of Defined Assault Weapons (19-01)
Date:	Thursday, August 15, 2019 9:46:17 AM

From: Matt Dunagan <mdunagan@flsheriffs.org>

Sent: Wednesday, August 14, 2019 4:14 PM

To: Schenker, Pamela <SCHENKER.PAMELA@leg.state.fl.us>

Cc: Hallaian, Melissa <HALLAIAN.MELISSA@leg.state.fl.us>; Wayne Evans <revans@anblaw.com>; Steve Casey <scasey@flsheriffs.org>

Subject: RE: Financial Impact Estimating Conference (FIEC) for the Proposed Constitutional Amendment - Prohibits Possession of Defined Assault Weapons (19-01)

Pam,

FSA does not have any comments or feedback for the proposed constitutional amendment. Thank you.

Matt Dunagan, Deputy Executive Director of Operations (850) 877-2165 x. 5807 (office) (850) 274-3599 (cell) FLORIDA SHERIFFS ASSOCIATION | Protecting, Leading & Uniting Since 1893.

From: Schenker, Pamela <<u>SCHENKER.PAMELA@leg.state.fl.us</u>>
Sent: Tuesday, July 30, 2019 2:55 PM
To: Harriet Sespico <<u>hsespico@flsheriffs.org</u>>; mdunagan@flsherrifs.org
Cc: Hallaian, Melissa <<u>HALLAIAN.MELISSA@leg.state.fl.us</u>>
Subject: Financial Impact Estimating Conference (FIEC) for the Proposed Constitutional Amendment
- Prohibits Possession of Defined Assault Weapons (19-01)

Mr. Casey --

The principals of the Financial Impact Estimating Conference (FIEC) for the petition initiative entitled **"Prohibits Possession of Defined Assault Weapons (19-01)"** met today, Tuesday, July 30, 2019 and requested that I reach out to you regarding the proposed amendment. In particular, they are interested to know if the proposed amendment would have an impact on local sheriffs and law enforcement.

To summarize, the proposed amendment:

Prohibits possession of assault weapons, defined as semiautomatic rifles and shotguns capable of holding more than 10 rounds of ammunition at once, either in fixed or detachable magazine, or any other ammunition feeding device. Possession of handguns is not prohibited. Exempts military and law enforcement personnel in their official duties. Exempts and requires registration of assault weapons lawfully possessed prior to this provision's effective date. Creates criminal penalties for violations of this amendment.

The FIEC Notice of Workshops and Conference can be found at: <u>http://edr.state.fl.us/Content/constitutional-</u> <u>amendments/2020Ballot/FIECProhibitsAssaultWeaponsNoticeOfWorkshopsAndConference.pdf</u>

The full text of the proposed amendment can be found at: <u>https://dos.elections.myflorida.com/InitiativeForms/Fulltext/Fulltext_1901_EN.pdf</u>

The next meeting is scheduled for Friday, August 16th, and the principals have requested that any impact on sheriffs be available for this meeting and that someone from your organization be available in case they have any questions. Our office typically distributes any information that is received to the principals a day prior to the meeting. However, you may either send information in advance or bring any handouts that you may have with you to the meeting.

We look forward to seeing you on August 16th, and please let me know if you have any questions regarding this request.

Thank you,

Pam Schenker

Florida Legislative Office of Economic and Demographic Research 111 West Madison Street, Suite 574 Tallahassee, FL 32399-6588 Office Phone: 850.487.1402 Pam Schenker - Direct Phone: 850.717.0471 Fax: 850.922.6436 http://EDR.state.fl.us

August 21, 2019 1101 Cherokee Drive Tallahassee, FL 32301-5762

State of Florida - Florida Legislature Office of Economic and Demographic Research Attn: Amy Baker 111 W. Madison Street Suite 574 Tallahassee, FL 32399-6588

Financial Impact Estimating Conference Principals Workshop Ballot Title: Prohibits Possession of Defined Assault Weapons

Ms. Baker and Workshop Members:

Thank you for having a public hearing on Friday, August 16, 2019, on the issue of the proposed Assault Weapons amendment. My schedule did not permit me to stay for the whole meeting. Fortunately, I was able to watch the rest of the deliberations via the recording posted on the Florida Channel.

With respect I would like to offer the following comments and concerns.

 In consideration of what constitutes an assault weapon, some speakers seemed to want to introduce uncertainty and doubt based on the use of the word "capable." In the end it seemed to me the workshop found precedent and agreement, about the use of capable and modifications for assault rifles.

I am concerned about handguns as defined and the speakers' assertions that handguns are not a concern at this time. That may be so. However, the weapons sold as AR-15 Pistols (such as the one used in the recent shooting in Dayton, OH) are sold assembled and sometimes with a wrist brace. This would, as one member in your workshop mentioned, make them useable with one hand. That would, as I understand the discussions about not modifying the weapon and the definition of a handgun, possibly exclude them from this amendment. I suggest this might be a point that could be clarified by the Bureau of Alcohol, Firearms and Tobacco. Are such weapons handguns or not?

2. I hope you are able to get the raw data you requested from the National Shooting Sports Foundation. If you are not, and have not already obtained a copy of the NSSF 2019 Industry Reference Guide, it may be worthwhile to purchase a copy. The online Table of Contents indicates it may provide some of the information you are seeking on manufacturing, sales, excise tax, licensing and more. However, given the nature of the organization, there is no guarantee that it be biased toward the funding organization.

When evaluating the possible impact to gun manufactures if the proposed amendment passes,

please consider what Florida has paid and continues to pay them. Manufacturers of guns and accessories received a boon when Enterprise Florida used \$10,000,000 to incentivize the gun, film, and video game industries. Local communities, also frequently added incentives beyond the many credits and tax incentives on corporate income, sales, personal property, insurance premiums, and more offered by Enterprise Florida. This edge has continued to be amplified by other tax breaks and other incentives to increase gun owner ship such as reducing the cost of concealed-carry permits (3 times in six years) and exempting gun and shooting club membership fees from sales tax (estimated cost to the state, \$1,200,000). We now have 11 shooting parks run by the Florida Wildlife Commission. The most recent park is a 150 acre site in Palm Beach County at a state contribution of \$3,000,000. The question isn't just whether or not these weapons manufacturers make a profit and employ Floridians; it is also about how we use our monies and how other industries may have benefited from similar favorable, empowering treatment.

3. When measuring the potential costs of the proposed amendment to gun and related industries in Florida please also consider:

the high medical costs outlined by Dr. Tate. These costs are borne not only by shooting victims, survivors and their families, but also first responders, emergency services, hospitals, and all related care givers. These costs impact the affected communities and the state.
 the psychological costs to every Floridian who goes to a school, yoga studio, night club, or sits in a car in a convenience store parking lot, or visits a Costco, Wal-Mart, restaurant, mall, church, community center, festival, and hundreds of other places. The ubiquitous presence of guns and frequency of shootings is changing daily life.

3) the future of tourism, not only as it pertains to hunter tourists, but also our historic tourism featuring beaches, entertainment parks, and other Florida attractions. The potential loss of tourism to these venues because of fear would greatly impact the economy of Florida.

In conclusion, how one feels about this issue may depend on whether or not one feels a tipping point has been reached regarding the prevalence and types of guns in America. I believe if we continue on our present course, we will soon bear little resemblance to the country we want to believe we are.

I sincerely thank you for your consideration of my concerns and your deliberate and thoughtful approach to this issue. I wish you continued harmony and comity in your work.

Sincerely.

Susan Campbell

State of Florida - Florida Legislature Office of Economic and Demographic Research Attn: Amy Baker 111 W. Madison Street, Suite 574 Tallahassee, FL 32399-6588

Financial Impact Estimating Conference Principals Workshop Ballot Title: Prohibits Possession of Defined Assault Weapons

Ms. Baker and Workshop Members:

Thank you for research and deliberations on the issue of the proposed Assault Weapons amendment. I wrote to you previously with some of my concerns about this issue. I hope you will not object to my second letter on this topic. The enclosed newspaper article caused me to think of other potential economic impacts to Florida.

- Florida does have manufacturers of bullet proof backpacks. There may be a potential loss of revenue to these companies if the BAWN amendment passes. (Presently, although their backpacks won't stop a projectile from an AR-15 or similar weapon, they are considering making backpacks that may.)
- Mr. Kenneth S. Trump, president of National School Safety and Security Services says, "The first and best line of defense is a well-trained staff and student body."¹ Passage of the proposed Assault Weapons amendment may cause financial issues for companies lining up to train teachers, staff, and students to prepare for a mass shooting at schools. There are Florida companies offering training and building assessments to prepare for these events. This training is also a boon to shooting parks and shooting ranges. Banning assault weapons such as AR-15 and similar weapons may reduce opportunity and revenue for these companies.
- Additionally, Florida insurance issuers and their licensed agents also stand to lose money if school districts don't add additional liability and coverage as part of the cost of the training and arming school staff and teachers.
 Casting these employees in the role of public safety officers means the school is also accepting potential responsibility and liability for their actions.
- Lastly, schools may opt to replace windows with "bullet proof windows."² Most windows advertised as ballistic glass are only designed to withstand rounds from small caliber handguns. While the more advanced technology in ballistic polycarbonate and glass windows may stop five .223 rounds, it is common knowledge that these weapons can shoot many more projectiles in a matter of seconds. Consequently with these weapons easily and commonly available (and the weapon of choice in mass shootings) changing glass may be a futile and meaningless gesture. I have not found a Florida company that manufactures such glass. Nonetheless, it is a potential opportunity for some suppliers, contractors, installers and others in Florida.

Sincerely Jengles Susan Campbell

https://www.schoolsecurity.org/trends/arming-teachers-and-school-staff/

² https://www.tssbulletproof.com/blog/bullet-proof-windows-stop-223-round/

My Turn: Banning assault weapons is the clear solution

By SUSAN PETROVEK

For the Monitor Published: 8/31/2019 7:00:07 AM

It's been about a month since El Paso-Dayton-Gilroy. Admit it, it is no longer at the front of your mind.

I've been an RN for 40 years, including 25 as a school nurse in New Hampshire. My son graduated the year of Columbine, my daughter the year after. It's exhausting to think about the number of school safety committees I sat on, spending money that could never fix the problem.

We wall up our schools, preparing children for the horror that is now part of their lives. The children cover their faces to hide tears during these drills, despite constant assurances that it is only a drill. We do this. Re-think it.

All those measures taken by both parents and school personnel were naïve. We abdicated caretaker roles as parent, teacher, nurse, school personnel and politician to the NRA. They have the upper hand now. We while away the time locked in classrooms thinking we are doing the right thing – an endless farce.

I avoided reading the Sandy Hook school shooting report for years. My granddaughter was 6. Too close. After the shootings of a few weekends ago, I forced myself to read it. As a nurse, I tell parents and teachers to read it – in doing so you will honor those children and teachers who died.

A teacher piled 6-year-olds in the bathroom. They climbed on top of each other seeking safety. Arriving officers thought there was a chance some on the bottom may have survived. No one survived. That is the awesome power of the assault weapon. Our mild-mannered measures do not compute.

We have been sidetracked and zombified into a game of charades. We are complacent now. We scurry around afterward avoiding the real issue. Red-flag laws sidetrack you; mental illness sidetracks you; background checks and even white supremacy sidetrack you. Deranged shooters can't mow down children without an assault rifle. There is only one thing that can work. So simple. So inexpensive. A ban on assault weapons and high-capacity magazines. Period. Nothing else will do the job.

You know this is true. It is the only meaningful thing we can do. We owe our children our protection. We are failing, have failed, continue to fail.

In the interim, the cost of school security has skyrocketed. The rich get richer. Schools hire companies to train teachers on security. There's big money in bulletproof windows, bulletproof backpacks. The rich get richer feeding on parents who will support anything that will ensure their children come home at the end of the day.

Would we rather see dead children than give up our rights to assault weapons? Can this be true? Your call.

Pro-lifers, why do you not support the right to life for a 6- or 16-year-old at school? Why only in the womb? That is hypocrisy.

We have allowed the NRA to make millions on the blood of innocents. They love the pat-a-cake measures we implement in school. Keeps us otherwise occupied. How about those NRA dues you pay? Your dues paid for silk suits for lobbyists in a boutique store out West. More than \$300,000 on one shopping spree. What do you get for your dues besides a decal that says you are a real country gal. You are contributing to the carnage.

When I moved to New Hampshire in 1988, I had never seen a deer hunter. I was a bit freaked out to see my students walking with a rifle over their shoulders on my way to work. Turns out there are many seasons in New Hampshire. Winter, spring, black fly, summer, turkey, bear, moose, fall and winter. I adjusted. They do not use weapons meant for war. They do it responsibly.

https://www.concordmonitor.com/Schools-and-guns-27999565

No one will ever recover from Sandy Hook or Parkland or the too-numerous-to-list places. Parents, siblings, teachers, police fire EMTs, state and city officials who were called to the scene will not get over any of these shootings. Ever.

Open your eyes. Read the reports. The truth is graphic. Don't allow them to have died in vain. Do your job. Selfserving politicians who take blood money from the NRA and gun manufacturers are not casting their votes for you, the people who elected them. Let this be a different season. Most Americans want a ban on assault weapons.

Take the power away from the NRA. Stop paying your NRA dues. Read the police reports. Vote. Vote them out.

(Susan Petrovek lives in Loudon.)

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National and Florida-Specific Costs of Gun Violence

Gun violence in America costs an estimated \$229 billion dollars annually.¹ This estimate was calculated by leading subject matter expert, Ted Miller, PhD, of the nonpartisan nonprofit, Pacific Institute of Research and Evaluation (PIRE), using data from the 1980s through 2012. It accounts for direct costs to individuals who survived or died from bullet wounds (i.e., emergency services, law enforcement investigations, medical and mental health care, and court and prison expenses) and indirect costs (i.e., lost income, employer losses, quality of life).

Direct costs of gun violence account for \$8.6 billion annually, with long term prison costs contributing the most significantly to this expense (\$5.2 billion). Mental health costs alone amount to an estimated \$410 million annually.² Indirect costs of gun violence account for \$221 billion, with quality of life and lost income primarily driving this value (\$169 billion and \$49 billion, respectively). In total, each gun death costs an average of \$6.2 million, and each gun injury requiring hospitalization costs an average of \$583,000. An estimated 87 percent of these costs are covered by taxpayers, with gun violence costing each American more than \$700 per year.

This estimate does not account for long term (i.e., over seven years) medical or disability expenses for those without spinal cord or traumatic brain injuries, nor does it account for community trauma, or fear. Further, these estimates have not yet been parsed by state nor type of gun--though Dr. Miller and Everytown for Gun Safety are currently collaborating to produce these estimates. Relative to Florida, however, Dr. Miller has estimated that the 2016 mass shooting in Orlando's Pulse Nightclub cost an estimated \$385-390 million, not including the mental health expenses accrued by others who were affected but not shot (i.e., those who were present, those whose loved ones were injured).³ In yet another example, Dr. Miller estimated that the 2017 Las Vegas Route 91 Harvest Festival shooting— where the shooter had access to 24 firearms, including a revolver, a bolt action rifle, 8 AR-10 rifles, and 14 AR-15 rifles enhanced with bump stocks—to cost \$600 million in medical bills, follow-up care, and quality of life.⁴

According to an estimate generated by the Giffords Law Center in 2018, gun violence costs Florida approximately \$228 million annually for healthcare, \$338 million a year for law enforcement and criminal justice expenses, another \$29 million in employer losses, and income losses of \$4.4 billion. 85% of these costs are covered by Florida taxpayers. When you include the reduced quality of life from to pain and suffering, estimated at \$9.1 billion, the total cost of gun violence in Florida annually is \$14.1 billion.⁵

¹ Follman, M., Lurie, J., Lee, J., and West, J. The true cost of gun violence in America. *Mother Jones*. April 15, 2015. <u>https://www.motherjones.com/politics/2015/04/true-cost-of-gun-violence-in-america/</u>

² Follman, M., Lurie, J., Lee, J., and West, J. The true cost of gun violence in America. *Mother Jones*. April 15, 2015. <u>https://www.motherjones.com/politics/2015/04/true-cost-of-gun-violence-in-america/</u>; For further reference: <u>https://www.pire.org/documents/GSWcost2010.pdf</u>.

³ Aboraya, A. The costs of the Pulse nightclub shooting. *NPR*. July 30, 2016.

https://www.npr.org/sections/health-shots/2016/07/30/486491527/the-costs-of-the-pulse-nightclub-shooting. ⁴ Galvin, G. Las Vegas shooting will likely cost millions. *U.S. News*. October 5, 2017.

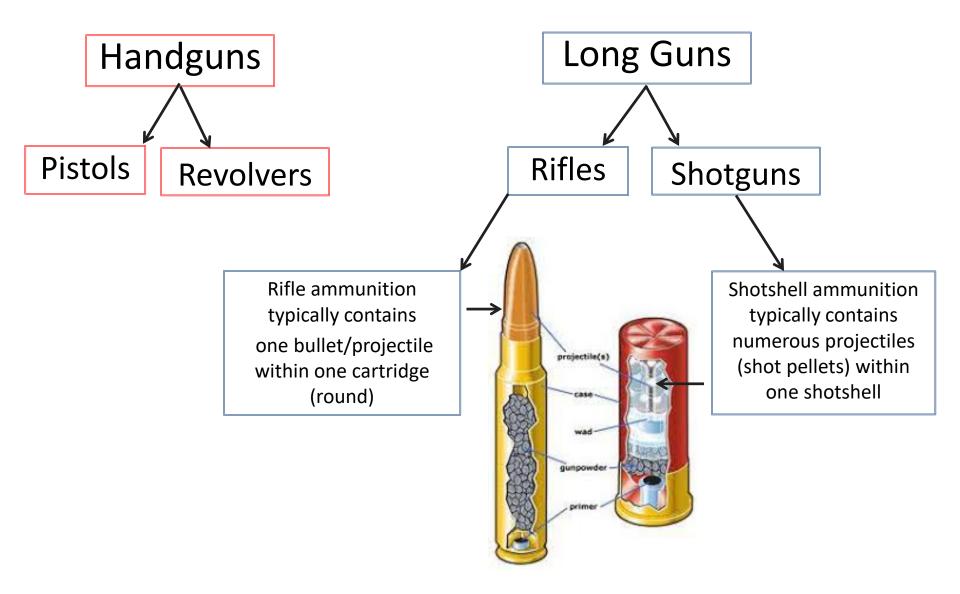
https://www.usnews.com/news/articles/2017-10-05/las-vegas-shooting-victims-facing-millions-of-dollars-in-medical-expenses.

⁵ Giffords Law Center. The economic cost of gun violence in Florida. <u>https://lawcenter.giffords.org/wp-content/uploads/2018/03/Cost-of-Gun-Violence-in-Florida-03.08.2018.pdf</u>. Published March 2018.

Tab 12

Requested Agency Material

Two Types



Rifled vs. Smooth bore

- The inside of the barrel of a firearm can have rifling (twist)
 - Revolver, pistol, rifle...
- Or can be smooth bore
 Shotgun (typically)

Manual vs. Autoloading

- Firearms can be loaded manually
 - Revolver, Single shot, Pump Action Shotgun....
- Or autoloading
 - Autoloading encompasses both semi-auto & full auto

Firearm Actions

- Action- how the firearm is loaded, fired and unloaded
 - Semiautomatic
 - A single pull of the trigger for each shot
 - Full Auto
 - One pull of the trigger fires multiple shots

Select fire- a firearm with a switch that can fire in either semi-auto or full based on the users choice

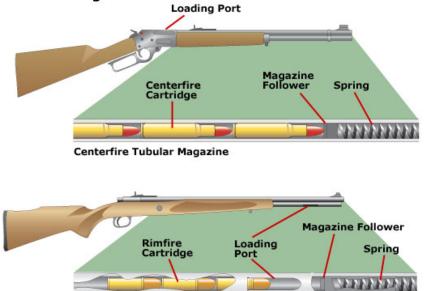
Magazine

• A container for cartridges which has a spring and follower to feed those cartridges into the chamber of a firearm. The magazine may be an <u>integral</u> or <u>detachable</u> part of the firearm.

Integral



Tubular Magazines



Rimfire Tubular Magazine

Detachable Box Magazines





Schenker, Pamela

From:	Hurm, Steve < Stephen.Hurm@freshfromflorida.com>
Sent:	Wednesday, August 07, 2019 3:31 PM
То:	Hallaian, Melissa; Schenker, Pamela
Cc:	Barzee, Mary; Scarpa, Shelby; Pagano, Paul; Anderson, Jordan; Ripple, Franco
Subject:	Response to revenue estimating questions
Attachments:	2019-07-29 response to FEIC re 19-01.pdf
Importance:	High

Dear Ms. Hallaian and Ms. Schenker,

I apologize for the delay in our response to your questions about the impact of the proposed amendment 19-01; there was some confusion about who was preparing and sending it to you. It is attached to this email and set out in full below. Please let me know if you have any other questions regarding this matter.

Thank you,

Steve

Stephen D. Hurm Director Division of Licensing Florida Department of Agriculture and Consumer Services (850) 245-5500 Stephen.Hurm@FreshFromFlorida.com www.FreshFromFlorida.com

Please note that Florida has a broad public records law (Chapter 119, Florida Statutes). Most written communications to or from state employees are public records obtainable by the public upon request. Emails sent to me at this email address may be considered public and will only be withheld from disclosure if deemed confidential pursuant to the laws of the State of Florida.

You have asked two questions: (1) whether the Florida Department of Agriculture and Consumer Services (the Department) administers licenses for the weapons described in the amendment; and (2) whether the Department believes this amendment will impact administration of the Concealed Weapons or Firearm License program. Finally, you asked for "any insight the Department can give on the administration and enforcement of gun laws."

As to both questions, the Department's administration of the Concealed Weapons or Firearm License program does not include licensure of the weapons defined in the amendment and the Department does not believe that program would be affected in any way. Section 790.06(1), Fla. Stat. authorizes the Department to "issue licenses to carry concealed weapons or concealed firearms" which are defined as "a handgun, electronic weapon or device, tear gas gun, knife, or billie . . ." The proposed amendment defines "assault weapon" as "any semiautomatic rifle or shotgun capable of holding more than 10 rounds of ammunition at once, either in a fixed or detachable magazine, or any other ammunition feeding device." The proposal specifically states that it "does not apply to handguns." Thus, the measure would have no effect on the administration of the Concealed Weapons or Firearm License program.

The Department regulates licensure of security officers and private investigators pursuant to chapter 493, Fla. Stat. One of the licenses issued by the Department to qualified applicants is a Class "G" license, issued to certain licensees who are then permitted to bear a firearm in the course of their professional duties. In addition to a specified list of handguns that may be carried by Class "G" licensees set forth in s. 493.6115(6), the statute authorizes the Department to approve other firearms. Rule 5N-1.131, Fla. Admin. Code lists the other firearms

approved by the Department to be carried by Class "G" licensees who are employed by licensed private investigative and security agencies. Under specified conditions, the rule permits use of a semi-automatic rifle as a secondary weapon. Currently, 640 valid Class "G" licensees have successfully qualified with a semi-automatic rifle. Copies of the relevant statutes and rule are below. The proposed amendment would have no fiscal impact on the Department regarding these Class "G" licensees.

Considering this information, the Department does not plan to send a representative to the workshops regarding this matter.

Florida Statutory Provisions:

790.06 License to carry concealed weapon or firearm. —

(1) The Department of Agriculture and Consumer Services is authorized to issue licenses to carry concealed weapons or concealed firearms to persons qualified as provided in this section. Each such license must bear a color photograph of the licensee. For the purposes of this section, concealed weapons or concealed firearms are defined as a handgun, electronic weapon or device, tear gas gun, knife, or billie, but the term does not include a machine gun as defined in s.<u>790.001(9)</u>. Such licenses shall be valid throughout the state for a period of 7 years from the date of issuance. Any person in compliance with the terms of such license must carry a concealed weapon or concealed firearm notwithstanding the provisions of s. <u>790.01</u>. The licensee must carry the license, together with valid identification, at all times in which the licensee is in actual possession of a concealed weapon or firearm and must display both the license and proper identification upon demand by a law enforcement officer. Violations of the provisions of this subsection shall constitute a noncriminal violation with a penalty of \$25, payable to the clerk of the court.

493.6115 Weapons and Firearms. —

(6) In addition to any other firearm approved by the department, a licensee who has been issued a Class "G" license may carry a .38 caliber revolver; or a .380 caliber or 9 millimeter semiautomatic pistol; or a .357 caliber revolver with .38 caliber ammunition only; or a .40 caliber handgun; or a .45 ACP handgun while performing duties authorized under this chapter. A licensee may not carry more than two firearms upon her or his person when performing her or his duties. A licensee may only carry a firearm of the specific type and caliber with which she or he is qualified pursuant to the firearms training referenced in subsection (8) or s. <u>493.6113(3)(b)</u>.

Florida Administrative Code Provisions:

5N-1.131 Approval of Other Firearms.

(1) In addition to firearms authorized pursuant to Section 493.6115(6), F.S., the department approves the following weapons for use by Class "G" licensed employees of security and private investigative agencies, when performing Chapter 493, F.S., regulated duties under the conditions identified below. A Class "G" licensee is only authorized to carry a firearm of the specific type and caliber with which she or he is qualified pursuant to the firearms training referenced in Section 493.6105(5) or 493.6113(3)(b), F.S.

(a) Use of 12-gauge pump-action shotguns or semi-automatic rifles as a secondary weapon, to carry or to remain in a vehicle, when the agency is engaged in:

1. Fulfillment of contractual obligations to guard United States, state, or local government facilities where the government contract specifically requires use of these weapons.

2. Fulfillment of contractual obligations to guard critical infrastructure facilities as defined in Section 493.631, F.S., where the contract specifically requires use of these weapons.

(b) Use of 12-gauge pump-action shotguns as a secondary weapon, where the shotgun remains in a vehicle for use only if needed, when the agency is engaged in:

1. Armored car services or agencies that replenish automated teller machines.

- 2. Courier services involving the transport of large amounts of currency and/or valuables.
- 3. Guarding and/or transporting prisoners.
- 4. Close protection bodyguard services.

(c) Use of automatic or select-fire firearms when the licensed security or private investigative agency provides services directly to the United States government, and the government contract specifically requires use of these weapons.

(2) Ammunition Guidelines and Restrictions.

(a) Ammunition for semi-automatic rifles shall be of .223/5.56 mm or of a statutorily compliant pistol caliber as described in Section 493.6115(6), F.S.

(b) Ammunition for the 12-gauge pump-action shotgun shall consist of .00 buckshot only. The use of slug-type ammunition is prohibited.

(c) All ammunition must be otherwise compliant with Rule 5N-1.129, F.A.C.

(d) Agency employees who carry firearms approved under this rule are prohibited from using less-lethal ammunition. For purposes of this rule, the term "less-lethal ammunition" means a projectile that is designed to stun, temporarily incapacitate, or cause temporary discomfort to a person without penetrating the person's body. (3) An agency employee holding a Temporary Class "G" Statewide Firearms License is prohibited from using the weapons specified herein, and are only authorized to utilize the weapons specified in Section 493.6115(6), F.S.

(4)(a) Firearms waivers previously issued by the Division, authorizing the use of firearms by agency employees with Class "G" licenses in circumstances and conditions where the use of such weapons is prohibited by this rule, shall remain valid until such time as the contractual obligations requiring the use of such weapons cease to exist.

(b) During the pendency of the agency's contractual obligation referenced above, the agency shall on a quarterly basis, provide the Division with a list of all Class "G" licensed employees currently assigned to perform security services for the contract in question. Each quarter's list shall indicate which Class "G" employees, if any, have been newly assigned to, or removed from, providing security services under the agency's contract.

(c) Each such agency shall notify the Division within 15 days of cessation of the contractual obligation referenced above. All future use of 12-gauge pump-action shotguns or semi-automatic rifles shall be in accordance with this rule.

Rulemaking Authority 493.6103 FS. Law Implemented 493.6115(6) FS. History-New 12-11-16.

Financial Impact Estimating Conference Request for Information August 16, 2019

1. List of Hunting Licenses and permits by game type, amount, and resident/non-resident.

See separate document.

2. List of lawful weapons that would be used for hunting each type of game by permit/license (deer, turkey, waterfowl, etc.)

Game mammals (i.e., deer, gray squirrel, and rabbits) and resident game birds (i.e., wild turkey and quail) may be taken with rifles, pistols, revolvers, shotguns, air guns, bows or crossbows.

Migratory game birds (i.e., ducks, geese, brant, rail or marsh hen, coot, common moorhen, snipe, woodcock and doves) may be taken with shotguns, bows or crossbows.

There are five common types of firearm actions: **Break**, **Bolt**, **Lever**, **Pump**, and **Semiautomatic**. All five of these actions in both rifles and shotguns are used for taking game mammals and resident game birds. Only **Break**, **Pump**, and **Semiautomatic action** shotguns are used for taking migratory game birds.

3. Explanation and history of Pittman-Robertson funds and how states get their apportionment.

See summary document and link below for additional information.

State of Florida Appo	ortionment:
Federal FY 2019	\$12,111,926
Federal FY 2018	\$14,351,398
Federal FY 2017	\$13,978,911

https://wsfrprograms.fws.gov/Subpages/AboutUs/AboutUs1.htm

4. Explanation of how amendment may impact hunting in Florida.

"...possession of "any semiautomatic rifle or shotgun capable of holding more than ten (10) rounds of ammunition at once, either in a fixed or detachable magazine, or any other ammunition-feeding device"

Under current regulations, semiautomatic rifles and semiautomatic shotguns are used by hunters for taking game mammals or game birds. Both of these methods of take can hold more than 10 rounds of ammunition at once by changing the magazine or adding a magazine

extension. The implication of this would be that most semiautomatic rifles and semiautomatic shotguns currently used for hunting would no longer be legal unless registered.

5. List of regulations that currently exist on Hunting weapons.

There are federal (e.g., 50 C.F.R. §§ 20 and 32) and state (e.g., Division 68A, F.A.C.) regulations regarding the equipment that may be used to take game birds and game mammals. The following is a listing of only those regulations contained in Rule 68A-12.002, F.A.C., that pertain to the use of rifles or shotguns for taking game mammals or game birds.

Prohibited equipment for taking game mammals and resident game birds:

- Centerfire semi-automatic rifles having magazine capacities of more than five rounds
- Nonexpanding full metal case (military ball) ammunition for taking deer
- Firearms using rimfire cartridges for taking deer
- Fully automatic firearms
- Air guns except when taking deer, turkey, gray squirrel and rabbit
- Air guns that are not pre-charged pneumatic (PCP) air guns when taking deer or turkey
- PCP air guns firing single bullets that are less than .30-caliber and less than .20-caliber when taking deer and turkey, respectively.
- Muzzleloading guns firing single bullets that are less than .30-caliber
- Muzzleloading guns firing two or more balls that are less than 20-gauge

Prohibited equipment for taking migratory game birds:

- Shotguns larger than 10 gauge or capable of holding more than three shells in magazine and chamber combined
- 6. Will there be a financial impact on the Agency to educate our officers and staff on this amendment?

There would be no financial impact for education of officers on this amendment, FWC has a process in place to train and advise on all new legislation and rule development through a directives management system (PowerDMS).

7. What enforcement issues may arise from passage of this amendment? How would this amendment be enforced?

Many hunters currently use semiautomatic rifles and shotguns when taking game. Florida hunters are restricted to a magazine capacity of five or less when using centerfire rifles to take game, and three rounds for shotguns when taking migratory birds. This restriction is on the magazine itself and not the firearm. Hunters also commonly use rifles that fire rimfire cartridges for small game that contain more than 10 rounds. Wild hogs are not game mammals and can lawfully be taken with rifles having magazine capacities greater than 10 under FWC regulations. These firearms are currently legal under FWC regulations. The proposed amendment language would make possession of nearly any semi-automatic rifle or shotguns currently used by hunters illegal.

"Exempts military and law enforcement personnel in their official duties.": The exemption for Law Enforcement and Military only applies to "in their official duties," as written Law Enforcement and Military may be in violation when possessing these firearms when "off duty." Some Law Enforcement agencies do not provide rifles for their officers but allow them to provide a personally owned rifle, this amendment may interfere with that practice.

Enforcement:

FWC Officers may encounter violations of this amendment during their regular patrols, coming across people otherwise lawfully hunting, fishing, camping or target shooting on rural lands or on Commission managed ranges. Overall calls for service in reference to complaints and increased time during regulatory checks to inspect firearms for compliance and check registration of firearms, would likely increase workload.

FWC's enforcement philosophy of recently enacted laws and regulations includes an outreach and educational period, typically for a term of six months. However, the proposed amendment includes a criminal penalty component establishing violations as a third-degree felony, which would result in a physical arrest for a violation.

Florida Fish and Wildlife Conservation Commission FWC FY 2018-2019 Recreational Hunting Sales

License Type	RESIDENCY (RESIDENT, NONRESIDENT, ALL)	Term	FY 2018/2019 Units Sold	FY 2018/2019 Sales	Sales Attributed to Hunting
Alligator Farming Agent	All	1 year	1,077	\$53,850.00	\$53,850.00
Alligator Trapping Agent	All	1 year	6,303	\$315,150.00	\$315,150.00
Migratory Bird Permit	All	Season	93,718	\$0.00	\$0.00
Released Quail Permit - WMA/WEA	All	1 day	121	\$0.00	\$0.00
Archery Season Permit	Nonresident	1 year	385	\$1,925.00	\$1,925.00
Crossbow Season Permit	Nonresident	1 year	213	\$1,065.00	\$1,065.00
Deer Permit	Nonresident Nonresident	1 year	1,559	\$7,795.00	\$7,795.00
Hunting	Nonresident	1 year	2,233	\$334,950.00	\$334,950.00
Hunting Management Area Permit	Nonresident	10 day 1 year	7,409 2,820	\$333,405.00 \$70,500.00	\$333,405.00 \$70,500.00
Migratory Bird Permit	Nonresident	Season	2,820	\$70,500.00	\$0.00
Muzzleloading Season Permit	Nonresident	1 year	251	\$1,255.00	\$1,255.00
Special Opportunity – Fall Hunts	Nonresident	Season	15	\$4,085.00	\$4,085.00
Special Opportunity – Spring Turkey	Nonresident	Season	12	\$7,920.00	\$7,920.00
Statewide Alligator	Nonresident	Season	124	\$100,318.50	\$100,318.50
Trapping License	Nonresident	1 year	58	\$1,450.00	\$1,450.00
Turkey Permit	Nonresident	1 year	3,431	\$428,875.00	\$428,875.00
Waterfowl Permit	Nonresident	1 year	1,803	\$9,015.00	\$9,015.00
5 Year Management Area Permit	Resident	5 year	114	\$14,250.00	\$14,250.00
Alligator Trapping License	Resident	1 year	84	\$21,000.00	\$21,000.00
Archery Season Permit	Resident	1 year	13,746	\$68,730.00	\$68,730.00
Archery Season Permit	Resident	5 year	176	\$4,400.00	\$4,400.00
Crossbow Season Permit	Resident	1 year	5,124	\$25,620.00	\$25,620.00
Crossbow Season Permit	Resident	5 year	77	\$1,925.00	\$1,925.00
Deer Permit	Resident	1 year	40,506	\$202,530.00	\$202,530.00
Deer Permit	Resident	5 year	453	\$11,325.00	\$11,325.00
Disabled Resident Alligator Trapping Agent	Resident	1 year	539	\$0.00	\$0.00
Federal Duck Stamp (Annual Will Be Mailed)	Resident	45 day	25,616	\$678,824.00	\$0.00
Freshwater/Saltwater/Hunting	Resident	1 year	13,863	\$644,629.50	\$215,306.25
Gold Sportsman	Resident	1 year	39,598	\$3,900,403.00	\$2,423,710.42
Gold Sportsman	Resident	5 year	317	\$156,122.50	\$97,014.52
Hunting	Resident	1 year	54,754	\$848,687.00	\$848,687.00
Hunting Hunting & Freshwater Fishing	Resident Resident	5 year	776 4,398	\$60,140.00 \$136,338.00	\$60,140.00 \$68,169.00
Hunting (0-4) Lifetime	Resident	1 year Lifetime	4,398	\$130,338.00	\$08,109.00
Hunting (13-15) Lifetime	Resident	Lifetime	2	\$1,000.00	\$1,000.00
Hunting (16-64) Lifetime	Resident	Lifetime	136	\$68,000.00	\$68,000.00
Hunting (5-12) Lifetime	Resident	Lifetime	7	\$2,450.00	\$2,450.00
Management Area Permit	Resident	1 year	32,249	\$806,225.00	\$806,225.00
Military Gold Sportsman's License	Resident	1 year	18,421	\$340,788.50	\$211,765.97
Military Gold Sportsman's License	Resident	1 year	3,198	\$59,163.00	\$36,763.89
Muzzleloading Season Permit	Resident	1 year	9,999	\$49,995.00	\$49,995.00
Muzzleloading Season Permit	Resident	5 year	95	\$2,375.00	\$2,375.00
Persons with Disabilities Hunt/Fish	Resident	5 year	2850	\$0.00	\$0.00
Persons with Disabilities Hunt/Fish	Resident	2 year	12562	\$0.00	\$0.00
Resident 65+ Hunt/Fish	Resident	25 Year	16,762	\$0.00	\$0.00
Silver Sportsman's 64+ (Fresh/Hunt)	Resident	5 year	201	\$12,060.00	\$10,038.74
Special Opportunity – Fall Hunts	Resident	Season	472	\$193,490.00	\$193,490.00
Special Opportunity – Spring Turkey	Resident	Season	249	\$117,860.00	\$117,860.00
Sportsman (Freshwater Only)	Resident	1 year	1,997	\$157,763.00	\$131,321.92
Sportsman 64+(Fresh/Hunt)	Resident	1 year	8,289	\$99,468.00	\$82,797.16
Sportsman's (0-4) Lifetime	Resident	Lifetime	952	\$370,800.00	\$230,415.12
Sportsman's (13-15) Lifetime	Resident	Lifetime	13	\$13,000.00	\$8,078.20
Sportsman's (16-64) Lifetime	Resident	Lifetime	957	\$954,000.00	\$592,815.60
Sportsman's (5-12) Lifetime	Resident	Lifetime	135	\$93,100.00	\$57,852.34
Sportsman's (0-4) Lifetime License Gift Card	Resident	Lifetime	25	\$10,000.00	\$6,214.00
Sportsman's (5-12) Lifetime License Gift Card	Resident	Lifetime	2	\$1,400.00	\$869.96
Sportsman's (16-64) Lifetime License Gift Card	Resident	Lifetime	3	\$3,000.00	\$1,864.20
Statewide Alligator	Resident	Season	7,413	\$1,725,217.00	\$1,725,217.00
Trapping License	Resident	1 year	488	\$12,200.00	\$12,200.00
Turkey Permit	Resident	1 year	15,245	\$152,450.00	\$152,450.00 \$7,200.00
Turkey Permit	Resident	5 year	144	\$7,200.00	\$7,200.00
Waterfowl Permit Waterfowl Permit	Resident Resident	1 year	9,171	\$45,855.00	\$45,855.00
Youth Gold Sportsman	Resident	5 year Other	98 27	\$2,450.00 \$2,659.50	\$2,450.00 \$1,652.61
Youth Hunting	Resident	Other	43	\$666.50	\$666.50

Row Labels	Sum of FY 2018/2019 Units Sold	Sum of FY 2018/2019 Sales	Sum of Sales Attributed to Hunting
All	101,219	\$369,000.00	\$369,000.00
Nonresident	20,313	\$1,302,558.50	\$1,302,558.50
Resident	342,360	\$12,082,359.50	\$8,625,490.42
Grand Total	463,892	\$13,753,918.00	\$10,297,048.92

WILDLIFE RESTORATION PROGRAM

UPDATED 1/2018

Fish and Wildlife Service, Wildlife and Sport Fish Restoration Program

DISTRIBUTION METHOD

Apportioned formula based on: 50% paid hunting license holders + 50% land/water area

Governing Guidance

 Wildlife Restoration Act, also known as Pittman-Robertson Act of 1937 (Enabling Legislation)
 50 CFR 80
 2 CFR 200



ELIGIBLE GRANTEES: ALL STATE/TERRITORY FISH AND WILDLIFE AGENCIES WITH ASSENT LEGISLATION

• Restoration, conservation, management and enhancement of wild birds and mammals and their habitat

- Provide public use and access to wildlife resources
 - Provide for education of hunters and development of shooting ranges

FUGIRIE PROJECTS	Manage wildlife and their habitats, monitor populations, conduct research, collect
	and analyze data, maintain facilities, perform outreach, and other activities
	designed to promote wildlife restoration and wildlife-based recreation.

SOURCE OF FUNDS

Purpose

MATCHING REQUIREMENTS AND LIMITATIONS ON AVAILABILITY OF FUNDS

Wildlife Restoration Trust Fund

Includes Revenues from:

- Excise taxes on sporting arms and a m m u n i t i o n s (firearms, ammunition, pistols, handguns, revolvers, bows, archery, arrow components)
- States may be paid up to 75% federal funding, 25% required from non-federal sources
- 100% federal funding for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Mariana Islands
- Annual apportionment available for two years before it reverts
- Reverted funds are returned to U.S. Fish and Wildlife Service for use in Migratory Bird Program
- Basic Hunter Education (separate formula and apportionment) - may be used for hunter education or other WR Act authorized projects
- Enhanced Hunter Education (eight million dollars set aside) - must be used for hunter education or shooting range enhancements (if all Basic Hunter Education funds are used for hunter education, Enhanced HE may be used for any WR Act authorized projects)

SPECIAL CONDITIONS OR REQUIREMENTS	 State Fish and Wildlife Agencies must pass and maintain assent legislation Submit annual license certification Ineligible projects include law enforcement, public relations, and revenue producing activities
	 Wildlife includes indigenous or naturalized species of birds or mammals that are either wildlife or free-ranging; held in a captive breeding program for reintroduc- tion of depleted species; or under the jurisdiction of State fish and wildlife agency.

For More Information: http://wsfrprograms.fws.gov/Subpages/GrantPrograms/WR/WR.htm

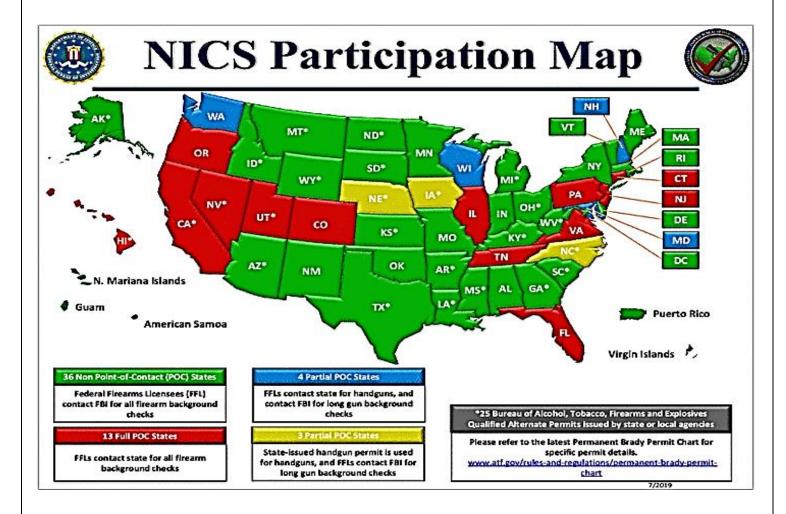
THE FINANCIAL IMPACT ESTIMATING CONFERENCE PRINCIPALS WORKSHOP ON THE PETITION INITIATIVE ENTITLED "PROHIBITS POSSESSION OF DEFINED ASSAULT WEAPONS"

Florida Department of Law Enforcement (FDLE) Firearm Eligibility Bureau (FEB) Overview

AUGUST 16, 2019

Authority

- The Gun Control Act of 1968 was enacted by Congress to establish categories of persons who are prohibited from receiving a firearm.
- The Brady Handgun Violence Prevention Act of 1993 (known as the Brady Act) added a required computerized background check on individuals attempting to acquire a firearm.
- 18 U.S. Code 922 Unlawful Acts Related to Firearm Transfers
- Florida Statutes 790.065 and 790.0655
- Florida Rule 11C-6.009 Sale and Delivery of Firearms
- Florida acts as a full Point of Contact (POC) state meaning FDLE handles all computerized background checks on individuals attempting to purchase a firearm (long guns and hand guns) to evaluate if the individual is eligible based on state and federal law.
- As a POC state, FDLE is required to assist other states and the FBI when an individual is purchasing a firearm in another state and Florida criminal record research is needed.



Operations

- Operates 9 a.m. 9 p.m. 7 days a week, 363 days a year, closed Christmas Day and New Year's Day
- Provides background check service to approximately 4,100 Florida Federal Firearm Licensees
- Offers a customer service line during business hours to assist with questions
- Processed over 930,000 background checks in 2018
- FDLE currently charges \$5.00 per check

Background Check Process

- As a result of the Brady Act, the National Instant Criminal Background Check System (NICS) was established and is under the management of the Federal Bureau of Investigation to conduct checks for Non- POC states.
- Each Federal Firearm Licensee (FFL), as regulated by Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), is required by federal law to complete a 4473 Form on each individual attempting to purchase a firearm. The purchaser information obtained from the 4473 Form (verified through government issued ID) is submitted to FDLE for conducting the computerized background check. Only an indicator if the firearm is a long gun or hand gun is submitted to FDLE, other firearm information like make, model, and serial number are not forwarded to FDLE.
- Information to conduct the background check is submitted to FDLE in one of three ways:
 - Electronically through our Firearm Eligibility System
 - Telephone
 - o Fax
- FDLE background check searches five systems: Florida Crime Information Center (FCIC), National Crime Information Center (NCIC), Florida Computerized Criminal History (CCH), Interstate Identification Index (III), and the National Instant Criminal Background Check System (NICS) Index
- The NICS Index contains mental health record indicators; each state maintains the actual mental health court order.

NOTE: FDLE maintains the Mental Competency Database per F.S. 790.065 that houses Florida mental health orders where an individual has been adjudicated mentally defective or committed to a mental institution. These records are maintained for the sole purpose in determining if he/she is prohibited from purchasing a firearm and is shared with the FBI and other states through the NICS Index.

- FDLE evaluates the background screening results, determines if there are any federal or state disqualifiers, and provides response back to the FFL.
- The FFL makes the final determination to release firearm.
- ATF audits each FFL and reviews the 4473 Forms completed by the purchaser.
- FDLE is required by F.S. 790.065 to purge identifiable information associated to an approval within 48 hours after the day an approval has been communicated to the FFL.

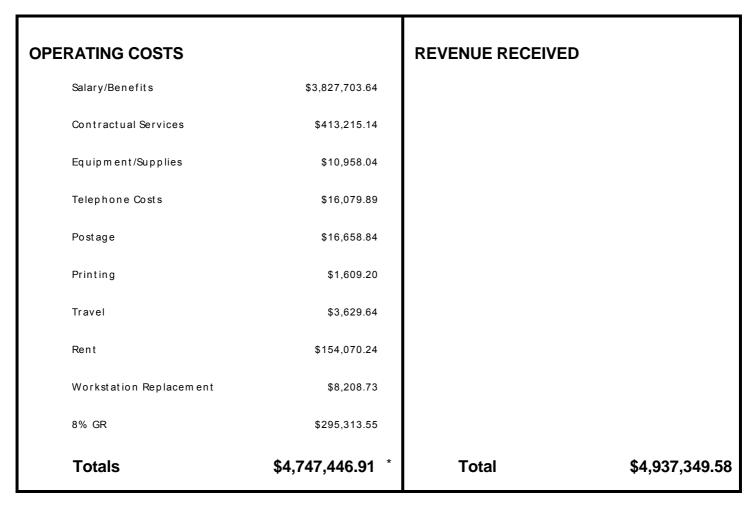
Federal Disqualifiers for Firearm Purchase

- Convicted in any court of a crime punishable by imprisonment for a term exceeding one year, or any state offense classified by the state as a misdemeanor and punishable by a term of imprisonment of more than two years;
- Under indictment or information for a crime punishable by imprisonment for a term exceeding one year;
- A fugitive from justice;
- An unlawful user of or addicted to any controlled substance;
- Adjudicated as a mental defective or involuntarily committed to a mental Institution;
- An illegal or unlawful alien; or a nonimmigrant who fails to meet certain exceptions to possess a firearm;
- Discharged from the Armed Forces under dishonorable conditions;
- A renouncer of U.S. citizenship;
- Subject to a court order restraining him/her from harassing, stalking, or threatening your child or an intimate partner or child of such partner;
- Convicted in any court of a misdemeanor crime of domestic violence

Additional State Disqualifiers

- Found, in the courts of this state, to have committed a delinquent act that would be a felony if committed by an adult and such person is under 24 years of age -- or -- Found to have committed a delinquent act in another state, territory, or country that would be a felony if committed by an adult and which was punishable by imprisonment for a term exceeding 1 year and such person is under 24 years of age;
- Received adjudication withheld on a felony or misdemeanor domestic violence charge and three years have not elapsed since completion of all court provisions;
- Has been issued a final injunction that is currently in force and effect, restraining that person from committing acts of stalking or cyber-stalking, as issued under s. 784.0485.
- Recent arrest (within the past six months) for a violent crime or enumerated offense as outlined in s. 790.065.

FLORIDA DEPARTMENT OF LAW ENFORCEMENT FIREARM ELIGIBILITY BUREAU FY 2017/18



* This report does not include the cost for technology infrastructure and services.

Florida Sexual Offender & Predator System FDLE-EIS

<u>SOPS</u>

Backend – Oracle Database Frontend – Browser based JSF Platform ~120,000 Subject Records ~70,000 Active Records

~6,500 Users; 1,200 Currently Active

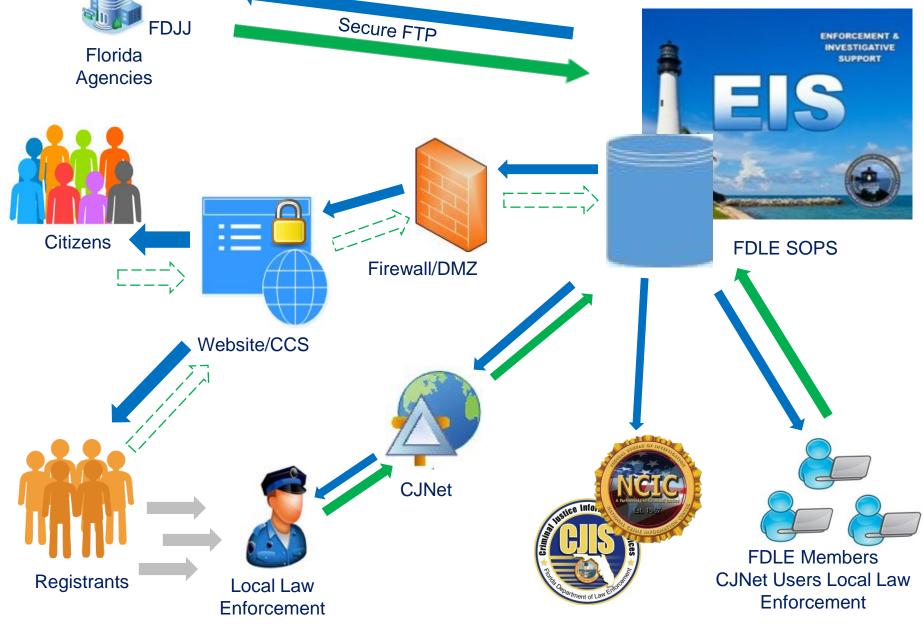
FY 18/19

31.4 M Public Searches 109,250 Registrations 66,443 LE Field Information Updates

Registry Staff

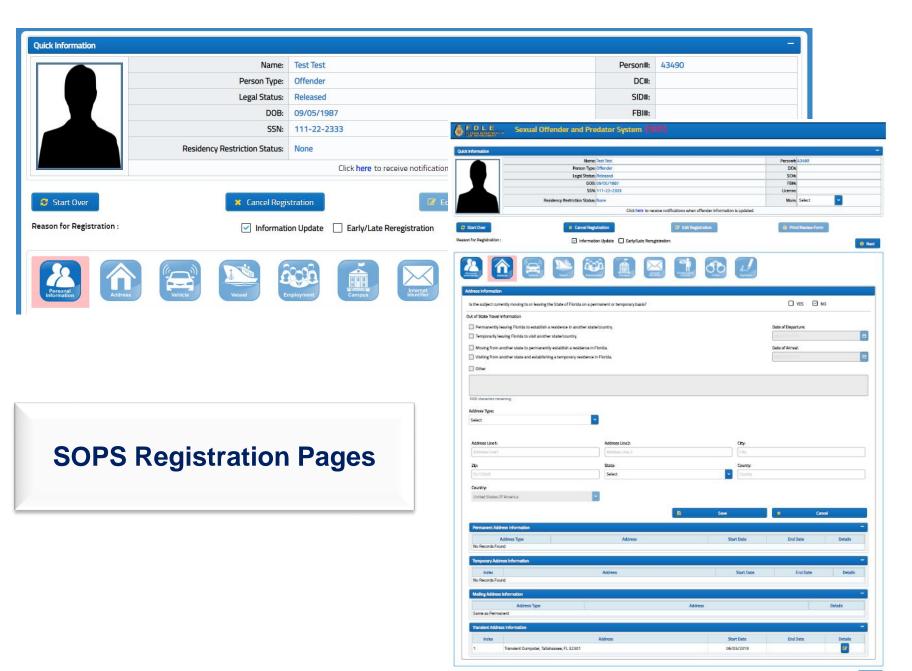
Assistant Special Agent in Charge Planning Policy Administrator 3 Senior Management Analyst Supervisors 30 Members

Sexual Offender & Predator System (SOPS) Data Flow



DHSMV

FDC



View Print Friendly Version

Ould Coard

DLE Sexual Offender and Predator System (TEST)

& Person Search 🔒 Facility Search 🔑 CJNet Search

Qu

X Cancel

Welcome moon-ra Offender Menu

Primary Information

Direct Entry Field Information

			Dates Of Birth
			Social Security Numbers
			Scars, Marks, and Tattoos
			🔁 Other Information
			Forms/Documents
			🜻 Letters
			🛊 Miscellaneous Numbers
			🛊 Professional Licenses
			😝 Address Information
			🙍 Residential
Add Address Information			Non-Residential
Other Address	Standardize Address	~	📻 🌲 Travel Itineraries
Functions:	Standardize Address		Phone Numbers
			🖕 🏚 ССН
Address Type: *		Address Line 1: *	Scrime/Victim Information
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Data Source:	100	Begin Date:	Registration Information
FDLE		MM/DD/YYYY	FL Registrations
Auto Standardize:		Override FAM:	Out of State Registration
			Translent Check-Ins
Special Residency Informa	ition:		S Address Confirmation
			Activity Reports
			Address Verification Request
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omment:			Field Information
			Compliance Tracking
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4000 characters remaining.			Document Management
Patrol Zone:		Display Status:	Olligent Search
Select	×.	Everywhere	Public Records Request
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Validation Result:			

	Name: Test Test	Person#:	43490
Per	rson Type: Offender	DC#:	
Leg	gal Status: Released	SID#:	
	DOB: 09/05/1987	FBI#:	
	SSN: 111-22-2333	License:	
Residency Restriction	on Status: None	More:	Select

	ipse All						Show	v Inactive?
Expand	Address	Address Type	Dates	Display Status	Special Residency Information Available?	Added By		Details
>	Transient Dumpster Tallahassee, FL 32301	Transient	Begin:06/03/2019 End:	Everywhere	No	06/03/2019 Registration-Use	er	
						. +	Add Res	sidential
on-Residenti	al/Business Addresses						Show	w Inactive?
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Tab 13

Public Comments

July 24, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: <u>edrcoordinator@leg.state.fl.us</u> Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the owner of Tac6 Media, LLC, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

In my business, I own multiple online publications in the firearms and law enforcement industries. Additionally, I write for numerous print publications that cover the firearms industry. We have been in business here in Florida since 2007 – first as a sole proprietorship and now as a LLC.

My lawful business provides a valuable resource for education on firearms topics and reviews for Floridians seeking to legally purchase firearms for recreational use and personal protection purposes. To accomplish this, I am required to receive many firearms and other accessories throughout the year for testing and photography. Each gun transfer is conducted through a Federally licensed firearms dealer and testing is conducted at multiple local ranges. I am proud of my business and contributions to my community and the state of Florida.

I appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact my business here in Florida.

The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on my small business with no positive impact on crime control whatsoever.

The proposed initiative would mean I could not conduct my business in Florida, and I would be forced to move my business – and family – to another state. That means a 100% loss in my company's taxable revenue as well as all of the business I generate with other Florida-based companies. This would translate into a decrease in taxes generated both at the local, state, and federal level.

Let me be perfectly clear: my business could not survive in the state of Florida if this initiative were to pass. The result would require us to re-locate to another state that allows us to possess these products lawfully for the purposes of testing, review and photography.

Additionally, the relocation to another state would also mean that all of the sales tax revenue generated by my wife's company, Shelf Space Trading, would leave Florida as well.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Richard L. Johnson Tac6 Media, LLC

07/24/2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the manager for Mike's Outdoor Sports, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We are a fulline outdoor hunting shooting retail store. We have been in business here in Pensacola, Florida since 1981. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by 50 percent. Additionally, this proposed initiative would also mean our business could lose up to \$ 1,000,000. in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Respectfully & Sincerely, Stan Butler



Nexus Shooting, LLC 2600 Davie Rd, Davie, FL 33314 (954) 587-8005 DUNS # 013572120 EIN# 45-3165899

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the owner for Nexus Shooting, LLC, I am respectfully submitting my comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

Nexus Shooting is a National Shooting Sports Foundation 5 Star Rated Range serving South Florida. We have been in business here in Davie, Florida since 2013. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by 10 employees. Additionally, this proposed initiative would also mean our business could lose up to \$650,000 in revenues per year. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level. There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

If I may be of further assistance, please do not hesitates to contact me at <u>bernie@nexusshooting.com</u>. Thank you.

Sincerely,

Bernard Hsiao, M.D., Ph.D. Owner Nexus Shooting, LLC

From:	edrcoordinator
To:	Bell.Stephanie
Cc:	Schenker, Pamela
Subject:	FW: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"
Date:	Wednesday, July 24, 2019 2:23:36 PM

From: Jason Brugh <morebruellc@gmail.com>

Sent: Wednesday, July 24, 2019 2:23 PM

To: edrcoordinator <edrcoordinator@leg.state.fl.us>

Subject: RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

07/23/2019

To: The Florida Legislature Office of Economic and Demographic Research

As the managing partner for Gun Trader Den, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We purchased our shop in February of this year from our friend who ran it for 15 years prior, of which it has stayed here in the community. We have been in business here in St Petersburg, Florida without issue. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small business and our new investment. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by two employees. Additionally, this proposed initiative would also mean our business could lose up to \$190,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Jason A. Brugh Managing Partner Gun Trader Den 5810 4th Street N St Petersburg, FL 33703 Phone: Matt: 727-430-9424 Jason: 727-366-5867

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July 24, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the CEO for Kalashnikov-USA, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We have been in business here in Pompano Beach, Florida since 2016. In the past 12 months, we have doubled our employee base to 40 excellent workers and plan on doubling this again in the near future. Furthermore, the average hourly worker starts at a base of \$15.00 per hour. We locally source tooling, gauges, fixtures, coatings and machining operations having widespread economic impact throughout the state of Florida. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our business. The proposed initiative would mean both jobs and revenues lost. This proposed initiative would likely mean we would shut down operations entirely and move to a more reasonable and business friendly state. To the state of Florida, this would mean a loss of 40 employees and would have a strong negative impact on all our suppliers and service providers. Revenue of at least \$200,000 in sales of our product to legal regional retailers would be lost and a rapidly growing company with a goal of \$25,000,000 in revenue by 2022 would be lost. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely, Jonathan Mossberg

Jonathan Mossberg, CEO Kalashnikov-USA



July 24, 2017

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

WJS LLC is a small family owned business started with our son when my husband and I retired and moved to Florida. We have been in business here in Merritt Island, Florida since 2015. Our lawful business has provided an avenue for Floridians to legally purchase firearms for hunting, recreation, and personal protection. WJS also offers training safety classes and simulator training so our customers know how to use a firearm safely and properly. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small, family-owned business. The proposed initiative would mean both jobs and revenues lost. Every year we have been in business, we have grown and been able to offer employment opportunities. It is our estimation that we would be forced to cut our workforce by two individuals, one who is also retired and needs us for his income. Additionally, this proposed initiative would also mean our business could lose up to \$ 200,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. WJS Guns is a small business fighting to grow and maintain. We moved to Florida when we retired because of the States attitude of fairness to all business enterprises and indicated desire to assist and promote small business. Regulations and laws that defeat free enterprise are an abomination on a person's right to pursue their dreams and cause great hardship on small family business.



The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Carol a. Stasat

Carol A. Stasak Secretary/Treasurer WJS Guns LLC | WJS Outdoors

July 25, 2019 The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: <u>edrcoordinator@leg.state.fl.us</u>, Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the owner and manager of Home Defense Firearms, **850-293-3241**, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We have been in business here in Pace, Florida since April 2016. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida. Our primary source of income is from assembling and selling AR platform firearms and transferring firearms.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our production completely. Additionally, this proposed initiative would also mean our business could lose up to \$20,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Wesley D. Stanaland Jr. Home Defense Firearms, 4820 Orleans, Street, Pace, FL 32571, Owner

From:	<u>Roger Minger</u>
To:	edrcoordinator
Subject:	Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"
Date:	Thursday, July 25, 2019 6:06:59 PM

(07/24/2019)

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: <u>edrcoordinator@leg.state.fl.us</u> Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the owner of Jolly Roger's Guns Gold & Pawn, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

My wife and I started this business 4.5 years ago. The business model is to make collateralize loans to people who have little to no options. We have been in business here in Umatilla, Florida since 2015. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. Firearms described in this petition includes some of the most common ones we pawn. Firearms are about 65% of our loan business. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by 2 (go out of business) employees. Additionally, this proposed initiative would also mean our business could lose up to (\$250,000) in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Roger C. Minger

Jolly Roger's Guns Gold & Pawn Inc. 525 N Central Ave. Umatilla FL. 32784 352-669-2529

https://www.facebook.com/jollyrogerspawn

TO WHOM THIS MAY CONCERN,

I am Mike Scott owner of Scott's Outdoors, Jay, Fl. and Mike's Outdoors Pensacola, Fl. writing with concerns over the Florida legislators desire to ban the sale of AR-15's and their uneducated definition of such rifles calling them Assault Rifles. The only Assault Rifles are used by the military and gun collectors who are recorded with the Federal Government. AR-15 stands for Armalite Rifle with a 15 round magazine. I believe in the 2nd Amendment, I am a patriot, I have grave concerns over our Legislators on the State and Federal level who listen to High School students and emotional people who are ignorant of the statistics of gun related fatalities. The fact of the matter is more people are killed with other devices other than guns and in fact of all those killed with an AR-15 are the least of all statistics on record of deaths in the United States therefore it is blatantly obvious to me the motives behind outlawing certain firearms. Ignorance (uneducated) is the rule of law governing our laws today that are being passed that have had no effect but rather punish law abiding citizens instead of the criminals that participate in unlawful acts. We have some of the most stringent laws on the books in Chicago and they're not being enforced with thousands of lives being wasted every year. In fact we have enough laws on the books and they're not being enforced. The Parkland shooter had been mentally ill and the police knew about it and yet he was allowed to purchase hi-capacity firearms and the deputy on sight went and hid knowing what was going on and his cowardly actions cost the lives of innocent children all because laws were not enforced.

I humbly ask you to consider the above and to work with your leading firearms dealers so that the legislators are fully informed, knowing the facts so they can make educated decisions instead of emotional outcrys of honest citizens and children who are ignorant of firearms. Ignorance breeds fear in all walks of life and especially with firearms. Nobody shows the millions of Americans that use firearms responsibly everyday but instead bad news travels fast and good news is ignored. I as a citizen of the state of Florida ask you to consider our state and federal constituion as it is written, to use the facts instead of emotionalism, to weigh the outcome of emotional decisions. Whatever we plant in this great nation will come to fruition, what are we planting when we punish the law abiding citizen and yield to the unlawful? The answer to that question is simple --- CHAOS --- and it will come if good judgement and responsible actions aren't followed while governing the people of this great nation.

Respectfully & Sincerely, Mike Scott

MIKE SCOTT 3898 HWY 4 JAY, FL 32565 850-675-4566 ext 232 850-675-4381 fax

850-516-1698 cell

 From:
 Scott Coats

 To:
 edrcoordinator

 Subject:
 Florida Ballot Initiative - Fiscal and Economic Impact Comment

 Date:
 Monday, July 29, 2019 11:01:49 AM

The NFA Store, LLC 6069 Ruff Street North Port FL 34291

July 28, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588

RE: Public Comments Fiscal and Economic Impact of Petition Initiative "Prohibits Possession of Defined Assault Weapons"

Dear Madam/Sir:

I am the owner of The NFA Store (d/b/a NFA MFG), a federally licensed firearms dealer and manufacturer here in Florida. I am writing today regarding the impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We manufacture, repair and sell firearms of all types, including those that would potentially be affected by this initiative. We have been in business here in Florida since 2009, serving the general public, but to a large extent, providing services to locate, state and federal government agencies.

The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our retail, service and manufacturing business—and the law-abiding public. It would do nothing to curb the illicit use of firearms.

In our estimation, the breadth of the initiative is cloaked in semantics, because the text of the initiative would include nearly every firearm manufactured today that has a removable magazine, including even the integral magazine 22-caliber rifles commonly employed by Florida hunters, youth and competitive shooters. I implore you to consider the intentional breadth of the initiative to include the impact on law enforcement personnel, TDY military, sporting shooters, homeowners and hunters. The economic impact is truly staggering.

But the impact to our business and the services to we provide to government agencies located in Florida would be severe. The loss of tax revenue and the economic impact of job and business lost would be enormous. Florida is a major center for the firearms manufacturing industry—think of the loss of revenues and jobs this initiative would have.

For our company, the initiative would mean both jobs and revenue lost. It is our estimation that we would be forced to cut our workforce by nine of twelve employees. Additionally, this proposed initiative would also mean our business could lose up to \$940,000 in revenue (using

2018 figures, expected to be significantly higher for 2019). This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the likelihood that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully. The law enforcement agencies we service would lose the services we provide and likely seek out-of-state vendors to fulfill their needs.

We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Scott Coats, PCEO The NFA Store, LLC

Via Email: <a href="mailto:editection-of-editection-weight-state-flus-background-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complexity-complex

Scott Coats

The NFA Store and NFA MFG • Sales and Service for the MIL, GOV and LEO Markets 6069 Ruff Street • North Port FL • 34291-4027 Toll Free (844) 361-9010 • Office (941) 361-9010 • Cell (561) 951-7401

From:	karl@kustomfirearms.com
To:	edrcoordinator
Subject:	Comments relating to Fiscal and Economic Impact of Petition
Date:	Monday, July 29, 2019 11:57:22 AM
Attachments:	image003.png
	Prohibit Possession (1).pdf
	Prohibit Possession (2).pdf

Please let my comments be heard concerning the petition entitled" Prohibits Possession of Defined Assault Weapons".

Sincerely, Karl Thatcher



Karl Thatcher

President, Kustom Firearms 941-47LASER (941-475-2737) 517 Paul Morris Dr. Englewood, FL. 34223

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

.....

Karl Thatcher

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7/29/2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled

"Prohibits Possession of Defined Assault Weapons"

As the owner / operator for Kustom Firearms LLC, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

Kustom Firearms is a training facility for Gun Safety, Home Protection and Concealed Carry. We have been in business here in Englewood, Florida since 2018. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida. We instruct and teach Law-Abiding US Citizens proper use and gun safety rules to protect themselves against the criminal element with use of semi-automatic rifles, modern sporting rifles and semi-automatic shotguns. Our 2nd amendment rights allow us legal citizens to protect ourselves by lawful means using modern guns equal to what the criminal's use against us in today's world. It's obvious, that law enforcement can't protect all the law-abiding citizens everywhere. It remains up to us citizens to defend ourselves using modern means, on an equal playing ground. This proposal will not prevent the criminal element from possessing firearms to use against U.S. citizens. In fact, it will allow law-abiding citizens to become weaker and more vulnerable to the criminal element.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small local business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by 4 employees. Additionally, this proposed initiative would also mean our business could lose up to \$100,000.00 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

THE PATRIOT GUN SHOPPE, LLC 1939 TAMIAMI TR. S UNIT A, VENICE, FL 34293

July 25, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the managing member for The Patriot Gun Shoppe, LLC, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

The Patriot Gun Shoppe, LLC was established in 2011, we sell firearms, ammunition and supplies to the general public, we also provide NRA pistol classes. We have been in business here in the Sarasota/Venice Florida market since 2011. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to liquidate our inventory and close our business for good or re-locate to another state that allows us to sell these products lawfully, depriving the State of Florida of jobs, revenues, and taxes. This proposed initiative would mean that our business would not generate up to \$100,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

The Patriot Gun Shoppe, LLC

m Michael K Worthington, managing member

7-24-2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the Owner for Florida Firearms Academy, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

FFA is an Academy, Shooting range, store, and armory. We have been in business here in Hillsborough Florida since 2011. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to CLOSE OUR DOORS AND LET ALL EMPLOYYES GO. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Thomas King

07/29/2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the Owner for Havoc Weapon Systems, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

Havoc Weapon Systems is a firearms manufacturer and retail seller of firearms, parts, and accessories. We specialize in modern, semi-automatic, magazine-fed firearms. This type of firearm has become the global standard and represents nearly every firearm that has been invented since the late 1800s. Over 95 percent of our stocked firearms take magazines and would be subject to this proposal. We do not have the equipment to manufacture antiquated designs such as bolt-action rifles, lever-action rifles, or revolvers. These examples are no longer the favored design for hunting, recreational shooting, or personal defense. We have been in business here in Dade City, Florida since our inception. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small business and many others. Florida is ranked third-highest in number of firearm businesses (7,298) compared to the rest of the nation, based on a 2017 statistics release by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF/BATFE). The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by 85 percent of employees. Additionally, this proposed initiative would also mean our business could lose up to \$ 450,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the near certainty that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully. The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Austin norm

Austin L Mount Owner/Chief Executive Officer Havoc Weapon Systems

p.1

July 30, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the owner for P-Squared Services, LLC. I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We are a Federal Firearms Licensed dealer. We have been in business here in Port Charlotte, Florida since 2016. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our (small) business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by not adding additional employees as planned. Additionally, this proposed initiative would also mean our business could lose thousands of dollars in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters./

Sincer Peter Pass

P-Squared/Services, LLC. 9684 Singer Circle Port Charlotte, FL 33981



July 29, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the CEO of Adams Arms, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

Adams Arms has been in business in the Tampa Bay area for 12 years, initially selling patented piston retrofit kits for AR-15s and selling full AR-15s to law enforcement and consumers for the last seven years. We are currently located in Odessa, Florida. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by fifty employees. Additionally, this proposed initiative would also mean our business could lose up to \$15,000,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level. We are also concerned that we would not be able to continue the support of our Florida Law Enforcement customers. Nearly 15% of Florida Law



Enforcement carries Adams Arms rifles, including Florida Highway Patrol, Pasco County Sheriffs and Pinellas County Sheriffs.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Paul A. Miller CEO, Adams Arms July 29. 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: <u>edrcoordinator@leg.state.fl.us</u> Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the owner for Weston Arms & Alfie's Gun Range, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

As a family owned and operated company, we have been in business here in Davie, Florida since 2003. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small family business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by six employees. Additionally, this proposed initiative would also mean our business could lose up to \$ 680,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely, Alfie Feliciano



edrcoordinator@leg.state.fl.us

18 August, 2019

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the CEO and owner of Gun IQ International LLC, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida and providing you with an assessment of the consequences of actions you may take.

Gun IQ International (GIQI) is a consulting firm providing engineering, sales, and other guidance to firms doing business with the US Military, Law Enforcement, and firearms purposed for civilian sales. We have been in business in Titusville, Florida since 2015 and in the design, analysis, testing, and marketing of firearms since 1967.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our military, law enforcement, and the firearms industry here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, high capacity magazines, and semi-automatic shotguns.

What I hope you will appreciate is that all firearms and accessories used by our military and law enforcement are produced by companies who also rely on civilian sales to balance their business. The military is always given priority on firearms, accessories, and spares contracts but there are no guarantees for set business levels because contracts are awarded to the lowest bidder. Losing a bid on a government contract bid today means dedicated machines, specialized tooling, and trained personnel can shift to making barrels, bolts, receivers, and other parts for civilian firearms. Most firearms manufacturers strive for a 50-50 balance between civilian and military. Should legislation as described be enacted, tomorrow it will be impractical for military firearm contractors to stay in business.

Please do not entertain the notion small arms can be made in a Government Arsenal as that would only prove we learned nothing from our past mistakes. Since the founding of our country we suffered through the incompetency and cost overruns at Springfield Arsenal. Their small arms design and manufacture were so deeply flawed, Secretary of Defense, Robert McNamara closed their doors in 1968. I saw these problems firsthand when the company I worked for

4231 Pondapple Drive Titusville, FL 3279

www.GunIQinternational.com

GunIQinternational@gmail.com 321-607-2965



International LLC

(General Electric Armament Systems Division) took over Springfield's production. I spent most of 1969 at Springfield, trying to sort through the mess. In the end, GE gave up and ceased the operation.

GIQI has been dedicated to the advancement of firearms technology, working with the US Government and private industry. We rely on our second amendment freedom to transport accessories, components, and semi-automatic firearms for demonstrating to customers, visiting military facilities, and attending symposiums. Restrictive laws will not discriminate between what is for military/law enforcement and what is civilian, which in the end restricts our ability to develop and demonstrate new products to the military and law enforcement.

Should you enact this legislation, I will be forced to close or relocate my business to another state. While we are a very small company, our annual pretax revenue is approximately \$80,000.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters. I will be happy to provide you more information, should you so desire.

Sincerely,

George E. Kontis CEO

July 25, 2019 The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: <u>edrcoordinator@leg.state.fl.us</u>, Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the owner and manager of Home Defense Firearms, **850-293-3241**, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We have been in business here in Pace, Florida since April 2016. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida. Our primary source of income is from assembling and selling AR platform firearms and transferring firearms.

We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our production completely. Additionally, this proposed initiative would also mean our business could lose up to \$20,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Wesley D. Stanaland Jr.

Home Defense Firearms, 4820 Orleans, Street, Pace, FL 32571, Owner

8/29/19

The Florida Legislature Office of Economic and Demographic Research 111 West Madison, Suite 574 Tallahassee, FL 32399-6588 Email: edrcoordinator@leg.state.fl.us Fax: (850) 922-6436

RE: Comments Relating to the Fiscal and Economic Impact of Petition Initiative Entitled "Prohibits Possession of Defined Assault Weapons"

As the Owner of Pembroke Gun Range, I am submitting comments today on the fiscal and economic impact that the proposed initiative, "Prohibits Possession of Defined Assault Weapons," would have on my business here in Florida.

We service many of the Security companies, Police Dept's., FBI, TSA, CIA, and other gov't organizations and civilians. We have been in business here in Hallandale, Florida since 2008 and the range has been here for almost 50 years. Our lawful business has provided an avenue for Floridians to legally purchase firearms for recreational use and personal protection purposes. We are proud of our business and contributions to our community and the state of Florida. We appreciate the opportunity to comment on the proposal, "Prohibits Possession of Defined Assault Weapons," and how it will impact our business here in Florida. The proposal itself has the potential to ban all semi-automatic rifles, modern sporting rifles, and semi-automatic shotguns. Such a ban on some of today's most popular firearms will certainly have grave impacts on our small business. The proposed initiative would mean both jobs and revenues lost. It is our estimation that we would be forced to cut our workforce by 5 employees. Additionally, this proposed initiative would also mean our business could lose up to \$250,000 in revenues. This loss in sales would translate into a decrease in taxes generated both at the local, state, and federal level.

There is also the serious possibility that our business could not survive if this initiative were to pass. The result would either require us to close our business for good or re-locate to another state that allows us to sell these products lawfully.

The voters of Florida must be given ALL information on how such an initiative will impact lawful businesses, jobs, revenues, and taxes. We ask that the Fiscal Impact Estimating Conference consider this carefully as it prepares to present the economic impact to Florida voters.

Sincerely,

Ronad E. Ritter Owner

Tab 14

Impact

FACT SHEET

June, 2019 Florida Federal Firearms Licensees (FFL)

License Type	Number of Licensees
Dealer in Firearms Other Than Destructive Devices	2,188
(Includes Gunsmiths)	
Pawnbroker in Firearms Other Than Destructive	613
Devices	
Manufacturer of Ammunition for Firearms	80
Manufacturer of Firearms Other Than Destructive	783
Devices	
Importer of Firearms Other Than Destructive Devices	139
Dealer in Destructive Devices	10
Manufacturer of Destructive Devices	43
Importer of Destructive Devices	41
Total	3,897

Firearms Manufactured in Florida 2017

Weapon	Number	Number of	% that
	Manufactured	Manufacturers	Manufacture < 5
Pistols	304,176	62	43.5%
Revolver	226,078	6	83.3%
Rifles	108,470	113	37.2%
Shotguns	26,265	6	66.7%
Miscellaneous	6,344	39	33.3%
Total	675,460	138*	

• - Includes manufacturers of multiple types of firearms

Source:

Firearms Commerce in the United States Annual Statistical Update 2018 – United States Department of Justice Bureau of Alcohol, Tobacco, Firearms and Explosives

Annual Firearms Manufacturing and Export Report 2017 - United States Department of Justice Bureau of Alcohol, Tobacco, Firearms and Explosives