OFFICE OF ECONOMIC
& DEMOGRAPHIC RESEARCH

Return-on-Investment for Select State Economic Development Incentive Programs

Capital Investment Tax Credit – Qualified Target Industry Tax Refund – Brownfield Bonus Redevelopment Tax Refund – High-Impact Sector Performance Grant– Quick Action Closing Fund – Innovation Incentive Program – Enterprise Zone Program

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EXECUTIVE SUMMARY AND COMPARATIVE ANALYSIS

Background and Purpose...

Recently enacted legislation directs the Office of Economic and Demographic Research (EDR) and the Office of Program Policy Analysis and Government Accountability (OPPAGA) to analyze and evaluate 18 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.

The review period covers Fiscal Years 2009-10, 2010-11, and 2011-12. In the first report, the following programs are under review:

- Capital Investment Tax Credit - CITC;
- Qualified Target Industry Tax Refund - QTI;
- Brownfield Redevelopment Bonus Tax Refund - BFRD;
- High-Impact Sector Performance Grant - HIPI;
- Quick Action Closing Fund - QACF;
- Innovation Incentive Program - IIP; and
- Enterprise Zone Program - EZ.

With the exception of the Qualified Target Industry Tax Refund and the Quick Action Closing Fund, there were less than 10 projects per program during the review period. Measurements for programs with a significant number of projects are likely to be more reliable.

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:

$$\frac{\text{(Increase in State Revenue – State Investment)}}{\text{State Investment}}$$

[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.

Since EDR's Statewide Model[3] 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.

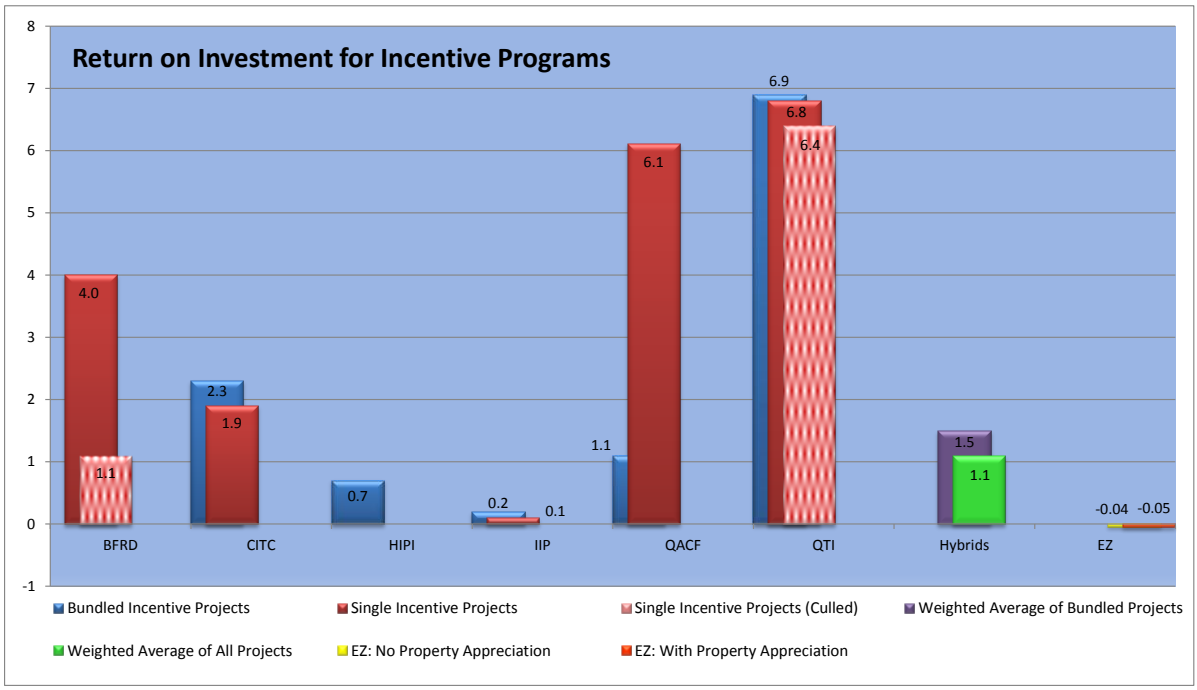
As used by EDR for this analysis, the returns can be categorized as follows:

- **Greater Than One (>1.0)**…the program more than breaks even; the return to the state produces more revenues than the total cost of the incentives.
- **Equal To One (=1.0)**…the program breaks even; the return to the state in additional revenues equals the total cost of the incentives.
- **Less Than One, But Positive (+, <1)**…the program does not break even; however, the state generates enough revenues to recover a portion of its cost for the incentives.
- **Less Than Zero (-, <0)**…the program does not recover any portion of the incentive cost, and state revenues are less than they would have been in the absence of the program because taxable activity is shifted to non-taxable activity.

The numerical ROI can be interpreted as return in tax revenues for each dollar spent by the state. For example, a ROI of 2.5 would mean that $2.50 in tax revenues is received back from each dollar spent by the state.

Overall Results and Conclusions...

This analysis develops a return-on-investment for each of the seven incentive programs under review and evaluates the key factors that affected their returns.



The seven programs are evaluated over 14 scenarios, which include projects that receive awards from only one program (single incentive) and projects that receive awards from multiple programs (bundled).

[3] See section on Methodology for more details.

For comparative purposes, the evaluation also develops two hybrid scenarios that combine all projects in the review (excluding the Enterprise Zone program) for a total of 16 scenarios. These hybrid measures serve as a benchmark for the individual programs. The table below shows the ranked program scenarios with corresponding ROIs in four general categories.

Return-on-Investment for the 3 year period

	Scenario	ROI
Greater Than One (>1.0)		
	QTI Bundled	6.9
	QTI Single	6.8
	QTI Single (Culled)	6.4
	QACF Single	6.1
	BFRD Single	4.0
	CITC Bundled	2.3
	CITC Single	1.9
Approximately Equal To One (=1.0)		
	Hybrid 1*	1.5
	Hybrid 2**	1.1
	QACF Bundled	1.1
	BFRD Sinlge (Culled)	1.1
Less Than One, But Positive (+, <1)		
	HIPI Bundled	0.7
	IIP Bundled	0.2
	IIP Single	0.1
Less Than Zero (-, <0)		
	EZ 1***	-0.04
	EZ 2****	-0.05

** Hybrid 1 is Weighted Average of Bundled Projects*

*** Hybrid 2 is Weighted Average of ALL Projects*

**** EZ 1 is No Property Appreciation*

***** EZ 2 is With Property Appreciation*

The programs in the Greater than One category have several common elements that lead to high ROIs:

- Capital Investment Requirements – One program feature for many of the programs in the first category is the requirement for capital investment, which usually takes the form of construction. The benefits of construction are typically localized. The work is labor intensive and the wages are spent locally which drives up indirect and induced effects. In addition, many of the materials used in construction projects are purchased locally and are generally taxable. Relative to other industries, there are few leakages to the rest of the world.

- High Wage Requirements – The top four scenarios share high wage requirements. In the Statewide Model high wages are linked to higher output and productivity which results in more household spending. This program feature is best exemplified in the QTI program scenarios and the QACF single-incentive project scenario. While the IIP and HIPI programs also have such requirements, the positive aspect of this feature is offset by other factors that adversely affect program ROI.

- Large Industry Multipliers – Industries with high multipliers typically have strong backward linkages to local suppliers. They also have high employment multipliers. Both of these factors result in greater indirect and induced benefits. Relative to other industries, there are few leakages to the rest of the world. Examples are found by looking at multipliers in manufacturing industries.

- Non-Economic Forces Affecting Costs and Benefits – In some scenarios awards are not fully being used – and in others, jobs, wages, and capital investments are being created in excess of the state's contracted levels. These circumstances artificially increase the ROI for the programs by reducing the state's cost or increasing the state's benefit. However, if businesses were able to receive the incentives' face value or create only the minimum jobs required, the ROIs would be reduced.

The remaining programs may have one or more of the elements identified above, but the positive impact of these features is offset by other factors that adversely affect the program's ROI. These factors are far-ranging. For some programs, the ROI may not be the principal purpose of the program or even a secondary goal. This applies to the Brownfield Redevelopment Bonus Tax Refund, Innovation Incentive, and Enterprise Zone programs.

Other factors have to do with the timing of the review period. While there was significant capital investment within the three-year window, there were additional investments that took place prior to the review period. Had this activity taken place closer to the beginning of the review period, or during the period, the ROI would have been significantly larger for some programs. This is especially true for the Capital Investment Tax Credit.

Similarly, the Innovation Incentive Program comprises research and development projects that have 20-year break-even requirements. The evaluation measured the ROI at an early stage of the projects' life cycle. As projects mature, the ROI may improve.

Finally, some projects could have been undertaken in the absence of the incentives. Removing (culling) Florida market or resource dependent projects lowers program ROIs by retaining the cost of incentives while losing any economic benefits associated with the projects. This concept applies especially to the Enterprise Zone Program where the program purpose and design essentially produces no increase in state economic activity. The Enterprise Zone Program does not recover any portion of the incentive cost, and revenues are less than they would have been in the absence of the program because taxable activity is shifted to non-taxable activity – producing a negative ROI.

Ultimately, a program with a ROI above 1 has sufficient justification from a financial perspective to continue the investment in the program. In this regard, decision-makers have several options as to the appropriate evaluation standard to use: breaks even; equals or improves upon the result of Hybrid Scenario #1 (all bundled projects; ROI of 1.5); or, equals or improves upon the result of Hybrid Scenario #2 (all projects; ROI of 1.1). Only policy considerations such as societal benefit or another economic measure would justify the continuance of programs that fail to break even or go negative.

In this regard, the table on the following page shows the three required economic indicators by rank, in addition to the ROI. They have been adjusted to reflect averages per year per investment dollar. The results are similar to the ROI rankings with the QTI scenarios being at the top for most measures. The

Brownfield single incentive scenario provides the best value for jobs per state dollar invested; however, the jobs are low wage.

Scenarios Ranked by ROI and Economic Indicators*

Scenario	ROI	Personal Income	GDP	Overall Employment
	for 3 year period	*average per year per investment $*		
QTI Bundled	**1**	3	3	2
QTI Single	2	**1**	**1**	4
QTI Single (Culled)	3	2	2	5
QACF Single	4	4	4	3
BFRD Single	5	5	5	**1**
CITC Bundled	6	8	7	8
CITC Single	7	9	9	7
QACF Bundled	8	6	6	6
BFRD Single (Culled)	9	7	8	9
HIPI Bundled	10	10	10	10
IIP Bundled	11	11	11	11
IIP Single	12	12	12	12
EZ 1	13	13	14	14
EZ 2	14	14	13	13

*Scenarios are ranked from 1 to 14, with 1 being the highest. Personal Income, GDP, and Employment rankings are based on calculations of the state's average investment per year compared to the average economic impact in order to account for program size.

OVERVIEW OF ECONOMIC DEVELOPMENT INCENTIVES AND ROI

The basic formula for return-on-investment is always calculated in the same manner, but the inputs used in the calculation can differ depending on the needs of the investor. Florida law requires the return to be measured from the state's perspective as the investor, in the form of state tax revenues. In this regard, the ROI is ultimately shaped by the state's tax code. For example, all other factors being equal, if Florida had a personal income tax the ROI for each incentive program would increase from the additional tax revenues.

All of the issues below shape EDR's calculation of ROI. Some of them are further addressed in the assumptions, methodology, and findings.

Role of Incentives...

Generally, the goal of economic development by local, state, or national government is to expand economic activity, primarily through capital investment and the creation of new job opportunities – preferably at competitive-to-above-average wages, thereby increasing the state's standard of living for its residents. This new economic activity creates new wealth, which when spent in the economy, induces the creation of additional jobs. To the extent this economic goal is achieved, the tax base is expanded and governments realize an increase in tax revenues.[4]

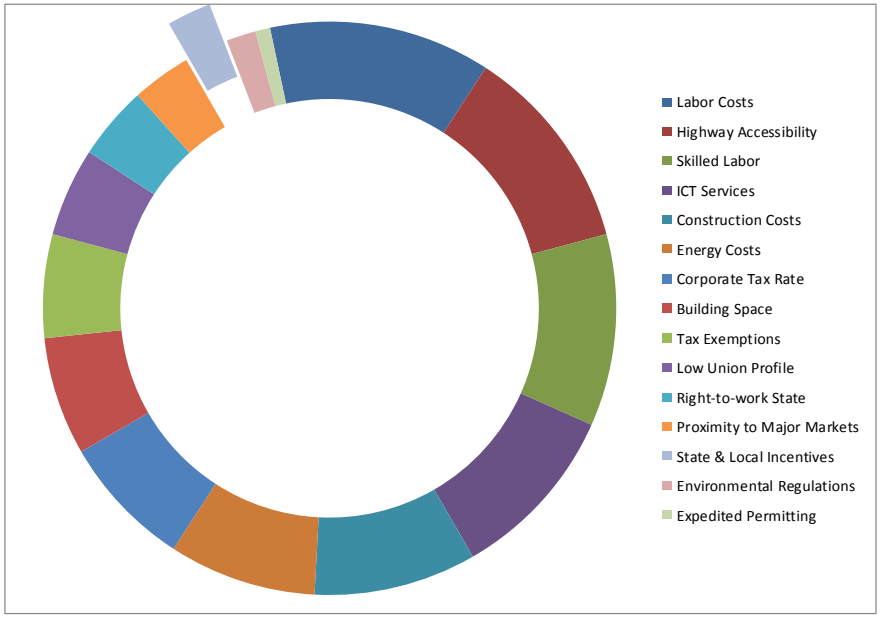
Intuitively, it is easy to see why local governments invest in economic incentives to individual businesses. Any action that benefits or increases the standard of living within a local jurisdiction – even if it causes harm to its neighbors – would be reasonable. It is much harder to accomplish this type of economic development (as opposed to generic investments in public infrastructure and Florida's overall business climate) at the state level where government should be neutral between competing in-state areas and has to take both winners and losers into account. In effect, the state becomes a single economic region, and the focus is generally on attracting new business to the state.

From the business perspective, incentives are public resources that reduce capital or operating costs. From an economic development organization's (EDO) perspective, incentives help sites overcome deficiencies or mitigate weaknesses relative to other sites. This perspective is shared by the heads of Florida's economic development agencies, who add that unlike other static site selection factors, an incentive can be adjusted to close the gap for individual projects, making Florida the highest ranked location choice when all positive and negative factors are considered.[5] Effectively, the incentive(s) is used to compensate the business for deficiencies in the other factors. The chart on the following page is used to illustrate this point, using factors identified in the most recent Area Development survey shown in the table on page 13.

[4] There may also be complementary policy goals to address poverty or economic self-sufficiency for disadvantaged persons or to promote environmental objectives; however, these goals would not be fully captured by the return-on-investment measure. To the extent they exist, that information would be addressed by OPPAGA's portion of the analysis.

[5] Gray Swoope, August 19, 2013, at an Economic Roundtable held by EDR.

Factors Affecting Business Location Decisions



Classification of Incentives...

Economic development incentives may be provided by any level of government. The various forms an incentive can take are wide-ranging, including everything from grants, loans, and tax relief, to regulatory breaks and technical assistance. There are a number of ways these incentives may be classified. For the purposes of this analysis, state incentives are classified into three general categories:[6]

- Direct Financial Incentives, such as grants;
- Tax-Based Incentives, which include credits and exemptions; and
- Indirect Incentives provided through intermediaries, which include public-private partnerships.

Direct financial incentives provide monetary assistance to businesses from the state or through a state-funded organization. The assistance is provided through grants, loans, equity investments, loan insurance, and guarantees. These awards usually give flexibility to the recipient regarding the specific use of the grant within the scope of its business operations, but they can also be targeted to areas such as workforce training, market development, modernization, and technology commercialization activities.

Tax-based incentives use the state's tax code as the source of direct or indirect subsidy to qualified businesses. They tend to have greater life spans and be less visible than direct financial or indirect incentives because they do not require an annual appropriation. While tax-based incentives generally function like direct financial incentives, from the business operating perspective, they have more

[6] This classification system is adapted from Kenneth Poole, George A Erikcek, Donald Iannone, Nancy McCrea, and Pofen Salem. *Evaluating Business Development Incentives,* a report prepared for the U.S. Department of Commerce, Economic Development Administration, EDA Project #99-07-13794, by the National Association of State Development Agencies, W.E. Upjohn Institute for Employment Research, and The Urban Center, Cleveland State University. (August, 1999): 10-13. The description of some of the terms in the classification system is adapted virtually verbatim, adjusted to clarify the Florida context.

uncertainty because they are typically subject to having sufficient tax liability or taxable activity to take full advantage of the incentive.[7] The recipient may also experience timing delays related to tax filing deadlines. Tax-based incentives can be further classified into three sub-categories:

- Credits, which provide a reduction in taxes due, after verification that statutory or contractual terms have been met;
- Refunds of taxes paid to the relevant government, after verification that statutory or contractual terms have been met; and
- Exemptions, which provide freedom from payment of taxes normally applied to certain business activities.

For purposes of this report, the statutory definition of economic benefit[8] leads EDR to focus on direct financial incentives and tax-based incentives.

The state offers many incentive programs; however, only seven programs are under review at this time. They are classified as follows:

- Direct Financial Incentive Programs:[9]
    - Qualified Target Industry Tax Refund
    - Brownfield Redevelopment Bonus Tax Refund
    - High-Impact Sector Performance Grants
    - Quick Action Closing Fund
    - Innovation Incentive Program

- Tax-based Incentive Programs:
    - Capital Investment Tax Credit
    - Enterprise Zone Program

Federal and Local Incentives...

Projects funded by state incentives may also receive federal and local incentives. For the purposes of this analysis, EDR focuses on state incentives consistent with available data and the statutory definition of economic benefit.

Federal incentives are available in the form of grants, exemptions, and tax credits. Known federal incentives received by projects under review include the Work Opportunity Tax Credit, the Brownfields Economic Development Initiative, Empowerment Zone Credits, and the Small Business Innovation Research Grant.

[7] Virginia Joint Legislative Audit Review Commission, *Review of State Economic Development Incentive Grants*, Senate Document No. 8 (November 2012):31. The report supports EDR's assertion by stating that "…In the case of tax credits, businesses cannot always claim the tax incentive in its entirety, often have to wait until the end of the following tax year to reap the benefits, and sometimes have to claim the incentive over multiple tax years."

[8] Section 288.005(1), F.S.

[9] The Qualified Target Industry Tax Refund and the Brownfield Redevelopment Bonus Tax Refund programs are not classified as "Tax-Based Incentives" because they are grant programs subject to annual appropriation. The amount of the award is limited to the number of qualifying employees and certain taxes paid (whether state or local), and this award is incorrectly referred to as a tax refund.

On the local level, a wide array of tax incentives are available such as grants, ad valorem tax abatements, free land, reduced rent on government owned facilities, or required local matches for state incentives. The majority of counties in the state have funds devoted to economic development projects as indicated in the annual Economic Development Incentives Report compiled and published by EDR. In local Fiscal Years 2010 through 2012, 43 (of 67) Florida counties and 49 (of 411) Florida municipalities reported awarding $268 million in economic development incentives to more than 1,800 businesses.

In OPPAGA's survey of businesses that received state incentives during the review period, they asked respondents to identify the local or federal incentives they received in conjunction with the state's project award. Of the 54 businesses that responded to the survey, four companies received both local and federal incentives, 17 companies stated they received local incentives, and five responded they received incentives from federal agencies. Other than these results, which are merely suggestive, EDR does not know the extent to which local and federal incentives are combined with the projects under this review.

From the business perspective, it may be that this total combination of incentives is necessary to be determinative to its decision regarding expansion, retention, or relocation.[10] In this case, excluding the local and federal incentives from the calculation likely overstates the ROI, jobs created, change in personal income, and change in state GDP attributed to the state incentive.

Florida Market and Resource Dependent Projects...

An additional issue that impacts the analysis of ROI relates to projects that are Florida market or state resource dependent. These are projects where the business' clients are primarily based in Florida or the business is dependent on Florida's resources to produce its products or services. While the projects may be technically qualified to receive an incentive from a program, there is no new state revenue resulting from those projects since the businesses are otherwise tied to Florida, meaning the state would have already been their location choice. In these cases, the ROI should not be attributed to the incentive.

In this regard, to the extent that incentives are for market or resource dependent businesses, there is "no net gain in economic activity or jobs or income."[11] The businesses cannot claim that "but for" the program benefit, they would not have undertaken the business activity. [See the broader discussion related to the "but for" issue in a subsequent section and **APPENDIX 1**.] As with the federal and local incentives discussed above, the program ROI would be overstated to the extent these projects are included.

Similarly, some companies are awarded incentives for multiple projects. In certain circumstances, this practice challenges the validity of the "but for" assertion. While it is possible that a subsequent stand-alone project could be located in another state if there is no direct interdependence with the rest of the business, it seems unlikely if there is established infrastructure in Florida. At the very least, any economies of scale would be foregone. The practice of awarding multiple project awards to the same company may also overstate reported ROIs.[12]

[10] While state and local incentives may prove determinative to a specific location decision, federal incentives will not as they are likely to be available in whatever state the business decides to locate.

[11] Peter S. Fisher, "Corporate Taxes and State Economic Growth, Policy Brief of the Iowa Fiscal Partnership," Revised February, 2012: 4.

[12] Within the universe of projects reviewed by EDR, 13 companies have received multiple project awards. Three of those companies received four project awards, five received three project awards, and five received two project awards.

Federal Tax Implications of State Incentives...
While the state cost equals the face value of the economic development incentive, the incentive's federal tax treatment diminishes its value to the recipient business since it will pay part of the incentive to the federal government in the form of increased taxes. This asymmetric valuation suppresses the ROI if it is fully taken into account by reducing the state benefit coming directly from the business. For example, if the tax leakage to the federal government were not present, the business would either have been able to hire more employees at the awarded incentive level or it would have hired the same number of employees at a reduced incentive level—assuming all else is equal.

The federal tax treatment of incentives depends upon whether the incentive is a grant—a payment by the government to the taxpayer, unrelated to taxes—or a tax incentive such as an exemption or credit. The general guidelines related to the tax treatment are described below.[13]

- GRANTS. If the payment is a grant, it generally is included within gross income and thereby taxable. Section 61, IRC, defines gross income to include all income, from whatever source derived. Case law clearly establishes that income includes "any accession to wealth." See *Commissioner v. Glenshaw Glass*, 348 U.S. 426 (1955).

- TAX INCENTIVES. If the incentive is a tax incentive, it is generally considered to not be included in gross income. Rather, it is deemed to be a reduction in taxes due. The most-cited case is *Snyder v. Commissioner*, 894 F.2d 1337 (6th Cir. 1990). Even though the incentive is not included in gross income, it will still affect the taxpayer's tax liability. In simple terms, a business' income tax liability is determined by adding up all of the business' income and deducting the business' normal expenses of doing business. Taxes that the business pays the state are deductible expenses. So, to the extent a business' state tax liabilities are decreased, its federal deductions will also decrease and its federal taxable income and tax will increase. This aspect is especially important when viewing the value of a state tax incentive.

Federal Tax Treatment of State Incentives
(assuming 35% federal tax rate)

Award Type	*Effect*	*Value to Taxpayer*
Cash Grant	Increases Federal Taxable Income	65% of face value
Tax Exemption	Increases Federal Taxable Income by Reducing Deduction	65% of face value
Tax Credit	Increases Federal Taxable Income by Reducing Deduction	65% of face value

State tax issues for incentives also exist; however, they would not represent a direct leakage from Florida's economy since the tax collections would be retained in-state. The ultimate impact on ROI would be case-specific.

Administrative Costs Associated with Incentives...
Administrative costs may also reduce the productive value of economic incentives. To the extent that businesses use site-selection companies or consultants to identify and obtain economic development incentives, the attendant administrative costs diminish the business's ability to deploy the dollars

[13] This information and the table immediately following were provided by staff from the Florida Senate Appropriations Subcommittee on Finance and Tax, 8/13/13. Information on file at EDR.

directly into employment or capital investment. In these cases, the value of state tax incentives to the economy will not equal the face value of the incentive. If taken into account, this would negatively impact the ROI.

In practice, these activities have proven to be fairly widespread. Gray Swoope, Secretary of Commerce for the State of Florida, estimates that 75–80 percent of the negotiations his organization has had with businesses seeking to expand in or relocate to Florida are done through site selection consultants.[14] A 2000 Florida Senate Committee on Commerce and Economic Opportunities Interim Project Report on the Enterprise Zone Program found:

> "Enterprise zone private consultants have increased the use of state funds, but the fees further reduce the size of the rebate, making it even less likely for the program to operate as a development incentive to modify business behavior."[15]

While the diminished value of the incentives would affect the ROI calculation, the service and expertise a consultant provides to the business likely has value to the business itself.

Treatment as a Subsidy...

Economic development is facilitated by investments in public infrastructure, expansion of certain public services, or through the provision of economic development incentives to the business sector. These incentives are public subsidies intended to induce an economic activity or capital investment by a private business in a jurisdiction in which such activity or investment would not otherwise take place. From an economic perspective, a subsidy is:

> ".. a grant of money made by government in aid of the promoters of any enterprise, work, or improvement in which the government desires to participate, or which is considered a proper subject for government aid, because such purpose is likely to be of benefit to the public."[16]

Generally, economic development subsidies are an investment of public resources (whether budgeted or from foregone revenue) with an anticipated ROI to the public treasury, as well as an indirect benefit to the general public. While subsidies still constitute a transfer of wealth from the class of general taxpayers to individual businesses, such transfers are intended to expand the state's economic infrastructure and wealth-creation capacity.

Even though subsidies can be used to accomplish specific policy goals, they cause market distortions which result in inefficiencies and inequalities in the marketplace. This outcome forces decision-makers to weigh the negative repercussions of incentives against the benefits associated with the underlying goal. It also makes periodic, in-depth evaluations critical to the use of incentives.

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[14] Gray Swoope, August 19, 2013, at an Economic Roundtable held by EDR.
For additional discussion of the expanding role and influence of site selection consultants, see A. Markusen and K Nesse, "Institutional and political determinants of incentive competition" in *Reining In The Competition For Capital*, ed. A. Markusen (Kalamazoo, MI: W.E.Upjohn Institute for Employment Research, 2007): 1-41. *Also see* Michael Luger and Suho Bae, "Speaking Falsehood to Power: States' Misguided Use of "Cost-of-Doing Business" Studies in Economic Development Policy," *The Review of Regional Studies,* Vol. 36, No. 1, 2006.

[15] Florida Senate Committee on Commerce and Economic Opportunities, *Review and Evaluation of the Enterprise Zone Program*, November 2000, Interim Project Report 2001-029, 3. The term "enterprise zone consultant" is not synonymous with "enterprise zone coordinators," who are typically local government employees, most of whom have responsibilities beyond administering the local enterprise zone programs.

[16] Black's Law Dictionary, 5th Edition, 1999.

Economic literature is fairly uniform in its assessment of potential repercussions. First, to the extent that subsidies are influential or determinative in business decisions, they can:

- decrease risk in the marketplace, thereby distorting economic decision making by businesses;
- shift capital from more profitable uses in the private sector; and
- foster inefficient projects that may not survive absent the subsidy.

Second, regardless as to whether subsidies are influential or determinative in business decisions, they can:

- distort the marketplace by artificially lowering production costs;
- shift business costs from the private sector to the public sector, as economic incentives—like all government expenditures—are funded through taxes;
- create inequities among similar industries and firms within the state; and
- divert public resources from spending on other public goods and services, which may be more productive uses of the funds.

To the extent that market distortions exist, the ROI may be overstated.

INDUCING LOCATION DECISIONS BY BUSINESSES

The "But For" Assertion...

As the use of incentives has proliferated, the question of whether the activity would have otherwise taken place has dominated recent research. The answer has implications for addressing the return-on-investment of the awarding programs. While some critics question the effectiveness of these practices, proponents claim that "but for" the incentives, the expansion or relocation would not occur in their area – the incentive is the primary, or at least the determining factor, in business decisions.

Some states require incentive recipients to attest to this "but for" condition, or require the state agency awarding such incentives to determine that this condition has been met, before the award of incentives. These requirements are intended to "ensure that the program is acting as a true incentive for economic activity that would not have occurred and does not reward economic activity that would take place normally or without an incentive."[17]

Decision Factors...

There are many factors businesses consider when deciding where to expand or relocate their facilities. Robert M. Ady, former Executive Consultant for Deloitte & Touche/Fantus Consulting, divides these factors into three basic categories:

- Operating costs, which include such items as labor costs, utility costs, occupancy costs, tax costs, and transportation costs, in the case of manufacturing;
- Operating conditions, which include quality of the work force, dependability of utilities, attitude of local officials, and executive travel times; and
- Quality-of-life factors, which may include cultural activities, education capabilities, sporting opportunities, and housing availability and cost.[18]

Economic development incentives, the focus of EDR's evaluation, can offset initial investment and ongoing operating costs, as well as compensate for deficiencies in operating conditions and quality-of-life factors. However, definitively determining the decisive factor behind the business's final decision is difficult at best, and is generally elusive. The literature is filled with surveys and studies that have at least made the attempt.[19]

Founded in 1965, Area Development magazine publishes information on corporate site selection and relocation. Area Development's annual surveys of corporate executives provide an indication of the importance of tax policy and incentives in the site selection process. In this survey, corporate survey respondents consider and weigh the various site selection and quality-of-life factors, rating the factors as either *Very Important*, *Important*, *Minor Consideration*, or *Of No Importance*. The 2012 survey of over

[17] Vermont Economic Progress Council. *Vermont Employment Growth Incentive Authorization Criteria*, Version 4.2012. (Montpelier, Vermont: VEPC, 2012)

[18] Robert Ady, as presented in: Ronald C. Fisher, "The Effects of State and Local Public Services on Economic Development" *New England Economic Review* (March/April 1997): 78.

[19] Chris Lockie, "Economic Development Incentive Wars: What Influence do State and Local Economic Development Incentives have on the Location Decisions of Firms?" *Major Themes in Economics* (Spring 2002): 21-47.
John P. Blair and Robert Premus, "Major Factors in Industrial Location: A Review" *Economic Development Quarterly* 1 (February, 1987): 76.

200 respondents indicates production factors outweigh tax and incentive factors. As shown in the following table, the corporate income tax rate ranked 7th, tax exemptions ranked 9th, and state and local incentives ranked 13th in the latest survey. Surveys from previous years show consistent responses regarding production costs, with some variation regarding incentives. Since 1986, responses over five-year intervals indicate that on average, the corporate income tax rate ranked 5.7, tax exemptions ranked 7.0, and state and local incentives ranked 5.9.

Area Development Site Selection Surveys[20]

(1 = Highest Rank)

2012 RANK	**2012**	**2010**	**2005**	**2000**	**1995**	**1990**	**1986**
Labor costs	1	2	2	2	1	2	1
Highway accessibility	2	1	1	1	2	1	2
Availability of skilled labor	3	7	3	3	5	6	3
Availability of advanced ICT services	4	13	5	n/a	n/a	n/a	n/a
Occupancy or construction costs	5	4	7	6	3	4	n/a
Energy availability and costs	6	8	10	10	4	5	n/a
Corporate tax rate	**7**	**6**	**6**	**4**	n/a	n/a	n/a
Availability of buildings	8	9	n/a	n/a	n/a	n/a	n/a
Tax exemptions	**9**	**3**	**8**	**7**	**8**	**7**	**7**
Low union profile	10	10	13	9	11	11	6
Right-to-work state	11	15	-	15	13	-	n/a
Proximity to major markets	12	-	9	12	14	14	3
State and local incentives	**13**	**5**	**4**	**5**	**6**	**3**	**5**
Environmental regulations	14	11	15	8	7	9	n/a
Expedited or fast-track permitting	15	14	n/a	n/a	n/a	n/a	n/a

Source: Area Development Annual Surveys regarding site selection and relocation.
"n/a" denotes question not asked; "-" denotes response not in the top 15.

Academic research on site selection supports Area Development's findings. In 1988, a U.S. General Accounting Office (GAO) review of the literature finds employer surveys report that financial incentives are secondary factors in location decisions.[21] A more recent literature review echoes the GAO findings and characterizes tax policy as a desirable location factor rather than a must factor, reiterating that desirable factors become more relevant near the end of a site search.[22]

[20] For 2012 data, and an analysis of respondents by industry and position within the organization, see: http://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2013/27th-Corporate-Executive-RE-survey-results-37376241.shtml# Accessed July, 2013.
For 1986 – 2010 data, see: 25th Annual Corporate Survey, p. 39.
http://www.areadevelopment.com/AnnualReports/jan2011/corporate-consultants-survey-site-selection2011-39290.shtml# Accessed July, 2013.

[21] U.S. General Accounting Office, "Enterprise Zones: Lessons from the Maryland Experience." (Washington, DC: GAO, 1988): 43.

[22] Dave N. Norris and Elizabeth Mansager Higgins, "The Impact of Economic Development Incentive Programs: A Review of the Literature" *A Component of the Biennial Unified Economic Development Budget Report Provided to the Louisiana Department of Economic Development* (Louisiana Tech University, 2003): 17. A recent survey by OPPAGA suggests that incentives may have a greater influence than indicated in previous research, at least for businesses that received the state incentives under review in this report. See Florida Office of Program Policy Analysis and Government Accountability, "Florida Economic Development Program Evaluations – Year 1." Concurrent OPPAGA Report, January 2014.

This point is illustrated by Ady in his outline of the site selection process.[23] Ady states that the selection process is one of elimination:

> "The site seeker starts with a universe of locations and systematically eliminates those with the greatest disadvantages and the fewest advantages for the project, until the single location with the most advantages and the fewest disadvantages emerges. It is this location that is selected for the new operation."

Ady notes that the focus during the initial screening is on:

> "…macro wage differentials, usually at the state level, transportation variations (in the case of manufacturing facilities), and key "fatal flaw" criteria as developed by the company/consultant; for example, right-to-work state, proximity to a university with an engineering school, port facilities, available buildings, and so on. Taxes will be brought into the analysis, but only on a comparative basis."

The second stage is community selection. Here, the focus is on projected operating costs, which are developed by estimating costs for taxes, labor, transportation, utilities, and occupancy. He notes that taxes rank well below the other operating costs, typically four to five percent of the weighted consideration.

At the final selection stage, the remaining sites are ranked, and the incentives offered for each site are evaluated and compared.

It is also at this stage that quality factors and availability of public services are considered. Ady notes that education is by far the most important quality factor, followed by highway adequacy, public safety, and infrastructure.[24]

Gray Swoope, Florida Secretary of Commerce and Enterprise Florida's President and CEO, states that for some projects, incentives compensate for site deficiencies relative to other locations. Unlike other static site selection factors, incentives can be adjusted to meet the needs of individual projects—those needs created by any perceived deficiencies relative to the next viable location.[25]

A site-selection consultant offers a similar perspective:

> "For site selectors, it is understood that incentives cannot make a bad location good. However, incentives can make a location more competitive and in the end distinguish one good location from another."[26]

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[23] Robert M. Ady, as presented in: Ronald C. Fisher, "The Effects of State and Local Public Services on Economic Development" *New England Economic Review* (March/April 1997): 78.

[24] Ibid., at 77-82.

Also see John P. Blair and Robert Premus, "Major Factors in Industrial Location: A Review" *Economic Development Quarterly* 1, 1 (February, 1987): 72-85.

[25] Gray Swoope, August 19, 2013, Economic Roundtable held by EDR.

[26] Mark Sweeney, "The Challenge of Business Incentives for State Policymakers: A Practitioner's Perspective" *Spectrum: The Journal of State Government* (Winter 2004): 10.

In summary, survey research and professional opinions indicate that incentives are not likely to be a primary consideration in site selection. However, practitioners indicate it can be a disqualifying factor at the initial stage (a fatal flaw) and may be a deciding factor or *the* deciding factor at the final stage.

At either phase, the "but for" assertion could be claimed, but substantiating the assertion is problematic. Those awarding incentives generally rely on the direct and indirect beneficiaries (incentive recipients and the Economic Development Organizations marketing the incentives, respectively) to verify the claim, thereby validating the effectiveness of incentive programs in stimulating business expansion.

The "but for" assertion is less likely to be satisfied for those projects where the incentive is relatively insignificant in proportion to relocation, capital investment, production or operating costs, or where a project is otherwise dependent on in-state markets or resources. While relatively high awards may increase the likelihood of landing the project, it could adversely affect the state's ROI.

Lack of Consensus Regarding Influence of Economic Development Incentives...
Research on location decisions over the decades tends to track the evolution in public policy regarding incentives. Research up to the 1980s addressed tax policy – primarily the absence of taxation, reductions in tax rates, and the availability of tax exemptions. By the 1980s, states and local governments were offering more creative incentives: targeted packages combining tax abatements, exemptions, credits, and refunds, as well as cash grants and workforce training to businesses. Additionally, these incentives became more lucrative, which elevated their value to businesses and their profile with the public. The academic literature reflects this evolution and increased scrutiny, and increasingly the research uses the more inclusive term incentives to capture both tax policy and the appropriated, targeted offerings.

Comprehensive reviews of the literature identify the lack of final consensus on the degree of influence that incentives have on location decisions made by businesses.

Lockie finds that despite the attention to the influence of incentives by scholars and economic development professionals:

> "… the answer to the question of incentives remains elusive. The variation in types of studies devised to answer this question is a testament to the difficulties of measuring the true influence of economic development incentives on the location of firms. No clear consensus can be reached from these studies as to the true influence incentives have on firms' location decisions."[27]

Peters and Fisher echo this conclusion, finding that:

> "The upshot of all this is that on this most basic question of all – whether incentives induce significant new investment or jobs – we simply do not know the answer. Since these programs probably cost state and local governments about $40-$50 billion a year, one would expect some clear and undisputed evidence of their success. This is not the case. In fact, there are very good

[27] Chris Lockie, "Economic Development Incentive Wars: What Influence do State and Local Economic Development Incentives have on the Location Decisions of Firms?" *Major Themes in Economics* (Spring, 2002): 39.

> reasons – theoretical, empirical, and practical – to believe that economic development incentives have little or no impact on firm location and investment decisions."[28]

Daniel Gorin, Supervisory Policy Analyst, Division of Consumer and Community Affairs of the Federal Reserve, concludes that:

> "(a)lthough it is a fundamental question in incentives policy, researchers have had a very difficult time answering the but for question."[29]

These conclusions are consistent with findings by a National Conference of State Legislatures Task Force on Economic Incentives (1998), which note that:

> "…no one knows much about the effectiveness of economic incentive programs and as a result, legislators must rely on anecdotal evidence which cannot establish whether the economic activity would have occurred anyway."[30]

At this point, the research on the "but for" issue is inconclusive. The strongest supported assumption is that it is highly unlikely that all projects receiving incentives satisfy the "but for" condition. It is more likely that some projects do satisfy the condition and some do not—and perhaps only the incentive recipients know the category in which their respective project fits.

If incentives are the primary, or at least the determining factor, in all expansion or relocation projects, then this assumption validates a positive ROI calculation. However, if incentives are irrelevant in such decisions, then the ROI becomes negative or meaningless since the new economic activity would have happened absent the incentive. The cost of the incentive is a total loss.

To illustrate, Virginia's Joint Legislative Audit and Review Commission (JLARC) concludes the following in its review of Virginia's economic development incentive grants:

> "Understanding the extent to which incentive grants shape business decisions to locate or expand in Virginia is critical to evaluating whether they are effective at achieving their policy goals. If incentive grants do not sway a business' decision to locate or expand in Virginia, then the jobs created and economic gains stemming from that business' increased presence in Virginia cannot be attributed to the incentive grant, and instead the grant payments are only a cost to the State."[31]

This cost has two negative outcomes: an unnecessary shift of private business costs to the general class of taxpayers and a reduction in available funding for other public services, some which promote or are necessary for economic growth. To the extent these negative outcomes exist, the ROI is overstated.

For further discussion on other states' findings and a more complete literature review, see **APPENDIX 1**.

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[28] Alan Peters and Peter Fisher, "The Failures of Economic Development Incentives" *Journal of the American Planning Association*, Vol. 70, No. 1 (Winter 2004): 32.
[29] Dan Gorin, "Economic Development Incentives: Research Approaches and Current Views" *Federal Reserve Bulletin*, Vol 94 (2008): 9.
[30] Ronald K. Snell, "A Review of State Economic Development Policy," National Conference of State Legislatures (1998): 53- 4.
[31] Virginia Joint Legislative Audit and Review Commission, "Review of State Economic Development Incentive Grants" Senate Document No. 8 (November 2012): 25.

DESCRIPTION OF THE DATA

Data Source and Development of the Universe...

The law requires EDR and OPPAGA to analyze and evaluate the seven designated incentive programs' performance over the previous three years.[32] The report for the first three-year period is scheduled for release January 1, 2014, and includes Fiscal Years 2009-10, 2010-11, and 2011-12. These years were selected after discussions with the Department of Economic Opportunity (DEO) and Enterprise Florida, Inc. (EFI) indicating that the end of Fiscal Year 2011-12 is the last point in time for which complete payment information is available. In this regard, the affected agencies were instructed to provide EDR with information for each project which received state dollars (via grant, exemption, credit, or refund) during the three-year review period. Collectively, these projects comprise the universe. Awards or tax breaks during the period are reduced by any subsequent incentive repayments or amended tax returns for purposes of the analysis.

When available, submitted information includes the amount and timing of incentive(s) distributed to the business; the amount and timing of direct capital expenditures for the project; and the number of direct jobs and associated average wages. Only data related to the three-year review period is considered in the evaluation, with one exception; this is made to account for any remaining economic benefit that resulted from capital investments occurring prior to the review period. In this case, the remaining benefit is quantified and included in the ROI calculation.

DEO is the primary source of program project information, except for projects receiving Capital Investment Tax Credits or Enterprise Zone tax incentives. For those two programs, the primary source of information is internal files from the Department of Revenue (DOR). Supplemental information for the projects in the universe is also included from the General Appropriations Act, the Department of Transportation's Economic Development Transportation Fund (EDTF) files,[33] Workforce Florida, Inc.'s Quick Response Training Grant files,[34] and DOR's SUNTAX taxpayer records.[35]

DEO also provided information on escrow payments for projects participating in the Quick Action Closing Fund (QACF) program. Escrow payments are payments made to Enterprise Florida, Inc., on behalf of certain recipient projects. The payments are held in escrow until the project achieves a specified goal, pursuant to contract. In most instances the payment to escrow and the payment to the recipient occur in the same fiscal year. When they do not occur in the same year, the analysis includes the payment from the state to the escrow account in the fiscal year the payment is made and includes the benefit arising from the project in the fiscal year the payment is made from the escrow account to the recipient.

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[32] Section 288.0001, F.S., as created by s. 1, ch. 2013-39, Laws of Florida and s. 1, ch. 2013-42, Laws of Florida.

[33] The Economic Development Transportation Fund (commonly referred to as the "Road Fund," s. 239.2821, F.S.) is an incentive tool designed to alleviate transportation problems that adversely impact a specific company's location or expansion decision. The award amount is based on the number of new and retained jobs and the eligible transportation project costs, up to $3 million. The award is made by the Department of Transportation to the local government on behalf of a specific business for public transportation improvements. The department did not identify any matches to the 192 projects included in the review.

[34] Administered by Workforce Florida, Inc. (WFI), the Quick Response Training Program (QRT, s. 288.047, F.S.) is a training program designed to assist new and expanding businesses. WFI identified seven awards to the 192 projects included in the review.

[35] After review, the data provided by DOR contained few tax refunds or credits that can be thought of as economic incentives, but which are different from those under review. While the businesses in the universe were also likely eligible for various sales tax exemptions that are available to any similarly situated entity, there is no data specific to tax payers for these exemptions.

Characteristics of the Universe...

The Enterprise Zone (EZ) program is unlike the other programs under review. Among the key differences: beneficiaries of EZ incentives are not regarded as projects in the traditional sense; the array of incentive types is broad; and the recipients are amorphous, including businesses and individuals, both identified and unidentified. For these reasons, EDR made the decision to exclude Enterprise Zone beneficiaries from the operable portion of the project universe and treat them separately. The discussion below conforms to that practice.

Among the non-EZ programs, a single project may be awarded more than one incentive if it meets eligibility criteria for more than one state program. For the purposes of this analysis, the practice of awarding more than one incentive to a single project is referred to as bundling. The net effect of bundling is to set the total public subsidy at a higher level than would otherwise be achieved through one program.

For the purpose of calculating a true ROI for each program, this distinction between the bundled and unbundled projects is important. From the combined DEO and DOR data, EDR categorized the projects as recipients of funds from a single program (single-incentive projects) or from multiple programs (bundled projects).

DEO provided data for 216 unique projects, 45 of which were bundled (20.8 percent). From this data, EDR identified 192 projects that had received payment from at least one incentive program in the analysis window. Of the 192 unique projects receiving payments, 39 were bundled (20.3 percent). The remaining 153 projects received payments from only one program. All totaled, these projects received $298 million over the review period.

Universe of Projects Receiving Payment by Program

Unduplicated Project Counts for Included Projects					
Single Incentive Projects		Bundled Projects		All Projects	
# of Projects	Total Expended	# of Projects	Total Expended	# of Projects	Total Expended
153	$ 252,089,845	39	$ 46,067,891	192	$ 298,157,736

When looking at the individual incentive programs, the bundled counts are higher. This is due to the fact that a project may have received a payment from one incentive program in the analysis window, but not its bundled counterpart. To illustrate this point, only eight of the bundled projects received a payment from more than one incentive program during the review period.

Universe of Projects Receiving Payment by Program

		Single Incentive Projects		Bundled Projects		All Projects	
	Program	# of Projects	Total Expended	# of Projects	Total Expended	# of Projects	Total Expended
Projects Included	BFR	9	$ 1,461,245	0	$ -	9	$ 1,461,245
	CITC	2	$ 22,746,623	3	$ 8,801,310	5	$ 31,547,933
	CLOSE	7	$ 11,649,760	21	$ 20,515,836	28	$ 32,165,596
	HIPI	0	$ -	2	$ 1,000,000	2	$ 1,000,000
	IIP	7	$ 192,993,853	1	$ 11,000,000	8	$ 203,993,853
	QTI	128	$ 23,238,364	20	$ 4,750,745	148	$ 27,989,109
Grand Total		**153**	**$ 252,089,845**	**47**	**$ 46,067,891**	**200**	**$ 298,157,736**

The state incentive payments for a bundled project are identified by program and limited to the review period. However, the benefits such as capital expenditures, jobs, and wages for a bundled project are attributable to all of the programs associated with the project regardless of when the state payments were made. In effect, each program is assumed to have contributed to the business's decision to locate or expand in Florida. The jobs and capital expenditures for a bundled project are apportioned across the programs based upon the percentages each program award represents of the total awards for the project. To be included in the universe, the project must have received state dollars from at least one of the programs during the review period. Other program funds not received during the period are only used to allocate the benefits.

Also used in the analysis was the classification of project types. Enterprise Florida, Inc., and DEO classify economic development projects into three categories – New, Expansion, and Retention & Expansion. New projects consist of businesses that are being recruited to locate in the state. Expansion projects are existing Florida firms that are expanding their footprint within the state. Retention & Expansion projects are businesses that are in jeopardy of leaving the state and jobs will be lost if the business does not remain. Of the 192 projects in the universe, 42 percent (81 of 192) are classified as New; 38 percent (73 of 192) are Expansions; and 20 percent (38 of 192) are Retention & Expansion projects.

METHODOLOGY

Broad Approach...

EDR used the Statewide Model to estimate the return-on-investment for the programs under review. The Statewide Model is a dynamic computable general equilibrium (CGE) model that simulates Florida's economy and government finances.[36] Among other things, it captures the indirect and induced economic activity resulting from the direct project effects. This is accomplished by using large amounts of data specific to the Florida economy and fiscal structure. Mathematical equations[37] 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.[38] 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 economic programs, the model is shocked[39] using static analysis to develop the initial or direct effects attributable to the projects funded by the incentives. In this analysis, direct effects are essentially the changes experienced by the businesses receiving the incentives and the transfer of state dollars. For all programs other than the Enterprise Zone Program, the combined annual direct effects (shocks) took the form of:

- Removal of the incentive payments from the state budget, with a corresponding award to businesses as subsidies to production.
- Capital investments or residual capital benefits related to the project.[40]
- Increased outputs based on jobs and payroll.[41]

The model was then used to estimate the additional—indirect and induced—economic effects generated by the projects, as well as the supply-side responses to the new activity, where the supply-side responses are changes in investment and labor supply arising from the new activity. Indirect effects are the changes in employment, income, and output by local supplier industries that provide goods and

[36] The statewide economic model was developed using GEMPACK software with the assistance of the Centre of Policy Studies (CoPS) at Monash University (Melbourne, Australia).

[37] These equations represent the behavioral responses to economic stimuli – to changes in economic variables.

[38] The business reactions simulate the supply-side responses to the new activity (e.g., changes in investment and labor supply).

[39] 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. In the current analyses, a shock is imposed to simulate the introduction of incentives into the economy.

[40] For capital investments made prior to the review period for projects in the universe, the capital expenditures made by each project before 2009 were entered into the Statewide Model by year. The amount of economic activity that was generated by these capital expenditures which continued into years 2009 through 2012 was then captured, and deemed to be residual capital benefits.

[41] Jobs are multiplied by the average wage for the project and by an "employer benefits contribution" multiplier to determine the total wage bill for each year. RIMS II multipliers are then used to estimate the annual output from the total wage bill. Most projects are only required to report jobs and wages when applying for an incentive payment. Therefore, some projects have years with zero jobs reported. To account for this inconsistency in reporting, EDR assumed that the projects maintain jobs and wages during the zero years at the same level as the latest year reported.

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
- Household consumption
- Investment
- Population

EDR's calculation of the return-on-investment used the model's estimate of net state revenues and expenditures. Other required measures for this report include the number of jobs created, the increase or decrease in personal income, and the impact on gross state product, all of which are included in the model results.

Measurement Scenarios...
The Statewide Model was used to measure the return-on-investment for three basic scenarios, not all of which were applicable to each program:

- In the first scenario, bundled-program projects were identified and the economic activity attributable to these projects was input into the model, with the economic benefits allocated to each program.

- In the second scenario, single-incentive projects were identified and the economic activity attributable to these projects was input into the model.

- In the third scenario, a supplemental measure of ROI – single-incentive projects (culled) – was used that did not include projects that were clearly determined to be Florida market or resource dependent. While the removed projects may be qualified to receive an incentive, this scenario assumes that no state revenue results from such projects although state costs remain. Note that this scenario was also used for the ROIs developed for the Enterprise Zone program.

In addition, two broad scenarios were developed for comparative purposes:

- Similar to the first scenario described above, the first hybrid scenario combined all bundled projects, but treated them as one program rather than distinguishing between specific programs. A single ROI was calculated for this hybrid program.

- The second hybrid scenario is similar to the first, except that it included all single-program projects in addition to the bundled projects.

Special Treatment of Enterprise Zones...
Unlike the other incentive programs, the Enterprise Zone program did not have the necessary inputs to run the Statewide Model as described above. Instead, two different scenarios were used in the

Statewide Model to develop the Enterprise Zone ROI. The first scenario attributed no direct economic effects to any Enterprise Zone incentives because it is assumed that the incentives do not induce businesses to locate in Florida. Only the production subsidy given to the businesses and the state costs remained in the model.

In the second scenario, the Statewide Model was shocked with additional local government spending attributed to property appreciation within the Enterprise Zones. This possibility was developed by using the results contained in the 2013 EDR study entitled "Florida's Enterprise Zones: Impact on Property Taxes" attached as **APPENDIX 4.** A corresponding rise in property taxes for businesses and homeowners, the production subsidy, and the change in state costs were input into the Statewide Model. The Statewide Model calculated the indirect and induced impacts from these inputs.

Other Tax Credits…
In the analysis, other tax credits (unrelated to the program incentives) claimed by new businesses were added to the project's total state incentive amount. EDR treated the tax credits as economic incentives that were a contributing factor to a business's final decision to relocate to Florida. These tax credits received a proportionate share of the output associated with the project. This lowered the amount of output attributed to the programs being reviewed in the study.

This treatment was applied only to projects classified as New by DEO where there were direct matches to businesses in the universe. It was assumed that existing businesses were already aware of other available tax credits, and they were not a contributing factor to their decisions.

Treatment of Statutorily Required Local Matches …
Required local matching funds for state incentive programs were excluded from the state payments used in the Statewide Model. In the analysis, jobs were allocated as a share of total payments which were then used to derive output. Since local matching funds were included in total payments but excluded from state payments, jobs that would have been attributable to these dollars and thus the corresponding output have been excluded from the model.

Comparison to DEO's Project Model…
For the purpose of this analysis, the Statewide Model used actual and historical data based on real outcomes. The DEO project model analyzes the prospective benefit of individual projects seeking state incentives. Although it has been roughly calibrated to produce results similar to the Statewide Model, the DEO project model assumes that all projects will be fully successful and receive the maximum value of the incentive.

Data has shown that projects generally do not materialize as anticipated. As such, businesses that fail to perform and do not create jobs are never captured in the EDR's analysis since these businesses did not receive payment in the analysis window. Similarly, the Statewide Model recognizes that businesses that perform below the contractual requirements receive reduced payments. Further affecting the ROI calculation, the analysis accounts for additional jobs created and capital investment by businesses above contracted levels. These effects makes EDR's program ROIs slightly higher than those found by DEO's project model for individual projects.

Required local matching funds for state incentive programs are excluded from DEO's project model, but all jobs created are attributed to the state dollars invested in the project. This serves to overstate the ROI for the project produced by DEO.

Conversely, any capital investment made by the single QTI projects is not captured by the Statewide Model since it is not a requirement of the program and not collected by DEO; however, the DEO project model includes these expenditures. Therefore, the Statewide Model understates the ROI of the program in those instances where businesses have capital expenditures.

All of the above features make the results from the two models not directly comparable. For an overview of DEO's model, see **APPENDIX 2**.[42]

[42] For an overview of other analytical approaches and tools (RIMS II, REMI and IMPLAN) available to assess the costs and benefits of development projects, see: Jonathan Q. Morgan, "Analyzing the Benefits and Costs of Economic Development Projects," *Community and Economic Development Bulletin*, *UNC School of Government* No. 7 (April 2010); and Kenneth Poole, George A Erikcek, Donald Iannone, Nancy McCrea, and Pofen Salem, *Evaluating Business Development Incentives*. A report prepared for the U.S. Department of Commerce, Economic Development Administration, EDA Project #99-07-13794, by the National Association of State Development Agencies, W.E. Upjohn Institute for Employment Research, and The Urban Center, Cleveland State University. (August, 1999): 10-13.

KEY ASSUMPTIONS

The following key assumptions are used in the Statewide Model to determine the outcomes of the programs under review. 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.

1. The analysis assumes that state incentives were the determining factor in business retention, expansion, or location decisions, provided the program was created and designed to attract new business activity to the state. The analysis further assumes that for bundled projects, the total value of the incentive package was the deciding factor for the business, not the individual components of the package. This assumption was relaxed in certain scenarios.

2. The analysis assumes that the influence of any federal incentives awarded to state-funded projects is immaterial to the size and location of the project. This is also true for local incentives; however, this assumption was relaxed for required local matches.

3. The analysis assumes all data provided by DEO, DOR, and other state entities related to projects and tax incentives was complete and accurate. The data was not independently audited or verified by EDR; however, data discrepancies between agencies were addressed.

4. The analysis assumes businesses received the full value of the state incentives and that related costs due to federal taxes or consultant fees are immaterial to the decision making process.

5. The analysis assumes that given the time span under review, applying discount rates would not prove material to the outcome.

6. The analysis assumes that any expenditure made for incentives is a redirection from the general market basket of goods and services purchased by the state. Similarly, any revenue gains from increased business activities are fully spent by the state.

7. The analysis assumes the relevant geographic region is the whole state, not individual counties or regions. The Statewide Model does not recognize that any economic benefit arises from intrastate relocation. However, 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.

8. The analysis assumes that businesses treated the incentives as subsidies. The subsidies lowered the cost of production for each individual firm.

9. The analysis assumes distribution of capital purchases by each business was the same as the industry in which it operates. This assumption was made because data was not available regarding the specific capital purchases associated with each project. It is also assumed that the businesses within a program were not large enough to affect the rate of return on capital within the industries in which the businesses operated.

10. The analysis assumes that the output from projects did not displace the market for goods and services of existing Florida businesses. To do this, output associated with the businesses was assumed to be exported to the rest of the world. The rest of the world is defined as other states or the international market.

11. The analysis assumes that businesses are indifferent between tax credits and cash awards and will not change their behavior based on the type of incentive award given.

PROGRAM FINDINGS

In the pages that follow, each incentive program is preceded by diagnostic tables describing the composition and statistics of the projects under review by scenario. Key terms used in the tables are described below:

Anticipated State Payments in Window – Represents the amount of state liability Florida was expected to incur for the projects in the scenario by fiscal year, based on the anticipated activity.

Actual State Payments Used in Analysis – Represents the amount of state payments made to projects in the scenario from an incentive program by fiscal year.

Confirmed Capital Investment – Represents the amount of capital investments confirmed by DEO for projects in the scenario in a given fiscal year.

Anticipated New Jobs by Year – Represents the number of incremental new jobs the state was projected to receive by fiscal year as a result of the incentive payments for projects in the scenario.

Actual Jobs Used in Analysis by Year – Represents the number of incremental new jobs that were allocated to projects as a result of incentive payments received from the state by fiscal year for projects in the scenario.

Average Annual Wage of Projects – Represents the average annual wage of all projects used in the scenario by fiscal year.

Statewide Average Annual Wage – This is the statewide private sector average annual wage by calendar year as reported by the Department of Economic Opportunity's Labor Market Information data.

Percentage of Statewide Average Annual Wage – Represents the average annual wage of projects in the scenario as a percentage of the statewide average annual wage for a given fiscal year.

Actual State Payments Used in the Analysis of QACF Excluding Escrow – The amount of state payments for the QACF incentive program paid to businesses by fiscal year. These payments exclude funds that were made on behalf of projects to the escrow account managed by Enterprise Florida, Inc.

State Payments for QACF Paid to Escrow – The amount of state payments made to the escrow account managed by Enterprise Florida, Inc.

QACF Returned to the State in the Window – The amount of repayments made by QACF projects to the state.

Personal Income (Nominal $(M)) – 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 (CCAdj), rental income of persons with CCAdj, personal income receipts on assets, and personal current transfer receipts, less contributions for government social insurance.

Real Disposable Personal Income (Fixed 2009 $(M)) – Total after-tax income received by persons; it is the income available to persons for spending or saving.

Real Gross Domestic Product (Fixed 2009 $(M)) – 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.

Consumption by Households and Government (Fixed 2009 $(M)) –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.

Real Output (Fixed 2009 $(M)) – Consists of sales, or receipts, and other operating income, plus commodity taxes and changes in inventories.

Total Employment (Jobs) – 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.

Population (Persons) – Reflects first of year estimates of people, includes survivors from the previous year, births, special populations, and three types of migrants (economic, international, and retired).

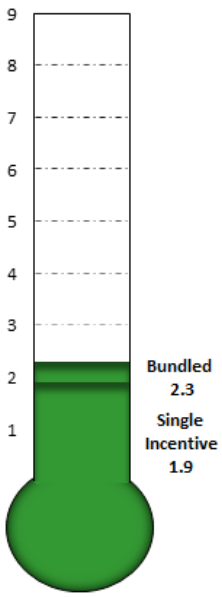
CAPITAL INVESTMENT TAX CREDIT

Project Summary Statistics

Total Number of CITC Projects	**5**	**100.0%**
Industry Compostion		
Manufacturing 31-33	1	20.0%
Information 51	1	20.0%
Finance and Insurance 52	2	40.0%
Management of Companies and Enterprises 55	1	20.0%

Bundled Project Summary Statistics

Number of Bundled CITC Projects	**3**	**60.0%**
Bundled Compostion		
QTI, CITC	2	66.7%
QTI, CITC, QACF	1	33.3%
Industry Composition		
Manufacturing 31-33	1	33.3%
Finance and Insurance 52	2	66.7%



Bundled CITC Projects

	2009-10	2010-11	2011-12	Total
Anticipated CIT Credits in Window*	$ 9,114,985	$ 9,114,985	$ 9,114,985	**$ 27,344,955**
Actual CIT Credits used in analysis	$ 4,074,560	$ 4,107,253	$ 619,497	**$ 8,801,310**
Confirmed Capital Investment	$ 18,114,603	$ 26,414,969	$ -	**$ 44,529,572**
Anticipated New Jobs by year	5	-	-	**5**
Actual Jobs used in analysis by year	187	187	202	**576**
Average Annual Wage of Projects	$ 74,848	$ 69,241	$ 70,171	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	176.9%	166.5%	171.2%	
Total Net State Revenues	6.1	7.9	5.9	**19.9**
Return-on-Investment by year	1.5	1.9	9.8	
Return-on-Investment for the 3 year period				**2.3**

** Assumes business was able to take the full credit for which it was eligible based on capital investment.*

Statewide Economic Model Impact of the Bundled Capital Investment Tax Credit Program

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	93.3	127.2	99.4	**319.9**		**106.6**
Real Disposable Personal Income	Fixed 2009 $ (M)	80.6	108.3	83.7	**272.6**		**90.9**
Real Gross Domestic Product	Fixed 2009 $ (M)	93.7	120.1	83.9	**297.7**		**99.2**
Consumption by Households and Government	Fixed 2009 $ (M)	81.8	109.1	82.7	**273.6**		**91.2**
Real Output	Fixed 2009 $ (M)	132.6	166.5	113.7	**412.8**		**137.6**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	400	416	174	***174***	416	**330**
Population	Persons	176	384	608	***176***	608	**389**

Single Incentive Project Summary Statistics

Number of Single CITC Projects	**2**	**40.0%**
Industry Composition		
Information 51	1	50.0%
Management of Companies and Enterprises 55	1	50.0%

Single Incentive Capital Investment Tax Credit Projects

	2009-10	2010-11	2011-12	Total
Anticipated CIT Credits in Window*	$ 58,906,381	$ 58,906,381	$ 58,906,381	**$ 176,719,143**
Actual CIT Credits Used in Analysis	$ -	$ 10,343,387	$ 12,403,236	**$ 22,746,623**
Confirmed Capital Investment	$ -	$ 150,127,620	$ -	**$ 150,127,620**
Anticipated New Jobs by Year	-	172	79	**251**
Actual Jobs Used in Analysis by Year	180	180	180	**540**
Average Annual Wage of Projects	$ 78,265	$ 78,400	$ 95,756	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	185.0%	188.6%	233.6%	
Total Net State Revenues $ (M)	9.1	18.8	16.4	**44.3**
Return on Investment by Year	-	1.8	1.3	
Return-on-Investment for the 3 Year Period				**1.9**

** Assumes business was able to take the full credit for which it was eligible based on capital investment.*

Statewide Economic Model Impact of the Capital Investment Tax Credit Program -- Single Incentive Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	150.8	253.2	201.2	**605.1**		**201.7**
Real Disposable Personal Income	Fixed 2009 $ (M)	131.4	216.3	169.8	**517.6**		**172.5**
Real Gross Domestic Product	Fixed 2009 $ (M)	150.7	241.9	168.9	**561.5**		**187.2**
Consumption by Households and Government	Fixed 2009 $ (M)	125.7	212.4	160.0	**498.1**		**166.0**
Real Output	Fixed 2009 $ (M)	212.2	323.4	222.6	**758.3**		**252.8**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	855	1,141	633	***633***	1,141	**876**
Population	Persons	821	1,074	1,522	***821***	1,522	**1,139**

Program Description…
Florida created the Capital Investment Tax Credit (CITC) in 1998 to encourage businesses in high-impact sectors to build or expand facilities within Florida. These sectors are designated by the DEO and currently are comprised of the following:

- Aviation/aerospace transportation equipment;
- Information technology;
- Life sciences;
- Financial services;
- Corporate headquarters; and
- Clean energy.

To participate in the program a business must meet several criteria:

- Be in a designated high-impact sector;
- Build or expand a facility within Florida;
- Incur construction or expansion costs of at least $25 million; and
- Create and maintain at least 100 new jobs within Florida.

A qualifying business receives authority to take annual credits for the 20-year period immediately following the date it commences operations at the new or expanded facility. The business can use the credits to reduce its corporate income or insurance premium tax liability.[43] However, the tax liability must arise out of the project. The CITC program is designed as a three-tier program with the level of eligible capital costs determining the tier that applies to a project and the maximum percentage of the project's tax liability that can be reduced by the credit in any year.

- Tier 1: $25 million (50 percent)
- Tier 2: $50 million (75 percent)
- Tier 3: $100 million (100 percent)

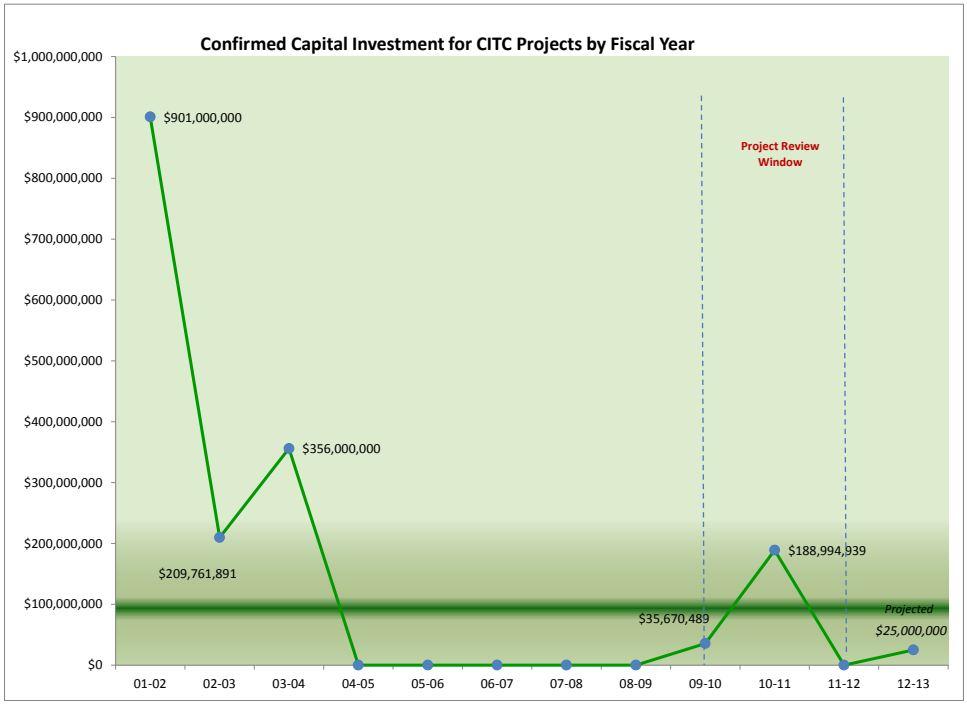
Analysis and Findings…
The benefits arising out of this program flow from two sources: the activity generated by the capital investment undertaken by the businesses, and the activity associated with the ongoing operations of the firm, but during and after the completion of the capital investment. The ability to measure these benefits is partially limited by the structure of the program. DEO is only required to certify the level of capital investment and new jobs created each year that the business requests a CITC credit. If the business has no liability against which to take a credit, there would be no certification of activity in the period and any benefits generated by that activity would be left out of the analysis. However, if credits were claimed in an earlier period, the analysis assumes that the earlier level of activity persists through future periods. These and other caveats to be made later should be taken into account when looking at the measured ROI figures for this program.

During the period of analysis, a total of five projects were evaluated for the CITC program. Of these five projects, one was a manufacturing business, one was in information services (NAICS 51), two were in finance and insurance (NAICS 52), and one was classified as management of companies and enterprises

[43] For a more complete history of the program see The Florida Senate, "*Review of the Capital Investment Tax Credit*," Issue Brief 2012-204, September 2011.

(NAICS 55). Additionally, three of the five projects were bundled with other incentive awards. All three also received QTI incentives, and one of the three received an additional QACF incentive. Separate analyses were performed on the bundled and single incentive projects.

There was a total of $224.7 million in confirmed capital investment over the three-year period of analysis. Businesses claimed a total of $31.5 million in CITC credits. These projects are credited with creating 1,116 project jobs within the review period. For those businesses claiming credits, there was additional capital investment that took place prior to the period of analysis (see chart below).[44]



Bundled Projects Scenario…

For the three bundled projects there was $44.5 million in confirmed capital investment and a total of $8.8 million in CITC credits taken during the three-year period of analysis. There were an estimated 576 project jobs created over the period by the three projects. The average annual wage for the jobs created was $72,686, which was about 175 percent of the statewide average. The economic activity associated with the capital investment and jobs generated a net increase in state revenues of $19.9 million. This results in an ROI for these projects of 2.3.

In addition to the net new revenues to the state, Florida's economy also benefited. These projects generated an average of $91 million a year in inflation-adjusted disposable personal income and $99 million a year in real gross state product. On average there were 330 more jobs economy-wide each year. It should be pointed out that the 576 jobs created by the projects corresponds to an average cumulative jobs number of 379 per year—greater than the net economy-wide job increase of 330. This is because some jobs are lost in state government due to the cost of the tax credits and redirected state spending.

[44] For those projects that were bundled with other incentives, it was assumed that the other incentives were responsible for inducing a portion of the capital investment. So while $224.7 million in spending took place, only $204.1 million is assumed to have been induced by the CITC program.

There are a number of factors that could affect the ROI for similar projects. These could move the ROI in either direction. First, since these projects were bundled with other incentive programs it is assumed that some of the capital investment is attributable to these other incentives. While $75.5 million in capital investment took place, approximately $30 million is attributed to the other incentive programs with which the CITC projects were bundled. If all of the capital investment was credited to the CITC program the ROI would have been higher; however, there is no guarantee that the same level of investment, or even the projects themselves, would have taken place without the additional incentives.

Another consideration that affects the ROI is the timing of the capital investment and whether it occurred prior to or during the review period. For the projects in this analysis there was an additional $80.1 million in capital investment that took place seven years prior to the review period. While the state benefited from this activity in those earlier years, there were only residual benefits that accrued to the state within the review period. The primary benefit arising out of these projects is generated by the ongoing operations of the businesses. However, even here some of the activity generated by the ongoing operations is credited to the other incentive programs with which the projects were bundled. If all activity was attributed to the CITC program, the ROI would have been higher; however, as in the case of the level of investment, there is no guarantee that the same level of activity would have taken place without the additional incentives.

A factor that acts to boost the measured ROI is the level of credits taken. The level is limited by the tax liability arising out of the projects. For the projects in this scenario there were potentially $27.3 million in credits that could have been taken. The state benefits from the $18.5 million in potential credits not taken. Had these additional available credits been fully taken, it would have reduced the ROI to 0.7.

Single Incentive Projects Scenario…

There were two projects in this scenario—one in the Information Services sector and one in the Management of Companies & Enterprises sector. Confirmed capital investments of $150.1 million and a total of $22.7 million in CITC credits were taken during the review period. There were an estimated 540 jobs created over the period—an average of 180 jobs per year. The average annual wage for the jobs created was $84,260, which was about 202 percent of the statewide average. The activity associated with the capital investment and jobs generated a net increase in state revenues of $44.3 million. This results in an ROI for these projects of 1.9.

In addition to the net new revenues to the state, Florida's economy also benefited. These projects generated an average of $172.5 billion a year in inflation-adjusted disposable income and $187.2 billion a year in real gross state product. And, on average there were 876 more jobs each year.

As with the first scenario, there are a number of factors that affected the measured ROI for these two projects. First, while there was $150.1 million of capital investment within the three-year window, there was an additional one billion dollars of investment that took place six years prior to the window. Had this taken place closer to the beginning of the window, or within the window, the ROI would have been significantly larger.

As above, a factor that acts to boost the measured ROI is the level of credits taken. The level is limited by the tax liability arising out of the projects. For the projects in this scenario there were potentially $176.7 million in credits that could have been taken. The state benefits from the $154 million in potential credits not taken. Had these additional available credits been fully taken, it would have reduced the ROI to 0.25.

Conclusion…

The structure of the CITC program makes it unique among those programs analyzed in this report. Most important are the limitations on the annual credit authorizations. First, the credits must be taken over a 20-year period. This limits the maximum potential credit in any year to five percent of the qualifying expenditures.

There are, however, two other potential limiting factors. As mentioned above, the credit can only be used to offset tax liability arising out of the new or expanded facility.[45] Second, only a percentage of the liability can be offset (as determined by the tier the business falls under).

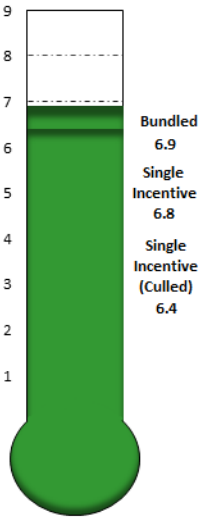
Since CITC's inception, 23 projects have applied and been approved as eligible CITC projects. Of the 23, 12 projects were expected to have been able to utilize the incentive within the review period based on potential job and capital investment milestones. In actuality, only five businesses have taken the credit during the period. Of the potential credits that could have been taken for these businesses in the period ($204,064,098) only $31,547,933 or 15 percent has been taken.

[45] What qualifies as liability arising from the new or expanding facility is subject to an agreement between the qualifying business and the Florida Department of Revenue.

QUALIFIED TARGET INDUSTRY TAX REFUND

Project Summary Statistics

Total Number of QTI Projects	**148**	**100.0%**
Industry Compostion		
Manufacturing 31-33	44	29.7%
Wholesale Trade 42	13	8.8%
Retail Trade 44-45	1	0.7%
Transportation and Warehousing 48-49	6	4.1%
Information 51	7	4.7%
Finance and Insurance 52	15	10.1%
Professional, Scientific, and Technical Services 54	19	12.8%
Management of Companies and Enterprises 55	29	19.6%
Administrative and Support Services 56	11	7.4%
Education Services 61	2	1.4%
Other Services (except Public Admin.)	1	0.7%



Bundled Project Summary Statistics

Number of Bundled QTI Projects	**20**	**13.5%**
Bundled Compostion		
QTI, CITC	3	15.0%
QTI, QACF	16	80.0%
QTI, CITC, QACF	1	5.0%
Industry Composition		
Manufacturing 31-33	4	20.0%
Wholesale Trade 42	1	5.0%
Information 51	1	5.0%
Finance and Insurance 52	5	25.0%
Professional, Scientific, and Technical Services 54	2	10.0%
Management of Companies and Enterprises 55	5	25.0%
Administrative and Support Services 56	2	10.0%

Bundled QTI Projects

	2009-10	2010-11	2011-12	Total
Anticipated State Payments in Window	$ 2,783,000	$ 2,927,200	$ 2,937,400	**$ 8,647,600**
Actual State Payments Used in Analysis	$ 2,073,595	$ 1,633,305	$ 1,043,845	**$ 4,750,745**
Anticipated New Jobs by Year	919	1,017	892	**2,828**
Actual Jobs Used in Analysis by Year	1,347	1,391	1,251	**3,989**
Average Annual Wage of Projects	$ 67,844	$ 60,511	$ 72,047	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	160.3%	145.6%	175.8%	
Total Net State Revenues $ (M)	9.2	13.6	10.2	**32.9**
Return-on-Investment by year	4.4	8.5	10.2	
Return-on-Investment for the 3 year period				**6.9**

Statewide Economic Model Impact of the Qualified Target Industry Tax Refund Program -- Bundled Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	312.4	467.1	387.2	**1,166.7**		**388.9**
Real Disposable Personal Income	Fixed 2009 $ (M)	266.7	393.6	323.1	**983.4**		**327.8**
Real Gross Domestic Product	Fixed 2009 $ (M)	315.5	443.7	324.5	**1,083.7**		**361.2**
Consumption by Households and Government	Fixed 2009 $ (M)	279.3	408.2	322.1	**1,009.6**		**336.5**
Real Output	Fixed 2009 $ (M)	433.3	593.4	423.7	**1,450.4**		**483.5**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	1,197	1,390	507	***507***	1,390	**1,031**
Population	Persons	288	1,072	2,032	***288***		**1,131**

Single Incentive Project Summary Statistics

Number of Single QTI Projects	**128**	**86.5%**
Industry Composition		
Manufacturing 31-33	40	31.3%
Wholesale Trade 42	12	9.4%
Retail Trade 44-45	1	0.8%
Transportation and Warehousing 48-49	6	4.7%
Information 51	6	4.7%
Finance and Insurance 52	10	7.8%
Professional, Scientific, and Technical Services 54	17	13.3%
Management of Companies and Enterprises 55	24	18.8%
Administrative and Support Services 56	9	7.0%
Education Services 61	2	1.6%
Other Services (except Public Admin.)	1	0.8%

Single Incentive QTI Projects

	2009-10	**2010-11**	**2011-12**	**Total**
Anticipated State Payments in Window	$ 10,285,600	$ 7,938,567	$ 5,672,133	**$ 23,896,300**
Actual State Payments Used in Analysis	$ 12,115,522	$ 6,998,743	$ 4,124,099	**$ 23,238,364**
Anticipated New Jobs by Year	3,173	2,681	2,169	**8,023**
Actual Jobs Used in Analysis by Year	9,638	9,845	9,549	**29,032**
Average Annual Wage of Projects	$ 63,511	$ 63,416	$ 63,412	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	150.1%	152.5%	154.7%	
Total Net State Revenues $ (M)	45.9	62.7	49.2	**157.8**
Return-on-Investment by year	3.8	9.0	12.0	
Return-on-Investment for the 3 year period				**6.8**

Statewide Economic Model Impact of the Qualified Target Industry Tax Refund Program -- Single Incentive Projects

		2009-10	**2010-11**	**2011-12**	**Total**		**Average per Year**
Personal Income	Nominal $ (M)	1,689.4	2,405.1	2,007.9	**6,102.4**		**2,034.1**
Real Disposable Personal Income	Fixed 2009 $ (M)	1,454.6	2,040.8	1,681.4	**5,176.7**		**1,725.6**
Real Gross Domestic Product	Fixed 2009 $ (M)	1,669.0	2,234.8	1,675.6	**5,579.3**		**1,859.8**
Consumption by Households and Government	Fixed 2009 $ (M)	1,447.2	2,017.3	1,631.9	**5,096.5**		**1,698.8**
Real Output	Fixed 2009 $ (M)	2,414.2	3,164.5	2,311.8	**7,890.6**		**2,630.2**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	4,816	4,584	761	***761***	4,816	**3,387**
Population	Persons	1,296	4,976	9,349	***1,296***		**5,207**

Single Incentive Project (Culled) Summary Statistics

Number of QTI Projects inlcuded in Culled Analysis	**122**	
Industry Composition		
Manufacturing 31-33	39	30.5%
Wholesale Trade 42	9	7.0%
Retail Trade 44-45	1	0.8%
Transportation and Warehousing 48-49	6	4.7%
Information 51	6	4.7%
Finance and Insurance 52	9	7.0%
Professional, Scientific, and Technical Services 54	17	13.3%
Management of Companies and Enterprises 55	23	18.0%
Administrative and Support Services 56	9	7.0%
Education Services 61	2	1.6%
Other Services (except Public Admin.)	1	0.8%
Number of QTI Projects removed from analysis	*6*	
Industry Compostion		
Manufacturing 31-33	*1*	*16.7%*
Wholesale Trade 42	*3*	*50.0%*
Finance and Insurance 52	*1*	*16.7%*
Management of Companies and Enterprises 55	*1*	*16.7%*

Single Incentive QTI Projects (Culled)

	2009-10	2010-11	2011-12	Total
Anticipated State Payments in Window	$ 10,285,600	$ 7,938,567	$ 5,672,133	**$ 23,896,300**
Actual State Payments Used in Analysis	$ 12,115,522	$ 6,998,743	$ 4,124,099	**$ 23,238,364**
Anticipated New Jobs by Year	3,073	2,681	2,169	**7,923**
Actual Jobs Used in Analysis by Year	9,354	9,561	9,265	**28,181**
Average Annual Wage of Projects	$ 64,182	$ 64,022	$ 64,017	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	151.7%	154.0%	156.2%	
Total Net State Revenues $ (M)	42.9	58.6	46.2	**147.7**
Return-on-Investment by year	3.5	8.4	11.3	
Return-on-Investment for the 3 year period				**6.4**

Statewide Economic Model Impact of the Qualified Target Industry Tax Refund Program -- Single Incentive Projects (Culled)

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	1,659.6	2,367.8	1,979.7	**6,007.0**		**2,002.3**
Real Disposable Personal Income	Fixed 2009 $ (M)	1,424.8	2,001.8	1,650.6	**5,077.2**		**1,692.4**
Real Gross Domestic Product	Fixed 2009 $ (M)	1,633.2	2,198.4	1,663.3	**5,494.9**		**1,831.6**
Consumption by Households and Government	Fixed 2009 $ (M)	1,420.3	1,992.0	1,623.5	**5,035.8**		**1,678.6**
Real Output	Fixed 2009 $ (M)	2,353.9	3,087.3	2,258.6	**7,699.8**		**2,566.6**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	4,595	4,331	660	***660***	4,595	**3,195**
Population	Persons	1,248	4,770	8,916	***1,248***		**4,978**

Program Description…

The Qualified Target Industry Tax Refund Program (QTI), established in 1995, is intended to encourage the creation of high-wage jobs (115 percent or more of the area or statewide annual wage) in targeted industries, with awards ranging from $3,000 - $13,500 per job.[46] Unless waived by DEO, 20 percent of the award must be provided by the city or county government in which the project is located.

QTI is a grant program, subject to annual appropriation, with the grant award determined by the interaction between the number of qualifying employees and certain taxes paid to both state and local government. Each QTI project has a performance-based contract, which outlines specific milestones that must be achieved and verified by the state prior to payment of funds.

QTI Per-Job Award Thresholds

		Eligible Award	State Liability
Base award with minimum wage criteria	$	3,000	2,400
Base award if located in a Rural Area, Enterprise Zone or, until 6/30/14, "Disproportionally Affected" County	+	3,000	2,400
If wage @ 150% of annual average area wage, **or**	+	1,000	800
If wage @ 200% of annual average area wage	+	2,000	1,600
If local financial support equals to state awards ($2,400 or $4,800)	+	1,000	800
If business operates in a "High-Impact" Sector, **or**			
If business increases exports thru airport or seaport by 10%	+	2,000	1,600
If located in a designated Brownfield Area	+	2,500	2,000
Maximum per-job award possible	$	**13,500**	**10,800**
Maximum award per-business, per year:	$		1,500,000
Maximum award per-business, per year, if in Rural Area, Enterprise Zone or, "Disproportionally Affected" County	$		2,500,000
Maximum award per-business, cummulative:			uncapped, as of 2013

Analysis and Findings…

During the review period, 148 projects received a payment from the Qualified Target Industry Tax Refund Program. The QTI program was evaluated under three scenarios – bundled projects, single incentive projects, and single incentive projects (culled)—with the return-on-investment calculated separately for each scenario.

Bundled Projects Scenario…

The bundled project scenario contained 20 projects with state payments totaling $4,750,745 for the period. There was an estimated 3,989 new project jobs created over the period with an average annual wage of $66,801 for the jobs created. The economic activity associated with the capital investment and jobs generated a net increase in state revenues of $32.9 million.

[46] Section 288.106, F.S. The per-job award increases from the $3,000 base when wages exceed 150 percent or 200 percent of the area or statewide annual wage, and when projects are located in a rural county, an Enterprise Zone, a Brownfield site, 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. In 2010, per-job increases of $2,000 were authorized when the local financial support is equal to the state's incentive award, for "high-impact sector" businesses, or when the business increases exports of its goods through a seaport or airport in the state by 10 percent. From 7/1/11 through 6/30/14, DEO may waive wage or local financial support eligibility requirements for Disproportionately Affected Counties.

The return-on-investment for the bundled projects is 6.9. The ROI for this scenario is slightly higher than the other scenarios for the QTI program. This is due to the fact that the projects in this scenario were combined with incentives that may have had a capital investment requirement. The allocated capital investment associated with these projects was added to total output generated by the project. Further, projects in this scenario had higher wages since most of the other incentive programs (80 percent with QACF) awarded to these projects had a greater wage requirement than the QTI program. This also contributed to higher output for these QTI projects.

Single Incentive Projects Scenarios…

In this scenario, there were 128 projects receiving state payments totaling $23,238,364 for the review period. There was an estimated 29,032 new project jobs created over the period with an average annual wage of $63,446 for the jobs created. The economic activity associated with the jobs generated a net increase in state revenues of $157.8 million. The return-on-investment for the QTI program under this scenario is 6.8. In addition to the net new revenues to the state, Florida's economy also benefited. These projects generated an average of $1.7 billion a year in inflation-adjusted disposable personal income or 0.26 percent of the state's total and nearly $1.9 billion a year in real gross domestic product or 0.25 percent of the state's total.

In the third scenario – single incentive projects (culled) – six projects were removed from the previous scenario as these projects were determined to be Florida market or resource dependent. The six removed projects operated in the following industries: manufacturing, wholesale trade, finance and insurance, and management of companies and headquarters. State payments for the QTI program remained the same as the single incentive projects scenario, but total jobs created dropped to 28,181. The average annual wage for the jobs created was $67,074. The economic activity associated with the jobs generated a net increase in state revenues of $147.7 million. The ROI under this scenario is 6.4.

Conclusion…

In all three scenarios, the return-on-investment for the QTI program is robust. Several factors contribute to the overall high ROI for the program, including industry composition, high wages, and program design. It is highly likely that the results will be similar in future years because of the high number of and wide array of projects.

According to s. 288.106, F.S., the QTI program is designed to attract business in specific high growth, recession resistant, and market independent industries such as manufacturing and professional services. These industries, called Target Industries, are designated by Enterprise Florida, Inc., and the Department of Economic Opportunity. These target industries have a greater effect on the economy due to their indirect and induced effects. This can be viewed by looking at the economic multipliers associated with these industries as shown in the highlighted areas on the chart on the following page.

State of Florida Aggregate Type II Multipliers (2002/2007)

Industry	Multiplier Direct Effect	
	Earnings (dollars)	Employment (jobs)
Crop and Animal Production	2.2417	1.6801
Forestry, fishing, and related activities	2.0920	1.6618
Mining, except oil and gas	2.0099	3.1418
Utilities	1.7595	2.8774
Construction	1.8981	1.9967
Fabricated Metal Product Manufacturing	2.0443	2.1938
Computer and Electronic Part Manufacturing	2.3997	3.5272
Miscellaneous Manufacturing	1.8788	2.6587
Chemical Manufacturing	2.7699	4.1944
Wholesale Trade	1.8347	2.3644
Retail Trade	1.7763	1.5674
Air Transportation	1.9280	2.5293
Warehousing and Storage	1.7632	1.7905
Internet and Other Information Services	1.9398	2.5371
Credit intermediation and related services	2.0484	2.5995
Real Estate	2.8866	1.8975
Professional, Scientific, and Technical Services	1.6933	2.1082
Management of Companies and Enterprises	1.8285	2.9350
Administrative and Support Services	1.7091	1.4624
Educational Services	1.7702	1.6030
Hospitals	1.7646	2.0150
Performing Arts, sports, museums, and parks	1.9371	1.7188
Accommodation	1.9141	1.7708
Other Services	2.0108	1.7248

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Input-Output Modeling System (RIMS II)

With the exception of the mining and utilities industries, Florida's current target industries have high employment multipliers when compared to other industries within the state. The higher the multiplier, the greater the impact will be to the state. The projects in the QTI analysis were largely in designated target industries such as manufacturing (29.7 percent), management of companies (19.6 percent), and professional, scientific, and technical services (12.8 percent).

The QTI program is also designed to attract high wage jobs. The statute requires that the average annual wage commitment of businesses participating in the program be at least 115 percent of the average annual wage in the state, county, or Metropolitan Statistical Area in which the business locates. This wage commitment is exclusive of any benefits such as health insurance or 401K contributions. The average annual wage for the State of Florida was approximately $42,000 during calendar years 2009 to 2011. A review of wages for the projects included in the analysis showed that the actual wage of the QTI projects were much greater than 115 percent of the average annual wage in the state. In fact, in most years, the projects under review had wages higher than 150 percent of the statewide average annual wage. Higher than average wages leads to higher output associated with the projects which, in turn, generates more revenue for the State of Florida.

Another important factor when considering the return-on-investment for the QTI program is the design of the program itself. Since QTI is a pay for performance program, the state is only paying for jobs that are contracted for and actually created by the business. Businesses that fail to perform and do not create jobs are never captured in the analysis as these businesses did not receive payments in the review period. Moreover, additional incentive dollars are not paid to businesses for jobs that a business

creates above and beyond its contractual obligations. In essence, in the review period, the state is receiving a windfall of job creation for which it is not obligated to pay. This is evident when looking at the projected new jobs by year in comparison to actual jobs created and used in the analysis. The QTI businesses have created more than three times as many jobs as expected which is a function of both projects that have hired faster than expected and projects that have hired more jobs in total. Future ROIs would be lower if businesses create only the contractually required number of jobs. Also note that project jobs in the review period are greater than total employment. This is because some jobs are lost in state government due to the cost of the grants and redirected state spending.

Finally, any capital investment made by the single QTI projects is not reported since it is not a requirement of the program. This would understate the ROI of the program in those instances where businesses have capital expenditures.

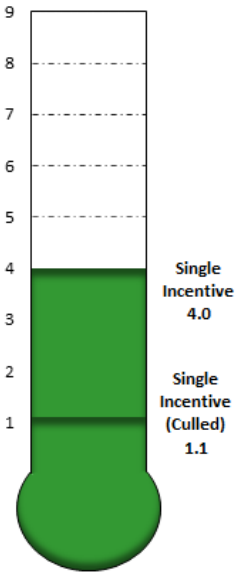
BROWNFIELD REDEVELOPMENT BONUS TAX REFUND

Project Summary Statistics

Total Number of Brownfield Projects	**9**	**100.0%**
Industry Compostion		
Wholesale Trade 42	2	22.2%
Retail Trade 44-45	5	55.6%
Transportation and Warehousing 48-49	1	11.1%
Management of Companies and Enterprises 55	1	11.1%

Single Incentive Project Summary Statistics

Number of Single Brownfield Projects	**9**	**100.0%**
Industry Compostion		
Wholesale Trade 42	2	22.2%
Retail Trade 44-45	5	55.6%
Transportation and Warehousing 48-49	1	11.1%
Management of Companies and Enterprises 55	1	11.1%



Single Incentive Brownfield Redevelopment Tax Refund Projects

	2009-10	2010-11	2011-12	Total
Anticipated State Payments in Window	$ 567,500	$ 644,500	$ 361,000	**$ 1,573,000**
Actual State Payments Used in Analysis	$ 583,660	$ 324,754	$ 552,832	**$ 1,461,245**
Confirmed Capital Investment	$ 11,341,000	$ 6,334,579	$ -	**$ 17,675,579**
Anticipated New Jobs by Year	254	-	-	**254**
Actual Jobs Used in Analysis by year	611	612	612	**1835**
Average Annual Wage of Projects	$ 25,430	$ 24,448	$ 25,448	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	60.1%	58.8%	62.1%	
Total Net State Revenues $ (M)	2.1	2.2	1.6	**5.9**
Return-on-Investment by year	3.5	7.3	2.7	
Return-on-Investment for the 3 year period				**4.0**

Statewide Economic Model Impact of the Brownfield Redevelopment Tax Refund Program -- Single Incentive Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	74.1	93.8	74.9	**242.8**		**80.9**
Real Disposable Personal Income	Fixed 2009 $ (M)	63.5	79.3	62.7	**205.5**		**68.5**
Real Gross Domestic Product	Fixed 2009 $ (M)	72.0	84.8	59.1	**215.9**		**72.0**
Consumption by Households and Government	Fixed 2009 $ (M)	64.9	78.9	59.7	**203.5**		**67.8**
Real Output	Fixed 2009 $ (M)	90.2	102.2	68.3	**260.7**		**86.9**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	457	504	263	***263***	504	**408**
Population	Persons	176	368	560	***176***		**368**

Single Incentive Project (Culled) Summary Statistics

Number of Brownfield Projects incl. in Culled analysis	**3**	**33.3%**
Industry Compostion		
Wholesale Trade 42	1	33.3%
Transportation and Warehousing 48-49	1	33.3%
Management of Companies and Enterprises 55	1	33.3%
Number of Brownfield Projects removed from analysis	*6*	
Industry Compostion		
Wholesale Trade 42	*1*	*16.7%*
Retail Trade 44-45	*5*	*83.3%*

Single Incentive Brownfield Projects (Culled)

	2009-10	2010-11	2011-12	Total
Anticipated State Payments in Window	$ 567,500	$ 644,500	$ 361,000	**$ 1,573,000**
Actual State Payments Used in Analysis	$ 583,660	$ 324,754	$ 552,832	**$ 1,461,246**
Confirmed Capital Investment	$ -	$ 2,531,784	$ -	**$ 2,531,784**
Anticipated New Jobs by Year	29	-	-	**29**
Actual Jobs Used in Analysis by Year	99	100	100	**299**
Average Annual Wage of Projects	$ 29,336	$ 29,758	$ 29,758	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	69.3%	71.6%	72.6%	
Total Net State Revenues $ (M)	0.6	0.7	0.4	**1.6**
Return-on-Investment by year	1.0	2.3	0.7	
Return-on-Investment for the 3 year period				**1.1**

Statewide Economic Model Impact of the Brownfield Redevelopment Tax Refund Program -- Single Incentive Projects (Culled)

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	17.9	21.4	15.4	**54.7**		**18.2**
Real Disposable Personal Income	Fixed 2009 $ (M)	15.4	18.1	12.8	**46.3**		**15.4**
Real Gross Domestic Product	Fixed 2009 $ (M)	17.0	19.3	12.0	**48.3**		**16.1**
Consumption by Households and Government	Fixed 2009 $ (M)	15.4	17.9	12.1	**45.5**		**15.2**
Real Output	Fixed 2009 $ (M)	22.0	24.3	14.4	**60.7**		**20.2**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	58	55	13	***13***	58	**42**
Population	Persons	37	58	78	***37***		**58**

Brownfield Redevelopment Bonus Tax Refund Program…

The Brownfield Redevelopment Bonus Tax Refund Program contains two distinct incentives designed to encourage economic expansion within Florida's Brownfield areas. These are geographic locations designated by local communities for the presence, or until 2013 the perceived presence, of environmental contamination or blight. This incentive is a grant program, subject to annual appropriation, with the grant award determined by the interaction between the number of qualifying employees and certain taxes paid to both state and local government.

Enacted in 1997, the first incentive[47] – QTI/Brownfield – provides a bonus grant of $2,500 per job created for approved QTI projects located in Brownfield areas. Because it is a bonus to the QTI award, projects receiving this bonus incentive are subject to the same qualification and performance criteria as QTI projects.[48]

Enacted in 2000, a separate stand-alone incentive[49] provides a grant of up to $2,500 per job created, to businesses:

> "…that can demonstrate a fixed capital investment of at least $2 million in mixed-use business activities, including multiunit housing, commercial, retail, and industrial in Brownfield areas, or at least $500,000 in Brownfield areas that do not require site cleanup, and that provides benefits to its employees."[50]

In this case the per-job award is limited to 20 percent of the average annual wage for the jobs created.

Analysis and Findings…

The Brownfield Redevelopment Bonus Tax Refund Program's legislative intent includes non-economic policy goals in addition to economic:

> "The reduction of public health and environmental hazards on existing commercial and industrial sites is vital to their use and reuse as sources of employment, housing, recreation, and open space areas. The reuse of industrial land is an important component of sound land use policy."[51]

The legislative intent also addresses environmental justice, community blight and environmental equity. The return-on-investment does not account for any non-economic features.

Single Incentive Projects Scenario…

The analysis shows a return-on-investment of 4.0 for the Brownfield Redevelopment Bonus Tax Refund Program (BFRD). The ROI was calculated based on $5.9 million of additional tax revenue generated from the Brownfield projects. In addition, Real GDP increased by $215.9 million and Personal Income by $242.2 million.

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[47] Section 288.107(2)(a), F.S.

[48] Because it is a QTI award, this Brownfield Bonus is included in the measure of QTI projects.

[49] Section 288.107(2)(b), F.S.

[50] In 2013, the Legislature limited eligibility to sites for which rehabilitation agreements have been executed, and abutting parcels, thereby prospectively eliminating the second option. See Section 18, ch. 2013-42, Laws of Florida.

[51] Section 376.78(1), F.S.

In the review period, nine projects received state incentives related to the BFRD program. The projects came from the following industry sectors: retail trade (five), wholesale trade (two), transportation (one) and management (one). There was an average of 611 project jobs attributed to these projects with an average annual wage of $25,109.

Capital investment was $11.3 million in FY 2009-10 and $6.3 million in FY 2010-11; however, the BRFD program experienced significant capital investment in the years prior to the review period. Only a portion of these investment effects were included in the program's ROI.

This scenario has a healthy ROI because of its low award amount per job and the timing of the state payments. The program provides a maximum grant of $2,500 per job created. This incentive per job amount is the lowest in all of the reviewed programs. The timing of the incentive is also important. The incentive amounts were only paid out after a job was created. This type of pay structure allows the state to start experiencing the benefit before it pays out the incentive.

The ROI for this scenario could have been higher if the industry makeup had been different. The vast majority of the Brownfield projects were in retail trade, and, on average, the retail sector is a low-wage and low-output industry. This is demonstrated by the program's low average wage of $25,109. In comparison, the average annual wage for the State of Florida was approximately $42,000 during calendar years 2009 to 2011. While many of the other incentive programs restrict what industries can receive the subsidy and even a few set minimum salary requirements, the BFRD program has no such restrictions. For example, if the industrial sectors were restricted to only manufacturing or finance, salaries and output per worker would be higher, and a higher ROI would be the result.

Single Incentive Projects (Culled) Scenario…

In this scenario, six out of the nine projects were removed from the analysis, and the ROI is 1.1. The culled projects came from the wholesale and retail sectors, all of which were determined to be market or resource dependent. The output and capital investments from these projects were removed from the model; however, the state's payments remained. This reduced jobs from 1,835 in the first scenario to 299 in this scenario. Capital investment dropped as well leaving only FY 2010-11 with $2.5 million in expenditures. All model metrics fell, including tax revenue to the state, which reduces the ROI. It should be noted that this ROI is based on only three Brownfield Redevelopment Bonus Tax Refund projects.

Conclusion…

The BFRD Program created an average of 612 jobs in the review period per year while the average total employment was an increase of 408. This is because some jobs are lost in state government due to the cost of the incentives and redirected state spending.

The BFRD Program requirements changed in 2013. Projects will only qualify if the project is on a parcel designated a Brownfield site or any abutting real property parcel within a Brownfield area and has a rehabilitation agreement with the Florida's Department of Environmental Protection or a designated local government.[52] Prior to 2013, projects qualified if the development occurred anywhere within a

[52]Brownfield site is defined as any property where the expansion, redevelopment or reuse of which may be complicated by actual or perceived environmental contamination. These sites are designated by Florida Department of Environmental Protection. A Brownfield area is defined as any property designated by resolution of a local government, and defined as contiguous areas of one or more Brownfield sites, some of which may not be contaminated. There are more properties designated as Brownfield areas than designated as Brownfield sites.

Brownfield area. Out of the nine projects in the study, only six projects would qualify now for the bonus refund. Based on this, the number of new projects that could qualify for the incentive will drop in the future. The ultimate effect on the return-on-investment is ambiguous.

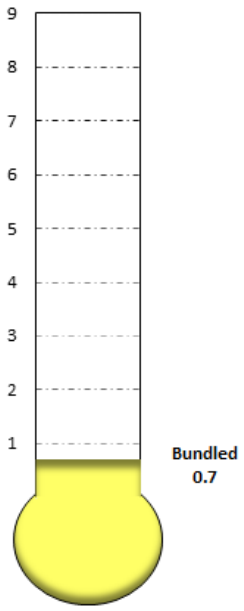
HIGH-IMPACT SECTOR PERFORMANCE GRANT

Project Summary Statistics

Total Number of HIPI Projects	**2**	
Industry Compostion		
Professional, Scientific, and Technical Services 54	2	100.0%

Bundled Project Summary Statistics

Number of Bundled HIPI Projects	**2**	**100.0%**
Bundled Compostion		
HIPI, QTI	2	100.0%
Industry Composition		
Professional, Scientific, and Technical Services 54	2	100.0%



Bundled HIPI Projects

	2009-10	2010-11	2011-12	Total
Anticipated State Payments in Window	$ -	$ -	$ 1,000,000	**$ 1,000,000**
Actual State Payments Used in Analysis	$ -	$ -	$ 1,000,000	**$ 1,000,000**
Confirmed Capital Investment	$ -	$ -	$ 12,107,369	**$ 12,107,369**
Anticipated New Jobs by Year	-	20	-	**20**
Actual Jobs Used in Analysis by Year	-	18	18	**36**
Projected Average Annual Wage of Projects*	$ 42,000	$ 42,000	$ 42,000	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	99.3%	101.0%	102.5%	
Total Net State Revenues $ (M)	-	0.2	0.4	**0.7**
Return-on-Investment by year	-	-	0.4	
Return-on-Investment for the 3 year period				**0.7**

** Actual average wages are not required to be collected for the HIPI program. Wages reflect those that were committed to by the business on the project application.*

Statewide Economic Model Impact of the High-Impact Sector Performance Grant Program -- Bundled Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	1.0	6.4	10.3	**17.8**		**5.9**
Real Disposable Personal Income	Fixed 2009 $ (M)	0.9	5.4	8.5	**14.7**		**4.9**
Real Gross Domestic Product	Fixed 2009 $ (M)	1.1	6.5	9.9	**17.4**		**5.8**
Consumption by Households and Government	Fixed 2009 $ (M)	0.9	5.5	8.6	**15.0**		**5.0**
Real Output	Fixed 2009 $ (M)	1.3	8.0	11.8	**21.2**		**7.1**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	4	29	38	***4***	38	**23**
Population	Persons	0	0	16	***0***		**5**

Program Description…

Enacted in 1997, the High-Impact Sector Performance Grant[53] (HIPI) is designed to encourage the growth of high-impact sector facilities. The program awards grants of at least $500,000 for businesses creating jobs and providing a cumulative capital investment of at least $25 million in facilities operating in high-impact sectors, as designated by DEO. This performance-based grant is paid in two equal installments, one upon commencement of operations and the other upon commencement of full operations (project is fully constructed and all jobs are in place).

Analysis and Findings…

During the review period, two projects received HIPI payments totaling $1,000,000 for commencement of operations. Both projects were in the Research and Development industry, and both received QTI awards, but have not yet received QTI payments.

The return-on-investment for the HIPI Program is 0.7. Therefore, the additional state revenues do not fully pay the cost of the incentive.

The low return-on-investment for the program is mainly attributable to the industry composition of the projects. Unlike other industries such as manufacturing, research and development does not generate significant taxable output. As indicated in the example below, a project operating in a manufacturing industry that creates 50 jobs at an average wage of $42,000 per year is estimated to have much higher output than the same project operating in research and development.

	Multipliers							
Industry	Final Demand Output	Final Demand Earnings	Final Demand Employment	Direct Effect Earnings	Direct Effect Employment	Number of Jobs	Average Wage of Jobs	Estimated Total Output
Electronic Computer Manufacturing	1.7026	0.3255	7.2760	2.7854	3.3000	50	$42,000	$17,970,323
Research and Development	2.1961	0.7908	17.8397	1.8745	2.7330	50	$42,000	$4,977,807

Capital investment is a requirement of the HIPI Program, and the capital expenditures of $12 million increase the return-on-investment of the program. Without the capital investment, the ROI of the program would be lower.

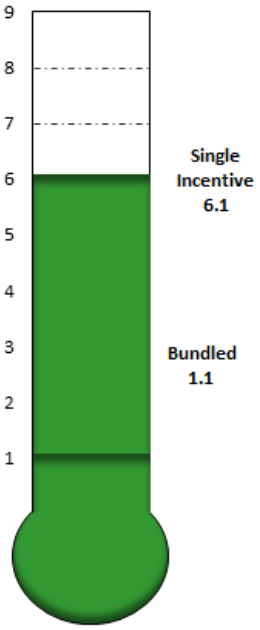
Though the ROI for the HIPI Program is low, it is important to realize that there were only two projects in the review period. However, at this point there would be no reason to believe that a future program ROI would be materially different given the size, scope, and type of projects seen thus far.

[53] Section 288.108, F.S.

QUICK ACTION CLOSING FUND

Project Summary Statistics

Total Number of QACF Projects	**28**	**100.0%**
Industry Compostion		
Manufacturing 31-33	11	39.3%
Wholesale Trade 42	1	3.6%
Information 51	2	7.1%
Professional, Scientific, and Technical Services 54	5	17.9%
Management of Companies and Enterprises 55	7	25.0%
Administrative and Support Services 56	2	7.1%



Bundled Project Summary Statistics

Number of Bundled QACF Projects	**21**	**75.0%**
** Funds for 7 additional prjoects were placed in escrow*		
Bundled Compostion		
QACF, IIP	1	4.8%
QACF, QTI	18	85.7%
QACF, CITC, QTI	2	9.5%
Industry Composition		
Manufacturing 31-33	8	38.1%
Information 51	2	9.5%
Professional, Scientific, and Technical Services 54	3	14.3%
Management of Companies and Enterprises 55	6	28.6%
Administrative and Support Services 56	2	9.5%

Bundled QACF Projects

	2009-10	2010-11	2011-12	Total
Anticipated State Payments for QACF in Window	$ 14,379,000	$ 4,730,000	$ 2,807,500	**$ 21,916,500**
Actual State Payments Used in Analysis of QACF Excluding Escrow	$ 12,978,336	$ 4,730,000	$ 2,807,500	**$ 20,515,836**
State Payments for QACF Paid to Escrow	$ (5,500,000)	$ 400,000	$ 6,886,000	**$ 1,786,000**
QACF Returned to the State in the Window	$		3,690,644	**$ 3,690,644**
Confirmed Capital Investment	$ 45,463	$ 18,379,932	$ 490,569	**$ 18,915,964**
Anticipated New or Retained Jobs by Year	619	900	1,181	**2,700**
Actual Jobs Used in Analysis by Year	373	1,104	1,518	**2,995**
Average Annual Wage of Projects	$ 68,685	$ 65,274	$ 74,650	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	162.3%	157.0%	182.1%	
Total Net State Revenues $ (M)	3.8	9.3	9.9	**23.0**
Return-on-Investment by year	0.3	2.0	3.5	
Return-on-Investment for the 3 year period				**1.1**

Statewide Economic Model Impact of the Quick Action Closing Fund Program -- Bundled Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	139.3	339.9	373.1	**852.3**		**284.1**
Real Disposable Personal Income	Fixed 2009 $ (M)	120.3	289.2	313.3	**722.8**		**240.9**
Real Gross Domestic Product	Fixed 2009 $ (M)	134.2	326.9	337.0	**798.2**		**266.1**
Consumption by Households and Government	Fixed 2009 $ (M)	111.1	273.1	295.1	**679.3**		**226.4**
Real Output	Fixed 2009 $ (M)	185.6	453.6	472.4	**1,111.7**		**370.6**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	559	1,240	949	***559***	1,240	**916**
Population	Persons	64	368	1,008	***64***		**480**

Single Incentive Project Summary Statistics

Number of Single QACF Projects	**7**	**25.0%**
** Funds for 4 additional prjoects were placed in escrow*		
Industry Composition		
Manufacturing 31-33	3	42.9%
Wholesale Trade 42	1	14.3%
Professional, Scientific, and Technical Services 54	2	28.6%
Management of Companies and Enterprises 55	1	14.3%

Single Incentive QACF Projects

	2009-10	2010-11	2011-12	Total
Anticipated State Payments for QACF in Window	$ 9,621,000	$ 4,360,830	$ 1,150,000	**$ 15,131,830**
Actual State Payments Used in Analysis of QACF Excluding Escrow	$ 9,513,930	$ 1,735,830	$ 400,000	**$ 11,649,760**
State Payments for QACF Paid to Escrow	$ -	$ -	$ 8,250,000	**$ 8,250,000**
QACF Returned to the State in the Window	$		3,482,070	**$ 3,482,070**
Confirmed Capital Investment	$ 11,691,022	$ -	$ -	**$ 11,691,022**
Anticipated New or Retained Jobs by Year	-	555	50	**605**
Actual Jobs Used in Analysis by Year	1,124	3,738	3,646	**8,508**
Average Annual Wage of Projects	$ 61,989	$ 62,509	$ 96,089	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	146.5%	150.4%	234.4%	
Total Net State Revenues $ (M)	11.8	28.7	30.1	**70.6**
Return-on-Investment by year	1.2	16.9	75.3	
Return-on-Investment for the 3 year period				**6.1**

Statewide Economic Model Impact of the Quick Action Closing Fund Program -- Single Incentive Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	369.8	939.4	1,035.8	**2,345.0**		**781.7**
Real Disposable Personal Income	Fixed 2009 $ (M)	318.6	796.0	865.5	**1,980.1**		**660.0**
Real Gross Domestic Product	Fixed 2009 $ (M)	382.6	940.3	961.4	**2,284.3**		**761.4**
Consumption by Households and Government	Fixed 2009 $ (M)	321.0	809.3	870.9	**2,001.2**		**667.1**
Real Output	Fixed 2009 $ (M)	669.0	1,533.8	1,509.7	**3,712.5**		**1,237.5**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	1,471	3,183	2,304	***1,471***	3,183	**2,319**
Population	Persons	144	892	2,584	***144***		**1,207**

Program Description…
Enacted in 1999, the Quick Action Closing Fund[54] (QACF) is a grant program used to respond to extraordinary economic opportunities for:

> "…high-impact business facilities, critical private infrastructure in rural areas, and key businesses in economically distressed urban or rural communities…and …projects to retain or create high-technology jobs that are directly associated with developing a more diverse aerospace economy."

Awards are limited to target industry jobs that pay an average annual wage of at least 125 percent of the area-wide or statewide private sector average annual wage, and projects that have a positive economic benefit ratio of at least five to one. DEO may waive these requirements under specified circumstances. DEO reports that QACF awards are generally paid out after the business has made a substantial capital investment toward tangible personal property tied to the project.[55]

Analysis and Findings…
During the review period, 28 projects were evaluated for the Quick Action Closing Fund program. For the analysis, the QACF program was evaluated under two scenarios – bundled projects and single incentive projects – with the return-on-investment calculated separately for each scenario.

Bundled Projects Scenario…
Of the 28 QACF projects evaluated, 21 were bundled with at least one other economic development incentive (85.7 percent with QTI). For the period, state payments totaled $20,515,836, and capital investment for the projects totaled $18,915,964. There were an estimated 2,995 new project jobs created with an average annual wage of $69,536. The economic activity associated with the capital investment and jobs generated a net increase in state revenues of $20.5 million. The return-on-investment for bundled QACF projects is 1.1.

One major factor negatively affecting the ROI for this scenario is the size of the Closing Fund award in relation to the total amount awarded from other economic development incentive programs. On average the Closing Fund award is approximately 46 percent of the total economic development incentive awarded to the business. As a result, only 46 percent of the jobs created by the projects in this scenario are attributable to the QACF. In addition, 54 percent of the capital investment that is administratively required for the QACF program is being attributed to the QTI which has no capital investment requirement.

Single Incentive Projects Scenarios…
There were seven projects for this scenario with state payments totaling $11,649,760 for the period. There were an estimated 8,508 new project jobs created with an average annual wage of $73,529. The economic activity associated with the capital investment and jobs generated a net increase in state revenues of $70.6 million. The return-on-investment for the QACF program under this scenario is 6.1.

[54] Section 288.1088, F.S. It is important to note that of all state incentive programs, only QACF, Economic Development Transportation Fund (commonly referred to as the "Road Fund," s. 239.2821, F.S.), and the Qualified Defense & Space Flight Business Tax Refund (QDS, s. 288.1045(3)(f)7., F.S.) programs may be used for retention projects. However, other state incentives may be awarded for new jobs created in conjunction with retention projects.
[55] Enterprise Florida, Inc., 2012 Annual Incentives Report. Tallahassee, Florida: 11.

The single incentive projects scenario has a much higher ROI than the bundled projects scenario due to several factors. One, the scenario contained only seven projects and the composition of those projects had higher job creation and wages relative to the bundled projects. Two, this scenario had a larger amount of QACF repayments which reduced the state's cost.

Conclusion…

Several factors affect the return-on-investment for the Quick Action Closing Fund Program, including industry composition, high wages, the use of escrow, and repayment of Closing Fund awards to the state.

According to s. 288.1088, F.S., the Quick Action Closing Fund may be awarded to businesses that operate in a target industry as designated in s. 288.106, F.S. As previously noted, these industries have a greater effect on the local economy due to their strong indirect and induced effects. This can be viewed by looking at the economic multipliers associated with these industries. See chart on page 39.

With the exception of the mining and utilities industries, Florida's current target industries have high employment multipliers when compared to other industries within the state. The higher the multiplier, the greater the impact will be to the state. The projects in the QACF analysis were largely in designated target industries such as manufacturing (39.3 percent), management of companies (25.0 percent), and professional, scientific, and technical services (17.9 percent).

The QACF program is also designed to attract high wage jobs. The statute requires that the average annual wage commitment of businesses participating in the program be at least 125 percent of the average annual wage in the state, county, or Metropolitan Statistical Area in which the business locates. This wage commitment is exclusive of any benefits such as health insurance or 401K contributions. The average annual wage for the State of Florida was approximately $42,000 during calendar years 2009 to 2011. In most years, the projects under review had wages higher than 150 percent of the statewide average annual wage. Higher than average wages leads to higher output associated with the projects which, in turn, generates more revenue for the State of Florida.

Another factor affecting the return-on-investment for the QACF program is the use of escrow. The Department of Economic Opportunity has the ability to secure grant funds for a project by placing the funds into an escrow account managed by Enterprise Florida, Inc. until such time that a project has met specific contractual milestones such as job creation and/or capital investment. During the analysis window, 11 projects had funds placed in escrow totaling $10,036,000. These projects have job creation and/or capital investment milestones that are expected to be completed by the next analysis to be performed by EDR. For modeling purposes escrowed funds decrease the return-on-investment for the QACF program because the state has lost the ability to spend escrowed dollars, yet the benefit (e.g., job creation and increased output) of this spending is not realized until some point in the future.

Conversely, repayment of Quick Action Closing Fund awards increases the return-on-investment for the program. During the analysis window $7,172,714 in Closing Fund awards were repaid by businesses to the State of Florida. For some of the projects, the state still received the economic benefit of partial job creation and/or capital investment. Over time, future repayments from the escrow accounts can be expected to replace the repayments directly from businesses with no long-term change to the ROI from the different administrative practices.

The QACF Program created an average of 3,834 project jobs in the review period per year while the average total employment per year was 1,618. This is because some jobs are lost in state government due to the cost of the awards and redirected state spending.

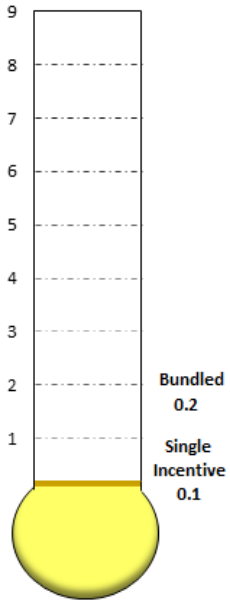
INNOVATION INCENTIVE PROGRAM

Project Summary Statistics

Total Number of Innovation Projects	**8**	**100.0%**
Industry Compostion		
Professional, Scientific, and Technical Services 54	8	100.0%

Bundled Project Summary Statistics

Number of Bundled Innovation Projects	**1**	**12.5%**
Bundled Compostion		
QACF, IIP	1	100.0%
Industry Composition		
Professional, Scientific, and Technical Services 54	1	100.0%



Bundled Innovation Incentive Projects

	2009-10	2010-11	2011-12	Total
Anticipated State Payments in Window	N/A	N/A	N/A	
Actual State Payments Used in Analysis	$ 4,000,000	$ 4,000,000	$ 3,000,000	**$ 11,000,000**
Confirmed Capital Investment	$ -	$ -	$ -	
Anticipated New Jobs by Year	45	30	25	**100**
Actual Jobs Used in Analysis by Year	65	84	84	**233**
Average Annual Wage of Projects	$ 63,022	$ 62,812	$ 58,609	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	148.9%	151.1%	143.0%	
Total Net State Revenues $ (M)	0.4	0.7	0.6	**1.7**
Return-on-Investment by year	0.1	0.2	0.2	
Return-on-Investment for the 3 year period				**0.2**

Statewide Economic Model Impact of the Innovation Incentive Program -- Bundled Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	15.0	23.5	21.8	**60.3**		**20.1**
Real Disposable Personal Income	Fixed 2009 $ (M)	13.1	20.1	18.2	**51.4**		**17.1**
Real Gross Domestic Product	Fixed 2009 $ (M)	13.0	20.1	17.8	**50.9**		**17.0**
Consumption by Households and Government	Fixed 2009 $ (M)	9.0	15.3	15.1	**39.4**		**13.1**
Real Output	Fixed 2009 $ (M)	18.5	27.3	22.4	**68.3**		**22.8**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	47	64	45	***45***	64	**52**
Population	Persons	16	58	100	***16***		**58**

Single Incentive Project Summary Statistics

Number of Single Innovation Projects	**7**	**87.5%**
Industry Composition		
Professional, Scientific, and Technical Services 54	7	100.0%

Single Incentive Innovation Incentive Projects

	2009-10	2010-11	2011-12	Total
Anticipated State Payments in Window	N/A	N/A	N/A	
Actual State Payments Used in Analysis	$ 63,071,000	$ 94,997,853	$ 34,925,000	**$ 192,993,853**
Confirmed Capital Investment	$ 12,510,949	$ 10,187,120	$ 6,799,389	**$ 29,497,458**
Anticipated New Jobs by Year	376	136	138	**650**
Actual Jobs Used in Analysis by Year	333	388	451	**1,172**
Average Annual Wage of Projects	$ 75,305	$ 78,091	$ 77,397	
Statewide Average Annual Wage	$ 42,312	$ 41,574	$ 40,991	
Percentage of Statewide Average Annual Wage	178.0%	187.8%	188.8%	
Total Net State Revenues $ (M)	5.8	7.8	6.0	**19.7**
Return-on-Investment by year	0.1	0.1	0.2	
Return-on-Investment for the 3 year period				**0.1**

Statewide Economic Model Impact of the Incentive Innovation Incentive Program -- Single Incentive Projects

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	197.7	282.3	229.9	**709.9**		**236.6**
Real Disposable Personal Income	Fixed 2009 $ (M)	170.0	239.0	192.1	**601.1**		**200.4**
Real Gross Domestic Product	Fixed 2009 $ (M)	157.1	214.0	164.5	**535.6**		**178.5**
Consumption by Households and Government	Fixed 2009 $ (M)	97.1	144.3	136.7	**378.1**		**126.0**
Real Output	Fixed 2009 $ (M)	182.9	245.7	190.7	**619.4**		**206.5**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	813	939	442	***442***	939	**731**
Population	Persons	240	752	1,376	***240***		**789**

Program Description…

Enacted in 2006, the Innovation Incentive Program[56] (IIP) encourages high-value research and development, innovation business, and alternative and renewable energy projects. Jobs created must pay 130 percent of the average private sector wage, and state awards must be matched by local sources.[57] IIP performance contracts also include a reinvestment requirement, by which recipients must remit a portion of their royalty revenues back to the state for reinvestment in existing state trust funds. Upon completion of project milestones, payments can be requested at will and do not follow a pre-determined schedule.

Analysis and Findings…

There have been nine awards granted under this program to date, eight of which have received payments within the timeframe analyzed in this study. Seven of the projects received only Innovation Incentive awards, and one of them also received an award from the Quick Action Closing Fund. All of the companies that received Innovation Incentives are in the scientific research and development industry. The average annual wage of the single Innovation projects was approximately $77,000, which is nearly double the statewide average annual wage.

The ROI for the Innovation Incentive Program is estimated to be 0.1 for the single projects and 0.2 for the bundled project, which is low compared to other incentive programs evaluated in this study. Because the award amounts for this program are very high relative to the output, the ROI is driven down. The total amount of incentive payments made for all non-EZ programs throughout the review period was $298 million. Innovation Incentive project payments made up $204 million, or 68.4 percent of these payments. Even though the eight Innovation Incentive recipients have created nearly twice the number of jobs they contracted to create during the time period, they were costly to the state given the total payment amounts. In addition, half of the capital investments were made prior to the time period, and therefore the full economic benefit of those investments is not captured in the program ROI.

Another factor contributing to Innovation's low ROI is the industry composition of the projects in the analysis. Unlike other industries such as manufacturing, the research and development industry has relatively low multiplier effects. The economic benefits to the state economy are not as high as other industries where specific products or services are produced and consumed. For example, a number of businesses that received incentives in Florida were in industries that tend to have higher multipliers because their products are consumed directly and the corresponding dollars flow through the economy.

The research and development businesses that receive Innovation Incentives are required to produce a break-even economic benefit to the state within 20 years (an ROI of 1.0). Because EDR's study analyzes activity for only a three-year period in the early years of the program, the calculated ROI may not be representative of this program's future benefits to the state. These endeavors would be expected to take a substantial amount of time, effort, and investment to come to fruition.

A recent OPPAGA report presents favorable results of the Innovation Incentive Program and its effect on the state's emerging biotechnology industry.[58] It finds that, in recent years, employment in biotechnology research and development in Florida has grown faster than the nation and other

[56] Section 288.1089, F.S. The program is similar to the Scripps Florida project approved in 2003.

[57] No adjustments were made in the model for local matches associated with the IIP since this information was not contained in the data provided by DEO. Furthermore, local match for this program can take forms other than cash.

[58] *Florida's Biotechnology Industry is Expanding*; *Cluster Growth Continues to Slowly Progress*, OPPAGA Report No.13-06, March 2013.

comparable states. The report also notes that the number of establishments and the average wage in Florida's biotechnology industry grew between 2008 and 2011. Among other things, OPPAGA reached out to various stakeholders in the biotechnology industry by conducting interviews, a focus group, and a survey. Their research finds that Innovation Incentive recipients have started to communicate with one another in order to share information, discuss research and share resources. The recipients view the collaborative environment in Florida as one indicator that the biotechnology industry will continue to grow. Other indicators include a favorable business climate, strong university research base, and a diverse population in the state. However, the recipients also reported factors that need improvement in the state such as lack of venture capital and the ability to transform scientific discoveries into commercialized products. It is possible that if the industry continues to grow and can overcome the issues that are present today, the returns from this program in the future may see an improvement from the ROIs that have been calculated for this time period.

Given the 20-year time horizon associated with the Innovation Incentive Program, business survival rates become another consideration. There have been several studies done that analyze the probability of success for new businesses. The U.S. Small Business Association reports that only about half of new establishments survive five years or more and only one-third survive 10 years or more. The actual rates vary by industry, but this general trend remains the same. The probability of an individual firm's survival increases with the firm's age. A more detailed study conducted by an economist at the University of Maryland using Bureau of Labor Statistics data reached similar conclusions.[59] This study reports survival rates for a cohort of new businesses over seven years: 81.2 percent first year, 65.8 percent second year, 54.3 percent third year, 44.4 percent fourth year, 38.3 percent fifth year, 34.4 percent sixth year and 31.2 percent seventh year. It is easier to evaluate these percentages as the survival rates of the previous year's survivors. In that study, 81.2 percent of businesses survived the first year and 81.0 percent of those businesses survived the second year. This is stable until the fifth, sixth and seventh years where it begins to increase to 86.3 percent, 89.9 percent, and 90.5 percent, supporting the conclusion that a business has a higher probability of success as it becomes more established; particularly once it passes the five-year mark. While it is possible that the ROIs for the Innovation Incentive program may be higher when looked at over a longer time period, it is also possible that some of the businesses may not be in operation for 20 years. However, seven of the eight recipients have already been in Florida for more than five years, which is a positive indication that they will be successful. It is also possible that the incentive itself may have a positive effect on the recipients' probability of success.

Conclusion…

The unique structure and goals of the Innovation Incentive Program result in a relatively low ROI for several reasons: the awards are very large given the output; half of the capital investment associated with these projects occurred prior to the time period under review and therefore related benefits are not fully represented; the research and development industry has smaller multiplier effects than some other industries; and the program is designed to generate a break-even ROI after 20 years and EDR's analysis covers only three years in the early stages of the program.

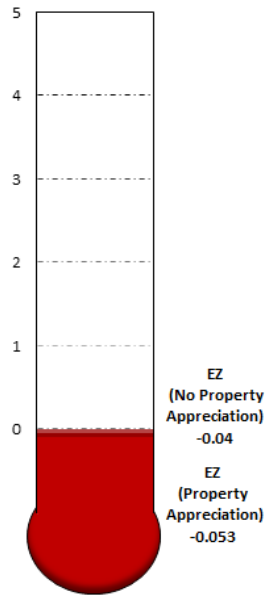
[59] Business Employment Dynamics Data: Survival and Longevity, II, Monthly Labor Review, September 2007

FLORIDA ENTERPRISE ZONE PROGRAM

Project Summary Statistics

Fiscal Years 2009-10 through 2011-12			
Enterprise Zone Benefits	**# of Awards**	**# of Recipients**	**Total Amount ($m)**
Building Materials Refund s.212.08(5)(g),(n)&(o), F.S.	618	573	$70,060,428
Business Equipment Refund s.212.08(5)(h), F.S.	360	283	$2,943,481
Electricity Energy Exemption* s.212.08(15), F.S.	Not Reported	Not Reported	$5,434,504
Job Sales & Use Tax Credit s.212.096, F.S.	590	308	$18,427,998
Job Corporate Income Tax Credit s.220.181, F.S.	133	85	$13,439,598
Ad Valorem Tax Credit s.220.182, F.S.	61	40	$4,920,480
Total:	**1762**	**1289**	**$115,226,489**

** Electricity Energy Exemption total amount is an estimate.*



Statewide Economic Model Impact of the EZ Program -- Without Property Appreciation

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	(98.4)	(95.5)	(54.4)	**(248.3)**		**(82.8)**
Real Disposable Personal Income	Fixed 2009 $ (M)	(83.1)	(80.1)	(45.4)	**(208.6)**		**(69.5)**
Real Gross Domestic Product	Fixed 2009 $ (M)	(102.8)	(89.4)	(39.6)	**(231.8)**		**(77.3)**
Consumption by Households and Government	Fixed 2009 $ (M)	(143.3)	(130.7)	(65.5)	**(339.5)**		**(113.2)**
Real Output	Fixed 2009 $ (M)	(121.0)	(101.9)	(42.3)	**(265.2)**		**(88.4)**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	(601)	(396)	(42)	***(601)***	(42)	**(346)**
Population	Persons	(124)	(376)	(536)	***(536)***		**(345)**

Statewide Economic Model Impact of the EZ Program -- With Property Appreciation

		2009-10	2010-11	2011-12	Total		Average per Year
Personal Income	Nominal $ (M)	(151.0)	(176.1)	(178.0)	**(505.1)**		**(168.4)**
Real Disposable Personal Income	Fixed 2009 $ (M)	(145.1)	(165.4)	(162.2)	**(472.7)**		**(157.6)**
Real Gross Domestic Product	Fixed 2009 $ (M)	61.2	62.1	46.0	**169.3**		**56.4**
Consumption by Households and Government	Fixed 2009 $ (M)	115.8	126.1	106.0	**347.9**		**116.0**
Real Output	Fixed 2009 $ (M)	40.8	32.2	11.3	**84.3**		**28.1**
		2009-10	**2010-11**	**2011-12**	**Minimum**	**Maximum**	**Average per Year**
Total Employment	Jobs	188	112	(16)	***(16)***	188	**95**
Population	Persons	(16)	(63)	(158)	***(158)***	(16)	**(79)**

Program Description…
First enacted in 1982, the Florida Enterprise Zone Program was created:

> "… to provide the necessary means to assist local communities, their residents, and the private sector in creating the proper economic and social environment to induce the investment of private resources in productive business enterprises located in severely distressed areas and to provide jobs for residents of such areas." [60]

Under the Enterprise Zone Act, areas of the state meeting specified criteria, including suffering from pervasive poverty, unemployment, and general distress were designated as enterprise zones. Currently, Florida has 65 enterprise zones in 52 of the state's 67 counties.[61] Florida also has three Federal Enterprise Communities and two Federal Empowerment Zones.[62] Certain federal, state, and local incentives are authorized to induce private businesses to invest in these enterprise zones. The program's state incentives include:

- Jobs credit against corporate income and state sales taxes for wages paid to new employees who are either residents of an enterprise zone or participants in a welfare transition program, up to 45 percent of wages paid for two years.
- Corporate income tax credit on ad valorem (property) taxes paid on new, expanded, or rebuilt businesses, up to $50,000 annually for five years.
- Sales tax refund on the purchase of building materials and business equipment. The amount of the refund is the lesser of 97 percent of the sales taxes paid or $5,000, or, if 20 percent or more of the business's employees reside in an enterprise zone, the lesser of 97 percent of the taxes paid or $10,000.
- Sales tax exemption of 50 percent for electrical energy used in an enterprise zone, if the municipality in which the business is located has passed an ordinance to exempt the municipal utility taxes on such business.

Analysis and Findings…
For a number of reasons, the Enterprise Zone Program produces a negative return-on-investment to the state. Most importantly, previously taxable activity has been converted to non-taxable activity. Further, to the extent the state funds supporting the incentive could have been more productively spent elsewhere and the business activity would have occurred anyway, the state actually foregoes revenues beyond the direct cost of the incentives.

The first reason relates to program purpose and design. Whereas most of the other programs were developed to induce business expansion or location to the state, the Enterprise Zone program has a more narrow purpose: to induce investment in designated severely distressed areas within the state and provide jobs to area residents. The program primarily captures or shifts existing economic activity from other in-state locations to the zone rather than inducing new economic activity.

This assumption is incorporated into the methodology currently used by the Revenue Estimating Conference (REC) to estimate the fiscal impacts on legislation that creates new Enterprise Zones or

[60] Sections 290.001 – 290.016, F.S. Unless reauthorized, the program is scheduled for sunset in 2015.
[61] *See* Department of Economic Opportunity, Bureau of Economic Development, Division of Community Development. *Enterprise Zone Program Annual Report, 2012*. Tallahassee, Florida.
[62] These federal programs are scheduled to expire in 2013.

expands existing Enterprise Zone boundaries. The REC assumes that economic activity in an Enterprise Zone, absent the formation of the zone, would have otherwise occurred within the zone or somewhere else in the state. Existing business activity (and any future investments by these businesses) is captured in a designated geographic area when local governments establish or change zone boundaries, or when in-state businesses move into the zone. These actions do not increase the total economic activity within the state.[63]

Research from other states supports the REC's assumptions. A 2005 Policy Brief prepared by the Minnesota House of Representatives Research Department that reviewed empirical research found the establishment of Enterprise Zones may result in a shift in employment growth to the zone rather than add overall employment within the region, as employers seek to take advantage of zone benefits.[64] This conclusion was echoed in a 2013 review of California's Enterprise Zone program:

> "Most rigorous research has found that Enterprise Zones do not create a net increase in jobs or increase the rate of job creation…Even if an Enterprise Zone results in more job growth in a particular locality, it is likely that some of the jobs were shifted from other parts of the region or state."[65]

The Enterprise Zone concept was developed in the United Kingdom.[66] Recent research regarding their Enterprise Zone program supports the conclusions above. Larkin and Wilcox found that there is evidence to suggest that many of the businesses that benefited from locating in Enterprise Zones were not new firms, but simply firms that had relocated from other areas.[67] Wainwright's research corroborated these findings and suggested that designation of new Enterprise Zones "will undoubtedly result in a transfer of value from the surrounding area as existing businesses, occupiers and investors simply attempt to take advantage of the available tax allowances and reliefs."[68] Sissons and Brown,

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[63] In 2010, EDR was asked to review the methodology used by the REC, and concluded after a literature review and property tax analysis on the effectiveness of state Enterprise Zone programs that there was no conclusive evidence disproving the REC assumption. See "Literature Review and Preliminary Analysis of the Impact of Enterprise Zones on State & Local Collections" prepared by the Office of Economic and Demographic Research, February 2010.

[64] Don Hirasuna and Joel Michael, "Enterprise Zones: A Review of the Economic Theory and Empirical Evidence," Minnesota House of Representatives Research Department (January 2005): 13.
Minnesota Office of the legislative Auditor. "Evaluation Report: JOBZ Program" (February 2008)

[65] "California's Enterprise Zone Program" Legislative Analyst's Office presentation to the Senate Budget and Fiscal Review Subcommittee No. 4 on State Administration and General Government (May 9, 2013): 6.
Also see Fisher and Peters, "Tax and Spending Incentives and Enterprise Zones," *New England Economic Review*, (March/April 1997): 127.
Also see Hanson and Rohlin's 2010 review of the Federal Empowerment Zone program, where they found a positive and statistically significant effect of the federal Enterprise Zone tax incentive program on attracting new establishments. However, they acknowledge that their findings "ignore any displacement and existing establishment effects that may occur" as a result of the incentive and that "it is possible there are substantial displacement effects of the program in other areas. Andrew Hanson and Shawn Rohlin, "Do Location-Based Tax Incentives Attract New Business Establishment?" *Journal of Regional Science* (2010): 18, 22.

[66] John Engberg and Robert Breenbaum, "State Enterprise Zones and Local Housing Markets" *Journal of Housing Research*, Vol 10, Issue 2 (1999): 164.
Don Hirasuna and Joel Michael, "Enterprise Zones: A Review of the Economic Theory and Empirical Evidence," Minnesota House of Representatives Research Department (January 2005): 7.

[67] Kieran Larkin and Zach Wilcox, "What Would Maggie Do? Why the Government's policy on Enterprise Zones needs to be radically different to the failed policy of the 1980s." *Centre for Cities* (February, 2011): 7.

[68] Simon Wainwright, "Enterprise Zones: Do they created or transfer value?" *Journal of Urban Regeneration and Renewal*, Vol. 5, 2. (2012): 130.

citing information compiled by the Department for the Environment, report that 80 percent of jobs created by Enterprise Zones in the UK from 1980 through 1987 were displaced from other areas.[69]

This transfer or redirection of investments and economic activity is also evident in Federal Empowerment Zones. Like Florida's Enterprise Zone program, the federal program offers job tax credits and other incentives for capital investments in designated economically distressed areas.[70] Hanson & Rohlin suggest that the gains in federal zones are at the expense of "neighboring and economically similar areas...both in terms of the number of establishments located in these areas and employment at local establishments…" and the losses are "especially strong in the retail and services industries."[71]

It is unlikely that zone incentives alone are sufficient to induce relocations to the state. Peters and Fisher argue that when compared to wages, an important location consideration, zone incentives were:

> "…so small, in fact, that even quite limited local variation in wage rates could easily wipe out the business income advantages conferred by incentives. Thus our non-econometric evidence suggests that it is likely that zone incentives influence business location and investment decisions only in exceptional circumstances."[72]

To the extent that Enterprise Zone incentives are an inducement, Florida has little or no competitive advantages when compared to other states. In FY 2012-13, Florida awarded $17.6 million in state incentives for the entire Enterprise Zone program, or $.91 per capita.[73] Thirty-six of the 50 states have Enterprise Zone programs, of which seven are local only (no state incentives available) or primarily local programs. EDR was able to obtain program cost information for 25 of these 29 states. Only six states have lower per capita program costs.

It has also been argued that "but for" the Enterprise Zone program incentives, in-zone businesses would not have expanded their economic activity. Research addressing this issue cast doubt on this assertion as well. Peters and Fisher conclude that "the majority of the recent literature comes down on the side of Enterprise Zone having little or no impact on growth" and find through their econometric study of 65

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[69] Andrew Sissons and Chris Brown, "Do Enterprise Zones Work?" *The Work Foundation* (February 2011): 5.

[70] This soon to expire program provides several different incentives, including wage credits, tax deductions, bond financing, and capital gains liability reduction.

[71] Andrew Hanson and Shawn Rohlin, "Do spatially targeted redevelopment programs spillover?" Forthcoming in *Regional Science and Urban Economics* (2012): 26.

Further, the study found that "(g)iven the …program uses tight geographic targeting in densely populated urban areas, establishments can benefit by literally moving across the street … to enjoy the benefits of the program without incurring relocation costs associated with moving further from a customer base, employees, or losing other advantages of the immediate location…Spillovers caused by relocation suggest a zero net effect from the program; however, some of our estimates suggest a negative net effect of the program. Negative net effects could be the result of spillovers causing job (and establishment) destruction in neighboring and similar areas, possibly through increased competition from establishments subsidized by the EZ program."

[72] Alan Peters and Peter Fisher. *State Enterprise Zone Programs: Have They Worked?* (Kalamazoo: Upjohn Institute for Employment Research, 2002): 157 - 158.

[73] See **APPENDIX 3**. Figures in this table do not include local incentives. In Florida, local incentives were reported to be $56.6 m in local fiscal years 2010-12.

Observers may note that annual state program costs have been as high as $67.6m in FY 2009-10, due primarily to sales tax refunds for building materials associated with condominium developments. See OPPAGA Report No. 11-01, "Few Businesses Take Advantage of Enterprise Zone Benefits; the Legislature Could Consider Several Options to Modify the Program" (January 2011): 6. and "Florida Enterprise Zone Program Annual Report, 2010" Office of Tourism, Trade and Economic Development (March 2011): 10. In 2010, the Florida Legislature repealed the authority for such developments to claim this refund. *See* s. 9, ch. 2010-147, Laws of Florida.

zones in 13 states (including Florida) that Enterprise Zone "incentives have no discernible positive effect on new economic activity. In fact, a very small negative effect is discernable in all our models." Finally, "…enterprise zones are not effective engines of economic expansion."[74]

Subsequent research corroborates these findings. In a review of California and Florida Enterprise Zone programs from 1986 to 1990, Elvery concluded that it was "likely that most of the tax credits paid by the states subsidized hiring that would have taken place regardless" of the Enterprise Zone incentives.[75] In its 2010 review of the effectiveness of Enterprise Zone programs nationwide, the Legislative Analyst's Office of the California Legislature found that "most research indicates the that area programs have little if any impact on the creation of new employment…" and that the granting incentives "may result in revenue losses that are significant relative to the benefits received."[76] Peters and Fisher found in their comprehensive review of state enterprise zone programs that the impact of enterprise zone benefits on state and local government revenues was likely to be negative. This conclusion is based in part on the research showing the incentives have very little impact on firm location and job growth, so that most of the amount of the incentive is wasted. [77]

While there may be individual exceptions, it is probable that general in-zone business expansion is due to the same factors that affect other businesses – reflecting the trend rate of growth and general business cycles.[78]

Finally, EZ program incentives are available to Florida market or resource dependent businesses. Because these business activities would have been undertaken somewhere in the state or local area absent the incentive, there is "no net gain in economic activity or jobs or income."[79]

The weight of this evidence (summarized below) leads to a conclusion that the EZ program does not produce a positive return on investment to the state. This analysis assumes:

- Gains in employment and capital primarily are the result of captured or redirected (shifted) in-state economic activity;
- EZ incentives are an insufficient inducement to relocate to Florida;

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[74] Alan Peters and Peter Fisher. *State Enterprise Zone Programs: Have They Worked?* (Kalamazoo: Upjohn Institute for Employment Research, 2002): 166, 185, 190.
See also Alan Peters and Peter Fisher. "The Effectiveness of State Enterprise Zones." *Employment Research Newsletter*, Vol. 9, No. 4 , Upjohn Institute for Employment Research, Kalamazoo, MI (2002): 4.

[75] Joel Elvery, "The Impact of Enterprise Zones on Resident Employment: An Evaluation of the Enterprise Zone Programs of California and Florida." Maxine Goodman Levin College of Urban Affairs, Cleveland State University (September, 2007): 21.

[76] "California's Enterprise Zone Program" Legislative Analyst's Office (LAO) presentation to the Senate Revenue and Taxation Committee, March 10, 2010. The LAO is overseen by the Joint Legislative Budget Committee (JLBC), a 16-member bipartisan committee of the California Legislature.
See also Alan Peters and Peter Fisher, "The Effectiveness of State Enterprise Zones." *Employment Research newsletter*, Vol. 9, No. 4, Upjohn Institute for Employment Research. Kalamazoo, MI (2002): 4.

[77] "Alan Peters and Peter Fisher. *State Enterprise Zone Programs: Have They Worked?* (Kalamazoo: Upjohn Institute for Employment Research, 2002): 121, 222.
See also Alan Peters and Peter Fisher, "The Effectiveness of State Enterprise Zones." *Employment Research newsletter*, Vol. 9, No. 4, Upjohn Institute for Employment Research. Kalamazoo, MI (2002): 4.

[78] The "trend rate of growth" is the average sustainable rate of growth over a period of time, or the underlying economic growth (in response to population increases, growth in the labor force, capital growth, increases in productivity, technological advances that increase efficiency, etc.) absent business cycles.

[79] Peter S. Fisher, *Corporate Taxes and State Economic Growth, Policy Brief of the Iowa Fiscal Partnership,* Revised February, 2012: 4.

- In-zone expansion is not attributable to EZ incentives; and
- Many of the EZ businesses are Florida market or resource dependent.

Scenario Assuming No Property Appreciation…
This scenario assumes there is no positive economic gain to the state and no detectable property appreciation within the zones relative to surrounding areas. No new output or investment was attributed to EZ businesses in the model. Only the state payments to the EZ businesses were included, which totaled approximately $115 million in the review period. This scenario produced a negative return-on-investment of -.040 to the state and decreased Florida's GDP in all three years because the incentive dollars were redirected from more productive state activities.

Scenario Assuming Property Appreciation…
This scenario assumes there is some positive economic gain associated with property appreciation in the Enterprise Zones. The approach uses increases in local property tax revenue attributable to EZs to measure an incidental benefit to the state.[80]

In 2010, EDR analyzed whether the EZ program was effective in eliminating conditions of slum and blight within the zone, as measured by changes in property values. EDR found that the "analysis of property values in Hardee, Hernando, and Sarasota enterprise zones from 1999 to 2004 did not support a conclusion that enterprise zones have a consistent, direct and quantifiable impact on property values."[81]

In 2013, EDR conducted a follow-up study using property tax data from 1999 through 2012 (See **APPENDIX 4**). The report reviewed the impact that Enterprise Zones may have on property values over a longer period. Using the same three zones, the analysis looked at the differential growth rate between the parcels in the Enterprise Zone and parcels outside the Enterprise Zone located within a 2-mile buffer. It found that the differential growth rate changed favorably towards the EZ parcels in two of the three Enterprise Zones and narrowed in the third.

Property Appreciation Growth Rates		
	EZ Parcels	Outside Parcels
1999-2002	16.92%	28.35%
2003-2012	22.74%	12.25%

EDR used data from the report and assumed similar differentials for all zones during the review period. The result was an estimate of additional tax revenues accruing to the local governments of $123.6 million in FY 2009-10, $171.2 million in FY 2010-11 and $151.0 million in FY 2011-12.

The millage rates were held constant in the analysis. This assumption allowed the rise in property appreciation to be captured by the local governments through additional revenue. A fluctuating millage

[80] Nationally, at least two studies have addressed the property tax issue. In their 1996 analysis of the Urban Enterprise Zone program in New Jersey, Boarnet and Bogart found that the program had no positive effect on municipal property values. Marlon Boarnet and William Bogart. "Enterprise Zones and Employment: Evidence from New Jersey" *Journal of Urban Economics* 40 (1996): 214.
In their review across 22 states, Engberg and Greenbaum found that, on average, EZ designation did not have an impact on the growth of housing values. John Engberg and Robert Breenbaum, "State Enterprise Zones and Local Housing Markets" *Journal of Housing Research*, Vol 10, Issue 2 (1999): 179.
[81] "Literature Review and Preliminary Analysis of the Impact of Enterprise Zones on State & Local Collections" prepared by the Office of Economic and Demographic Research, February 2010.

rate would have split the appreciation between additional local revenue and a lower tax liability per parcel. Only Enterprise Zones established on or before January 1, 2002 were included in EDR's estimate, which represents 91 percent of the Enterprise Zones by total square miles.

The Statewide Model had to account for additional impacts besides increased local government revenue, including the rise in property taxes. The rise in property taxes was accounted for by increasing taxes on capital. Taxes on capital were split between commercial and residential parcels.

The Statewide Model estimated that Florida GDP increased because of the additional local government spending. However, the result is still a negative ROI of -.053. Two important reasons account for this negative ROI. First, the impact of local government spending on state revenues is weak because local government spending is largely not taxable. Generally only the indirect and induced spending attributable to local government spending is taxable. Second, residential properties were negatively affected by the rise in property taxes. This reduces taxable consumer spending within the state.

Conclusion…

EDR's research found that that the state Enterprise Zone program produces a negative ROI. This analysis does not measure the impact of EZ incentives on the local economy which clearly would have had some benefit from the additional spending in the second scenario. In addition, local governments may have other criteria for evaluating the impact of the incentives on their community.[82]

EDR's assessment regarding the Enterprise Zone program is consistent with recent evaluations of similar programs in other states. [83] In response, some states have considered or implemented reforms, with some significantly reducing or eliminating program benefits. [84]

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[82] As noted earlier, 36 of the 50 states have EZ programs, of which seven are local only (no state incentives available) or primarily local programs.

[83] *For evaluations regarding cost effectiveness of respective state enterprise zones, see:*

CA: David Neumark and Jed Kolko, "Do Enterprise Zones Create Jobs? Evidence from California's Enterprise Zone Program" NBER Working Paper Series (December 2008, Revised January 2010)

Budget Brief from the California Budget Project, *Dollar for Dollar: California's Enterprise Zone Program Falls Short* (June, 2013)

CO: Colorado Enterprise Zone Review Task Force (2012) Office of Economic Development and International Trade (November, 2012).

IA: Colin Gordon, "EZ Money: Assessing Iowa's Enterprise Zone Program" Iowa Fiscal Partnership (April 2008) State of Iowa Tax Credit Review Report, December, 2009, by the Iowa Department of Management.

MD: *See Baltimore Sun,* "Baltimore's sprawling enterprise zone. Our view: What started as small and directed has gotten large and amorphous, but city enterprise zones remain a useful tool for promoting economic development." September 01, 2013.

Scott Calvert and Jamie Smith Hopkins, "Most city neighborhoods get little in enterprise tax breaks; Enterprise Zone program was created to bring development, jobs to poor areas," *Baltimore Sun*, August 26, 2013.

Scott Calvert and Jamie Smith Hopkins, "Enterprise zone tax breaks flow to Baltimore waterfront, other prosperous neighborhoods; Schaefer launched program 30 years ago to aid poor areas, " *Baltimore Sun*, August 24, 2013.

MN: Minnesota Office of the Legislative Auditor. "Evaluation Report: JOBZ Program" (February, 2008)

NJ: Delta Development Group, Inc. and HR&A Advisors, Inc., *New Jersey Urban Enterprise Zone Program Assessment* (February 18, 2011)

NY: Citizens Budget Commission, *It's Time to End New York State's Empire Zone Program* (New York: December 2008)

AT Kearney, *Delivering on the Promise of New York State: A Strategy for Economic Growth and Revitalization*, Prepared for Empire State Development, 2007.

EDR research indicates that as of 2013, 36 of the 50 states have Enterprise Zone programs, of which seven are local only (no state incentives available) or primarily local programs. Since 2009, eight of the 30 state programs have contracted (either by reducing program benefits to businesses or restricting benefit eligibility – NY, IL, MI, NJ, MO, LA, IA & RI) and six programs were repealed or sunset (AR, AZ,CA, KY, KS & NB). In 2013 the Texas Legislature reduced program benefits, but the Governor vetoed the bill instituting the changes.

[84] Since 2008, eight of the 29 state Enterprise Zone programs have contracted (reduced benefits or restricted benefit eligibility), six programs were allowed to sunset or were repealed, 1 program was sunset and subsequently reauthorized, and in 2012 one state passed legislation to reduce program benefits, but the State Governor vetoed the legislation. *See* **APPENDIX 3**: State Enterprise Zone Programs. In addition, the Keystone Opportunity Zone program in Pennsylvania sunset in 2011 and then was reauthorized and expanded in 2012.

APPENDIX ONE

Assessing the "But For" Assertion: A Literature Review

Economic development incentives are public subsidies intended to induce an economic activity or capital investment by a private business in a jurisdiction in which such activity or investment would not otherwise take place.[1] The necessity of offering such incentives has been the subject of much research.

Some incentive proponents assert that "but for" the incentive, business expansions or relocations would not have occurred in their area – the incentive is the primary or the determining factor in business location decisions. Site selection and economic development professionals claim that incentives may tip the scales between competing sites when all other factors are relatively equal.

The following identifies attempts by other states to address the "but for" assertion and reviews the academic literature on the impact of state and local tax policy and incentives on business location decisions.

Florida Studies and the "But For" Issue...

In 2003, the Florida Senate Committee on Commerce, Economic Opportunities, and Consumer Services conducted a sunset review of the Florida's Qualified Target Industry (QTI) and Qualified Defense Contractor (QDC) Tax Refund Programs. Program recipients are eligible to receive awards based on the number of qualifying jobs and the average wage of their employees.

As part of this review, committee staff surveyed incentive recipients and local economic development organizations, asking how the QTI and QDC programs influenced business site selection and job creation. Out of the 183 surveys sent to active QTI businesses, 38 businesses responded. The report includes the following findings:

- Twenty QTI businesses reported that they probably or definitely would have located or expanded operations in Florida without the QTI incentives. Fifteen QTI businesses reported that they probably or definitely would not have located or expanded operations in Florida without the incentives. Nearly all of the responding businesses, 36, reported that they considered locating or expanding operations outside of Florida. Incentives were offered by other states to 20 of these 38 businesses.
- The most common reasons that incentives from other states were rejected were that the other locations lacked an adequate workforce, had personal income taxes, and offered smaller incentives. Other slightly less common reasons for rejecting incentives offered elsewhere included high labor costs, higher corporate income taxes, and poor climates.
- A survey was also sent to 66 local economic development organizations (EDOs). Committee staff received 31 responses to this survey. The responses from the EDOs differed significantly from the responses from QTI businesses regarding the effectiveness of the program in attracting businesses to this state. According to 24 of the 30 EDOs that responded to the issue, all or most of the QTI businesses in their communities would have located or expanded operations outside of Florida without the QTI incentives. The responses

[1] Poole offers an alternative definition: "Programs with budgeted or authorized public dollars that are directly or indirectly invested in activities of businesses." *See* Kenneth Poole, George A Erikcek, Donald Iannone, Nancy McCrea, and Pofen Salem, *Evaluating Business Development Incentives*. A report prepared for the U.S. Department of Commerce, Economic Development Administration, EDA Project #99-07-13794, by the National Association of State Development Agencies, W.E. Upjohn Institute for Employment Research, and The Urban Center, Cleveland State University. (August, 1999): 10-13.

from EDOs also differed slightly from the responses from QTI businesses as to why QTI businesses rejected locations in other states. According to the survey results, the most common reasons QTI businesses rejected locations in other states, in order of frequency, were that other locations had a low quality of life, high labor costs, personal income tax, and were too distant from customers.

- According to 21 EDOs, the most common reason that a business that would have qualified for QTI incentives rejected a Florida location was for larger incentives elsewhere. Eleven EDOs reported that their communities lacked adequate infrastructure, such as sewer, water, electricity, and telecommunications. Six EDOs reported that their communities lacked adequate transportation facilities, such as seaports, airports, highways, and rail systems.[2]

The report concluded that:

> "(A)lthough many businesses participating in the QTI and QDC programs would have located in this state anyway, the programs do encourage the creation or retention of some jobs."[3]

As part of the required evaluation of seven incentive programs in 2013, OPPAGA conducted a survey or incentive recipients. OPPAGA asked recipient businesses to gauge the influence of the state incentives on their decision to expand or relocate to Florida with five questions. Seventy-three businesses responded to the survey, with 51 to 56 responding to the individual questions.

The survey indicated that state incentives were the most important factor affecting their location decision. However, 38 percent of respondents stated they *definitely* or *probably* would have considered locating, expanding or remaining in Florida if state incentives were not available. Thirty-five percent responded they did not know. Only 20 percent responded that state incentives were *the key decision factor* in their company's final site location decision. Nearly half of the survey respondents were existing Florida businesses expanding their operations.

To some degree, Florida law addresses the "but for" condition for four of its incentives in the application or review process. Some applications require a brief statement concerning the applicant's need for tax refunds or to explain the role the incentive will play in its decision to locate or expand in this state.[4] For Quick Action Closing Fund awards, the Florida Department of Economic Opportunity (DEO), the entity responsible for awarding the incentive, must determine the incentive is "an inducement to the project's location or expansion in the state."[5] Although not under review in this cycle, DEO must review and evaluate the impact of a proposed Qualified Defense & Space Flight Business Tax program refund has "…on the viability of the project and the probability that the project will occur in this state if such tax

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[2] Florida Senate Committee on Commerce, Economic Opportunities, and Consumer Services, "Review Of Qualified Target Industry And Qualified Defense Contractor Tax Refund Programs" Interim project Report 2004-115 (December 2003): 5.

[3] Ibid., at 1.

A 2005 Collins Center for Public Policy report on the QTI program, commissioned by EFI, referred to the findings in the Senate's "sunset" review. The report indirectly addressed the "but for" issue, and concluded that "the QTI program is a useful competitive tool when combined strategically with larger state and local economic development programs and when administered judiciously." See Collins Center for Public Policy, Inc. & Global Insight, Inc. *Florida Qualified Target Industry Tax Refund Program: An Independent Analysis* (February 2005): 40, 2.

[4] Qualified Defense & Space Flight Business Tax Refund, s. 288.1045(3)(f)7., F.S.; Qualified Target Industry Tax Refund Incentive, s. 288.106(4)(a)7., F.S.; High-Impact Sector Performance Grant, s. 288.108(5)(a)5., F.S.; and Innovation Incentive Program, s. 288.1089(3)(i), F.S.

[5] Quick Action Closing Fund, s. 288.1088(2)(c), F.S.

refunds are granted to the applicant, taking into account the expected long-term commitment of the applicant to economic growth and employment in this state."[6]

To implement these requirements, DEO staff includes the following questions in their evaluation of applications for all incentives administered by the department:

- What role will the incentive(s) play in the business unit's decision to locate, expand, or remain in Florida?
- How will the incentive dollars be used by the business?
- What other cities, states, or countries are being considered for this project?
- What advantages or incentives offered by these locations do you consider important in your decision?
- What advantages or disadvantages offered by the proposed Florida location do you consider important in your decision?
- Indicate any additional internal or external competitive issues impacting this project's location decision.[7]

In addition, the Department of Transportation's application for an Economic Development Transportation Fund grant requires applicants to submit a letter from the company with a statement attesting that "the project will not occur in Florida without the proposed transportation improvements and only one Florida site is under consideration."[8]

To the extent these application requirements are met, and the responses to these questions are judiciously considered in the evaluation of awards, the "but for" condition is largely addressed in the award of Florida's economic incentives.

Other State Studies and the "But For" Issue...

Several state legislatures have commissioned studies to evaluate the effectiveness of their economic development incentive programs. Some of these studies also attempted to address the "but for" issue – to determine whether the incentives are the primary, or at least the determining factor in business decisions to expand in or relocate to their state.

In 1999, Cleveland State University's Urban Center prepared a comprehensive assessment of the state's economic development programs for the Ohio Economic Development Study Advisory Committee and the Ohio Office of Budget and Management. As part of their review of business location and investment behavior, they surveyed nearly 400 Ohio firms – half of which had received incentives – for their perspective on Ohio's incentive programs. From the 61 responses, they conclude that the incentives "have a contributing, but not a driving or determining, effect upon business investment and location decisions." In addition, "many respondents showed a lack of knowledge about these programs."

The report also identifies the problems with requiring the "but for" condition to be satisfied, including:

[6] Qualified Defense & Space Flight Business Tax program, s. 288.1045(3)(f)7., F.S. Also, the QDS incentive is one of 3 state EDIs that may be used for "retention" projects. Until 2008, the Qualified Defense & Space Flight Business Tax program was known as the Qualified Defense Contractor Tax Refund program. *See* s. 1, ch. 2008-89, Laws of Florida.
[7] See "General Project Overview" on file with EDR.
[8] See "Economic Development Transportation Fund Application Instructions" on file with EDR.

- The rationale is impossible to prove in a truthful sense, as the argument basically boils down to a government official's willingness to take a business executive's word that government investment in the project is absolutely necessary to project success.
- The condition forces the provider and recipient to exaggerate the benefits of the project.
- The requirement is a far too general and simplistic justification for government action.

Instead of employing the "but for" condition for awarding incentives, the report recommends it be replaced with an eight-point justification framework addressing limited circumstances.[9]

In 2007, North Carolina's Joint Select Committee on Economic Development Incentives examined the state's economic incentive programs, and addressed the role of incentives in company location decisions. A survey of businesses receiving a prominent state corporate income tax credit found that incentives ranked low on the list of priorities for business executives. Furthermore,

> "62% of surveyed NC executives were unaware his/her company received an incentive. This indicates that incentives in the form of tax credits have little impact on business decisions if the majority of executives are unaware of incentive receipt."[10]

Subsequent case studies with 56 companies revealed the state's corporate income tax credit had little impact on the company's decision to engage in economy growth or expansion.[11]

Kentucky, Missouri, and Vermont have implemented specific policies to address the "but for" assertion. In the 2012 review of Kentucky's economic development incentives, it was reported that many of the incentive programs offered by the state require incentive recipients:

> "…to sign a 'but for' agreement indicating that they would not have come to Kentucky 'but for the incentive.' Nevertheless, the true impact of programs is usually not known."[12]

The Missouri BUILD incentive program is designed to reduce infrastructure and equipment expenses related to large business expansion or relocation projects. To qualify, the project must meet the "But For" Test: the Missouri Department of Economic Development and the Missouri Development Finance Board" must determine that the program is a material factor in the company's decision to initiate the project, and this is certified by the business."[13]

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[9] The Urban Center, Maxine Goodman Levin College of Urban Affairs, Cleveland State University, *An Assessment of the Costs, Benefits, and Overall Impacts of the State of Ohio's Economic Development Programs*. (May 28, 1999): 258, 62, & 236.

[10] Brent Lane and Jason G. Jolley, "An Evaluation of North Carolina's Economic Development Incentive Programs: Summary of Analysis, Findings and Recommendations," Prepared for the North Carolina General Assembly, Select Committee on Economic Development Incentives. UNC Center for Competitive Economies (January 21, 2009): 14.

[11] Ibid., at 16.

[12] Anderson Economic Group, LLC. *Review of Kentucky's Economic Development Incentives* (June 11, 2012): 98.

[13] See Sections 100.700 - 100.850, *RSMo*. Section 620.017 1.(3), *RSMo*., requires that the EDI contracts state why the incentive is needed.

The 2010 Missouri Tax Credit Review Commission adopted a global recommendation for improving Missouri's toolkit by replacing various economic development tax credit programs with one flexible, unified program. One feature of this unified program would include a financial "but for" requirement similar to that in the current Missouri BUILD program, whereby the project would need to demonstrate that without state assistance to fill a financing gap, the project would otherwise not occur. In 2013, the Missouri Legislature enacted HB 184, which consolidated four unique economic incentive programs into one, and included the following restriction in newly created s. 620.210 6., *RSMo*:

> 6. No benefits shall be available under this section for any qualified company that has performed significant, project-specific site work at the project facility, purchased machinery or equipment related to the project, or has publicly

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Vermont law requires project applications for Vermont Employment Growth Incentive (VEGI) program be screened to assess whether the proposed "economic activity would not occur or would occur in a significantly different and significantly less desirable manner without the incentive."[14] A company official (one of the application signatories) is also required to address the "but for" assertion in a public meeting of the Vermont Employment Progress Council, the entity responsible for approving VEGIs. [15]

In 2011, Virginia's Joint Legislative Audit and Review Commission (JLARC) reviewed the effectiveness of economic development incentive grants available in Virginia, and addressed the impact incentives had on business decisions regarding site selection. The report finds that the "best available information in the (research) literature suggests that approximately ten percent of location decisions are swayed by financial incentives." However, the report suggests this rate is higher in Virginia because the state offers discretionary grants which are more desirable to businesses rather than tax credits, and has higher award levels than other states. Grant recipients indicate that incentives are usually the primary determinants of their site selection decision, typically toward the end of the process.[16]

To address the "but for" condition, the report notes that Virginia Economic Development Partnership staff screen projects to ensure the grants are only awarded to projects where the incentive "is necessary." One aspect of the screening process requires asking the applicant what other states they are considering in order to gather information on the incentives being offered. From this information, the staff determines whether the award should be granted or adjusted.[17] Notwithstanding these efforts, the report acknowledges that it is "difficult to quantify with much precision the extent to which grants sway business decisions."[18] A survey of 12 incentive recipient businesses and 25 local economic developers was inconclusive. [19]

Review of Academic Literature...

Until the 1990s, much of the academic research shared a common perspective regarding the impact of tax policy, and by implication economic development incentives, on business expansion and relocation decisions: tax policy may matter, but not nearly as much as production-related factors. Simply put:

> "Relative to other costs of doing business, state taxes are simply too small to have a major influence on business decision-making. Other factors with far greater impacts on costs, accessibility of raw materials and markets, and regulatory stringency, are far stronger determinants of location decisions and of economic growth. The literature on economic development incentives is filled with examples of businesses acknowledging that their decisions were not guided by the available state fiscal incentives. Often business decision makers were unaware of the incentives until after their decision; in other cases, the incentives were candidly acknowledged as what one executive called, **"**a little extra cream on top." At best, incentive

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announced its intention to make new capital investment at the project facility prior to receipt of a proposal for benefits under this section or approval of its notice of intent, whichever occurs first.

[14] Vermont Economic Progress Council, *Vermont Employment Growth Incentive Authorization Criteria*, Version 4.2012.

[15] Vermont Economic Progress Council, *Vermont Employment Growth Incentive Authorization Criteria*, Version 4.2012. *Also see 32 VSA* ss. 5930a(c)

[16] Virginia Joint Legislative Audit and Review Commission, *Review of State Economic Development Incentive Grants,* Senate Document No. 8 (November 2012): 25-32.

[17] Ibid., at 66.

[18] Ibid., at 32-33.

[19] Ibid., at 25.

packages only become relevant in breaking a tie between sites that do not differ significantly on more important dimensions."[20]

Pomp elaborates on the influence of tax policy on business decisions:

- First, innumerable factors are important to a business in its decision about where to locate. Depending on the type of business at issue, the location decision can be influenced by plant or site availability, access to financing, access to and cost of transportation, quality and cost of labor, proximity to markets, cost of utilities, proximity to supplies, proximity to other company facilities, the regulatory environment, the quality of a state's schools, colleges, and universities, the cost of housing, the level and quality of public services, and the range of other amenities that enter into the general quality of life offered.
- Second, taxes are one of the many costs of doing business and the magnitude of the other costs may easily swamp the amount of state taxes involved.
- Third, state and local tax payments are deductible for purposes of the federal corporate income tax. The effect of this deduction, the so-called federal offset, is to reduce both the absolute burden of state and local taxes and differences in burdens among the states.
- Fourth, differences in state and local taxes may reflect differences in the level and quality of state and local public goods and services, which also affect the business location decision. Low taxes are not necessarily attractive to businesses if they mean that the firm will have to supply, at its own expense, what is supplied through the public sector in other states or other jurisdictions. Furthermore, if low taxes mean inferior schools, a state may lack the educated and literate labor force that is essential to certain types of businesses. Of course, not all public goods and services are equally important to businesses.
- Fifth, to the extent that tax rate differentials are capitalized, their impact will be reduced. For example, low property taxes in one jurisdiction might mean that land sells there for a higher price than what it would sell for in another jurisdiction having higher property taxes. In other words, land located in a high-property-tax jurisdiction may sell for less than an equivalent parcel of land in a low-tax jurisdiction, assuming that differences in taxation are not reflected in differences in public services, which might also be capitalized.
- Sixth, most relocating companies plan to stay at their new site years longer than any group of elected officials is likely to be in office. Consequently, current tax levels, special concessions, or special features of the tax law may not be a reliable basis upon which to make a multimillion dollar investment. What one group of legislators might grant today by way of concession another might eliminate tomorrow, especially if financial conditions change significantly. Fiscal stability and predictability may be more important than special concessions.
- Seventh, a state tax incentive that is granted by way of incorporating a similar federal provision may have no impact on a firm's decision making if the future of the federal provision itself is in jeopardy.
- Eighth, state tax incentives may contain their own seeds of destruction. If incentives are effective at all, a state will gain only a short-lived advantage over other states because the latter can be expected to adopt similar ones.
- Ninth, some executives charged with the location decision may be uninformed about the existence of tax incentives.

[20] Peter D. Enrich, Saving the States From Themselves: Commerce Clause Constraints on Tax Incentives for Business, 110 *Harvard Law Review* (1996): 391- 392.

- Finally, there are relatively few footloose firms that can be affected by tax incentives.[21]

The influence of tax policy may be further diminished when additional non-production factors are considered. Financing tax incentives may divert public resources from funding public services, which may be of value to businesses and influence their expansion or relocation decisions. Ronald Fisher identified research indicating the positive effects of government spending – especially spending on transportation – on business activity, and by inference, business expansion.[22]

However, more recent studies note some shift in thinking regarding the relative influence of tax policy on business decisions. In their comparison of pre-1963 studies with more recent industrial location literature, Blair and Premis find that:

> "…the traditional location factors are waning somewhat in importance…(and) other locational factors more directly controllable by state and local governments are, at least, moderately important. Since they are controllable, these policy variables can be effective when other major locational variables are roughly equal among competing areas."[23]

They find that econometric studies in the 1980s show tax-expenditure variables to be important, as are production-related factors. However:

> "… (t)he effectiveness of specific subsidies or locational incentives has not been shown to be a particularly significant variable although incentives have been included in some measures of fiscal climate. The lack of strong econometric and survey evidence contrasts with the opinions of many policymakers that some development incentives are essential for a successful job creation effort. Perhaps the varieties of incentives are too complex to be captured by the econometric models or perhaps they are so widely offered that they cancel out." [24]

Econometric Studies...

By the 1980s, economists were attempting to measure the effect tax policy has on business decisions by using econometric studies focused on elasticity, a way to gauge the effect tax policy has on business decisions. Simply put, elasticity is a measurement of the effect of one economic variable on others. In this context, it describes the responsiveness of economic activity to changes in tax policy, including the award of economic development incentives. For example, if the elasticity of certain business activity to state and local business taxes is -0.2, then a 10 percent reduction in state and local business taxes will result in a two percent increase in employment or general business activity.

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[21] Richard Pomp "State Tax Reform: Proposals for Wisconsin" *Marquette Law Review* (2004): 61-66.
Also see: Alan Peters and Peter Fisher, "The Failures of Economic Development Incentives," *Journal of the American Planning Association*, Vol. 70, No. 1 (Winter 2004): 29; and
Greg LeRoy, "Trends in State Business Incentives: More Money and More Accountability," *Spectrum: The Journal of State Government*, Vo. 77, Number 1 (Winter 2004): 17.

[22] Ronald Fisher, "The Effects of State and Local Public Services on Economic Development" in the Proceedings of a Symposium on the Effects of State and Local Public Policies on Economic Development, *New England Economic Review*, March/April (1997): 53-82. See also, Sherry Jarrell, "Law and Economics of Regulating Local Economic Development Incentives," *Wake Forest Law Review*, (September 2006): 825-6.

[23] John P. Blair and Robert Premus, "Major Factors in Industrial Location: A Review." *Economic Development Quarterly* 1, 1 (February, 1987): 82.

[24] Ibid., at 83.

APPENDIX ONE

In 1983, Newman measured how improvements in state corporate income tax policy affected regional business growth, concluding that there was considerable support for "the argument that corporate tax rate differential(s) between states…have been major factors influencing the redistribution of industry toward the South."[25] In short, reductions in effective tax rates acted as an incentive for relocation.

Timothy Bartik, Senior Economist at the Upjohn Institute for Employment Research, has published widely on measuring the impact tax policy has on business behavior. In 1985, Bartik estimated the relationship between tax policy and business decisions on plant expansion, finding an elasticity of -.2 to -.3. He concludes from his research that "…state taxes affect business location, contradicting the conventional wisdom in the economic literature, although the tax effect is of modest magnitude."[26]

In research published in 1991, Bartik finds in 48 of the 57 studies conducted between 1979 and 1991, "some evidence of significant negative effects of state and local taxes on regional business growth."[27] Across states and metropolitan regions, state and local taxes had elasticities ranging from -0.1 to -0.6 on interregional business location decisions, and -0.1 to -0.3 for intrametropolitan decisions. From these studies, he calculated the long-run mean elasticity of local economic activity with respect to state and local taxes to be -.25.

In 1995, Phillips and Goss completed a meta-analysis of the research Bartik reviewed in his 1991 study, finding that their "results generally support the conclusions reached earlier by Bartik."[28] Consistent with Bartik's research, in 1997 Wasylenko reviewed 75 studies, considering the wide range of estimated interregional elasticities of economic activity with respect to taxes. He finds that "the review of the literature suggests that taxes have a small, statistically significant effect on interregional location behavior."[29] He suggests that the interregional elasticity is -0.2, but cautions that "all elasticity estimates must be viewed in the context of the state and its fiscal position vis-à-vis other states." In 2004, Peters and Fisher, by extension, link previous elasticity estimates regarding tax policy to the use of economic incentives, as does Bartik in 2009.[30]

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[25] Robert J. Newman, "Industry Migration and Growth in the South" *The Review of Economics and Statistics,* Vol. 65, No. 1 (Feb., 1983): 76-86, 85.

[26] Timothy J. Bartik, "Business Location Decisions in the United States: Estimates of the Effects of Unionization, Taxes, and Other Characteristics of States" *Journal of Business & Economic Statistics*, Vol. 3, No. 1 (Jan., 1985): 19, 21.

[27] Timothy J. Bartik, "Who Benefits from State and Local Economic Development Policies?" (Kalamazoo: W.E. Upjohn Institute for Employment Research, 1991): 39, 43, 40.

Also see Timothy J. Bartik, "The Effects of State and Local Taxes on Economic Development: A review of Recent Research" (Kalamazoo: W.E. Upjohn Institute for Employment Research, 1992): 103, 105.

Timothy J. Bartik, "Jobs, Productivity, and Local Economic Development: What Implications Does Economic Research Have for the Role of Government?" *National Tax Journal*, vol. 47 (1994): 847–62.

Timothy J. Bartik, "Taxes and Local Economic Development: What Do We Know and What Can We Know?" Proceedings of the Eighty- Seventh Annual Conference on Taxation,. Charleston, SC: National Tax Association-Tax Institute of America (November 13, 1994): 102–106.

[28] Joseph M. Phillips and Ernest P. Goss, "The Effect of State and Local Taxes on Economic Development: A Meta-Analysis" *Southern Economic Journal,* Vol. 62, No. 2 (Oct., 1995): 329.

[29] Michael Wasylenko, "Taxation and economic development: the state of the economic literature," *New England Economic Review* (March, 1997): 49.

[30] Alan Peters and Peter Fisher, "The Failures of Economic Development Incentives" *Journal of the American Planning Association*, Vol. 70, No. 1 (Winter 2004): 29.

Timothy J. Bartik, "What Works in State Economic Development?" In *Growing the State Economy: Evidence-Based Policy Options*, 1st edition, Stephanie Eddy and Karen Bogenschneider, eds. (Madison, WI: University of Wisconsin, 2009): 29.

In 2007, Bartik concludes that prior literature reviews suggest that the elasticity is between -0.2 and -0.3.[31] In 2012, Bartik used previously published elasticities to measure the probability that a widely-used, discretionary income tax credit for new job creation would be decisive in business location and expansion decisions. He finds the probability ranged between two percent and 24 percent. Bartik concludes that his seemingly low probability still produced a positive return on investment, due to the program design: the credits were available only for high-wage, export-based businesses, which resulted in a high multiplier effect.[32]

At least one state applied the evolving consensus on elasticities to its measurement of state-offered incentives. In its review of the JOBZ program, Minnesota's version of the Enterprise Zone, the Minnesota Office of the Legislative Auditor estimates that 21 percent of the jobs created in the zone were attributable to the program.[33]

Skepticism Regarding the Econometric Studies...

However, some researchers have expressed skepticism about the econometric research, criticizing both the methodology and the value of the research findings. Buss reviewed these studies—stating that because "methodological problems are pervasive…validity becomes a major concern," identifies their limitations and weaknesses, and offers compensation strategies, including the use of simulations in lieu of static models.[34]

McGuire is skeptical because of her own research on the subject—one study of which is included in Bartik's 1991 review—and the implications for recommendations to or conclusions by policy-makers:

> "With respect to the interstate and interregional studies, despite the number of studies with significant coefficients, I find it difficult to be convinced that taxes are an important factor in explaining differences in business location decisions and economic activity between states or regions. In part I believe the discrepancy between my conclusion and that of many other scholars of the topic is due to our different perspectives. I came to this topic through the tax-study, blue-ribbon-commission route. I have seen firsthand state policymakers grasping for straws. I simply do not think that the evidence allows us to comfortably advise lawmakers that reducing the corporate income tax rate or the personal income tax rate will revive a flagging state economy."[35]

Lynch critiques the research, minimizes the significance of the findings, and suggests they are subject to "misuse, misinterpretation, or misunderstanding" by proponents of incentives. He notes specifically that:

- The econometric studies fail to adequately take into account the interrelationship between taxes and public services.

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[31] Timothy J. Bartik, "Solving the Problems of Economic Development Incentives." *In Reining in the Competition for Capital*, Ann Markusen, ed. (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2007): 106.

[32] Timothy J. Bartik and George Erickcek, (2012). "Simulating the Effects of Michigan's MEGA Tax Credit Program on Job Creation and Fiscal Benefits." Upjohn Institute working paper; 12-185, (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2012): 21.

[33] Minnesota Office of the Legislative Auditor, "Evaluation Report: JOBZ Program" (February 2008): 94.

[34] Terry F. Buss, "The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions: An Overview of the Literature." *Economic Development Quarterly* 15:19-105 (2001): 95.

[35] Therese J. McGuire, "Do Taxes Matter? Yes, No, Maybe So." *State Tax Notes* (June 2003): 9.

- The studies suggest only small effects of taxes on economic activity—with the results of these studies often inconsistent with each other, not reproducible, and unreliable.
- The negative effects of state and local taxes that the econometric studies report are likely somewhat overblown. But, even if the findings of the econometric studies are not exaggerated, their results do not support the notion that state and local tax cuts and incentives can be counted on to create numerous jobs or to create jobs in a cost effective manner.
- Contrary to the assumption used by all the econometric studies, state and local taxes may be largely irrelevant to business investment decisions.
- And finally, the reported results may be meaningless because most of the studies are measuring their explanatory variable—tax burdens— inaccurately. Whenever an explanatory variable is misspecified, it is impossible to know if the econometric results accurately reflect the impact of the variable.[36]

Weiner echoes earlier criticisms of the research and notes that the "various attempts to replicate the studies" proved fragile. In addition, she states "it is unclear" how Bartik's findings can be applied to incentives, as they may be unique in design, are targeted at specific types of businesses or activities, and operate under different conditions.[37]

Jarrell, Shoesmith, and Robbins find that "(o)verall, the analytical approaches are so disparate that the findings offer little or no guidance to policymakers."[38] Wong notes in his review of the research on location decision studies that they "continue to produce conflicting conclusions about the impact of incentives."[39]

Conclusion…

Evaluating the extent to which economic development incentives are determinative in business location decisions is challenging. Survey research is instructive but may be unreliable, principally due to the unavoidable self-interest of respondents. The studies commissioned by various states identify the problems verifying the "but for" condition is satisfied. While econometric studies show, to some extent, the relationships between incentives and business behavior, there is some skepticism in the academic community regarding the usefulness and applicability. Finally, a review of the academic literature reveals a lack of consensus on the degree of influence that incentives have on business location decisions.

[36] Robert Lynch, "Rethinking Growth Strategies: How State and Local Taxes and Services Affect Economic Development" Economic Policy Institute, Washington DC (2004): 28.

[37] Jennifer Weiner, "State Business Tax Incentives: Examining Evidence of their Effectiveness" Federal Reserve Bank of Boston (2009): 18-19.

[38] Sherry L. Jarrell, Gary Shoesmith and J. Neal Robbins, "Law and Economics of Regulating Local Economic Development Incentives" *Wake Forest Law Review* (September 2006): 827.

[39] John D. Wong, "Strategic Analysis of Economic Development Expenditures by Kansas State Government and Five Surrounding State Governments: FY 1989 – FY 2007." Hugo Wall School of Urban and Public Affairs, Wichita State University (2007): 32.

APPENDIX TWO

DEO Legacy Model Methodology

The Department of Economic Opportunity uses an economic impact model to analyze the projected economic benefit over ten years for each applicant requesting state economic development incentives for a project. Pursuant to s. 288.061 (2), F.S., beginning July 1, 2013, the Department must use an economic impact model established by the Office of Economic and Demographic Research (EDR) to calculate the economic benefits for each project. According to s. 288.005, F.S., economic benefits are calculated as the gains in state revenue (taxes attributable directly to the business or those generated as a result of the increased economic activity rippling through the economy) as a percentage of the state's investment in the project. The state's investments are the various incentives offered to the business via tax refund, tax credit, or cash grant.

The Department's economic impact model has been in use many years dating back to the former Florida Department of Commerce. The model has undergone significant revisions, most recently in 2010, when EDR was tasked by the Florida Legislature to review and recommend changes to the model. As charged in s. 288.061 (2), F.S., a full methodological review was completed by EDR in 2013. Economic benefits are now calculated in a manner consistent with Return on Investment (ROI) calculations. Results prior to 2013 are expressed as a Payback Ratio and are not comparable with ROI.

The Department's economic impact model uses RIMS II multipliers, developed by the U.S. Department of Commerce's Bureau of Economic Analysis, to estimate the additional economic activity (induced and indirect effects) generated by the direct economic activity of the project (direct effects). For example, the construction of a new building will lead to an increase in production in industries that supply construction materials (indirect). Construction workers will spend their paychecks in the economy buying groceries and visiting dining and entertainment establishments (induced). These ripple effects are referred to as indirect and induced economic activity. By including indirect and induced activity, the impact analysis becomes more comprehensive than typical financial impacts developed by state government.

The estimate of the direct economic activity is provided by the applicant for state economic development incentives. The applicant provides estimates of the number and timing of net new jobs to be hired by the business, the average annual wage to be paid and the amount to be invested in capital such as facilities and equipment.

The number of net new jobs and the average annual wage are used to estimate the increased company output (direct sales). The RIMS II multipliers are applied to the direct sales estimate to calculate the resulting indirect and induced sales. Effective sales and corporate income tax rates are applied to the sales estimates where applicable to determine the anticipated sales and corporate income taxes to be paid by the applicant and other businesses.

In addition to the sales and corporate income taxes that are generated as a result of the project, sales tax revenue is also generated from the project's estimated capital expenditures for construction materials, machinery and equipment and from any indirect and induced economic activity resulting from the capital expenditures.

The model calculates ROI for the ten year period by dividing the total gains in state revenue by the total incentive dollars paid to the business. In addition, the model reports estimated indirect and induced jobs attributable to the economic development project.

APPENDIX THREE

State Enterprise Zone Programs

	State	Year of Source Data	State EZ Awards (nominal dollars)	2012 Population	Per Capita Expenditures	Recent Program Changes
1	Colorado	2010	99,331,160	5,187,582	19.15	Reviewed 2012, credit caps 2013
2	New York	2013	374,000,000	19,570,261	19.11	Program closed to new entrants
3	New Jersey	2013	133,000,000	8,864,590	15.00	Contracted 2010, by Exec. Order
4	Louisiana	2012	67,184,450	4,601,893	14.60	Contracted 2013
5	South Carolina	2011	65,725,292	4,723,723	13.91	
6	Illinois	2010	104,200,000	12,875,255	8.09	Contracted 2012
7	Minnesota	2013	36,940,000	5,379,139	6.87	
8	Wisconsin	2012	24,850,000	5,726,398	4.34	
9	Maryland	2012	20,400,000	5,884,563	3.47	
10	Maine	2014	3,550,000	1,329,192	2.67	
11	Utah	2009	7,600,000	2,855,287	2.66	
12	Michigan	2012	23,700,000	9,883,360	2.40	Contracted 2011
13	North Dakota	2012	1,582,827	699,628	2.26	
14	Iowa	2013	6,228,007	3,074,186	2.03	Contracted 2009 & 2012
15	Virginia	2011	16,200,000	8,185,867	1.98	
16	Pennsylvania	2013	24,200,000	12,763,536	1.90	Sunset 2011, reenacted 2012
17	Hawaii	2005	1,500,000	1,392,313	1.08	
18	Texas	2012	27,400,000	26,059,203	1.05	Gov. Vetoed Reduction 2013
19	FLORIDA	2013	17,622,659	19,317,568	0.91	Program under review 2013
20	New Hampshire	2012	825,000	1,320,718	0.62	
21	Indiana	2010	2,601,943	6,537,334	0.40	
22	Rhode Island	2012	383,503	1,050,292	0.37	Contracted 2011
23	Connecticut	2012	1,200,000	3,590,347	0.33	
24	North Carolina	2010	2,640,000	9,752,073	0.27	
25	Alabama	2012	809,103	4,822,023	0.17	
26	Massachusetts	information unavailable				
27	Mississippi	information unavailable				
28	Missouri	information unavailable				
29	Washington	information unavailable				

Notes:
The information presented in this table contains preliminary research on State Enterprise Zone programs. From this research we find that thirty-six states have Enterprise Zone (EZ) programs, 7 of which are totally or near-totally locally funded. [California (?), Georgia, New Mexico, Ohio, Oregon, Oklahoma, and Tennessee.] Information relating to EZ programs in Washington, Massachusetts, Missouri, and Mississippi were unavailable at the time of this publication. States not listed in this table do no not have state EZ programs.

The 25 of the 29 state programs with available information are represented in the table above. Eighteen of the 25 states have a higher per-capita level of expenditures than Florida.

Kentucky, Nebraska, and Kansas state EZ programs were sunset or repealed in 2008, 2009, and 2011, respectively. Arkansas, Arizona, and California previously had state EZ programs, but were replaced in 2003, 2011, and 2013, respectively, with wage subsidy programs with broader purposes then historical EZ programs.
11/13/13

Florida's Enterprise Zones: Impact on Property Taxes

January 2014
Prepared by:
The Legislative Office of Economic and Demographic Research

APPENDIX FOUR

Introduction

In conjunction with the Legislative Office of Economic and Demographic Research's (EDR) 2013 evaluation of economic development programs, this report attempts to measure the impact of Enterprise Zones through changes in property values. Similar to a report issued by EDR in 2010, the study attempts to measure whether the Enterprise Zone program is effective in eliminating conditions of slum and blight within the zone as measured by changes in property values and whether the property values bring a positive return on investment to either local or state government.

2010 Analysis

In 2010, EDR was asked to review the methodology currently used by the Revenue Estimating Conference (REC) to place fiscal impacts on Enterprise Zone creation and expansion. The REC practice was to concentrate on impacts to the General Revenue Fund (GR). The REC assumed that economic activity in an Enterprise Zone would have occurred within the zone or somewhere else in the State absent formation of the zone. That is, businesses moving into the zone do not increase the total economic activity within the State.

The analysis began with a literature search to determine: (1) if the REC assumptions regarding economic activity and business location occurring irrespective of zone formation are flawed; and (2) if the REC methodology overlooks any significant areas that might impact state and/or local revenue collections. Results from the literature review guided the subsequent staff analysis.

The 2010 report concluded that the literature review did not provide any conclusive evidence that the current REC assumption about economic activity / business location within a zone was flawed. That is, there did not appear to be any inherent flaw in the REC method of calculating GR impacts. However, the review did reveal that possible impacts to property tax revenues have not been accounted for in the REC methodology
[1].

To address this finding, EDR staff conducted an analysis to probe possible property tax impacts from Enterprise Zone formation.

Hypothesis

The research question in the 2010 analysis was whether Enterprise Zones are effective as mechanisms to eliminate or reduce slum and blight in these areas, as measured by changes in property tax values.

To accomplish this analysis, EDR assumed that there is an inverse relationship between property values (just valuation) and the degree of slum and blight present in Enterprise Zones. As slum and blight conditions increase, property values decrease and vice-versa. Therefore, comparing property values for a period prior to Enterprise Zone designation and for a period following zone designation may demonstrate a clear change in the degree of slum and blight.

Further, the longitudinal comparison of property values of parcels in Enterprise Zones, characterized by higher levels of slum and blight, to areas surrounding Enterprise Zones, characterized by lower levels of

[1] Property tax revenue primarily impacts local governments and has an incidental effect on budgeted revenues through the Florida Education Foundation Program which funds public schools.

slum and blight, might provide an indication of a lessening of slum and blight conditions as the zone matures.

Applying these assumptions and this methodology to select Enterprise Zones, it would be expected that property values in Enterprise Zones would generally be declining in the period prior to Enterprise Zone designation or, at the very least, that values in the zone would be increasing less than the areas surrounding the zone prior to designation. At some point upon zone designation or subsequently, this trend would slow, stop or reverse entirely, if the Enterprise Zone mechanism is effective.

Methodology

Based on this hypothesis, EDR set out to analyze three Enterprise Zones, one rural and two non-rural, existing in counties with different population sizes. The analysis compared property values in the years prior to the Enterprise Zone designation and the subsequent years after the establishment of the Enterprise Zone.

For analytical purposes, it was desirable to identify Enterprise Zones that were reasonably compact and contiguous. It was also important that the zones were not zones that had been previously designated as zones or were part of previously designated zones. The Enterprise Zones in Hardee (rural), Hernando (non-rural) and Sarasota (non-rural) were used for these reasons.

Each of these areas were designated Enterprise Zones on January 1, 2002.

Findings and Conclusions

According to EDR's hypothesis, in order to conclude that Enterprise Zones were successful in reducing or eliminating conditions of slum and blight as measured by changing property values, it would be expected that property values in Enterprise Zones would be increasing at a lesser rate than the area outside the Enterprise Zones in the period prior to the Enterprise Zone designation. After the designation, the property appreciation trend of lower growth would slow, stop or reverse entirely, if the Enterprise Zones mechanism is effective. Ideally, this pattern would be clearly identifiable in each of Enterprise Zones analyzed.

The analysis of property values in Hardee, Hernando, and Sarasota Enterprise Zones from 1999 to 2004 did not support a conclusion that Enterprise Zones have a consistent, direct and quantifiable impact on property values. However, there is some reason to believe that these zones were not the worst areas in the counties to begin with—at least in terms of property values. This would skew the results. Moreover, property values may not be the best short-term measure. Consistent with the literature review, the report suggested that it is possible that more recognizable impacts may emerge over time.

While this analysis did not clearly demonstrate that Enterprise Zones positively impact property values in Florida, it did not provide proof that Enterprise Zones are ineffective. Even so, without more concrete evidence, it was determined that there was no reason to include property tax impacts within fiscal analyses at that time.

2013 Analysis

Recently enacted legislation directs the Office of Economic and Demographic Research (EDR) and the Office of Program Policy Analysis and Government Accountability (OPPAGA) to analyze and evaluate 18 state economic development incentive programs or tax exemptions over a recurring three-year schedule. The statute states that EDR is required to evaluate the "economic benefits" or return-on-investment of each program and to provide an explanation of the model used in its analysis and the model's key assumptions.

The Enterprise Zone program is scheduled for this review in 2013. In its evaluation of the Enterprise Zone program, EDR concludes that, for a number of reasons, the program is unlikely to have a positive return on investment to the state. However, the review recognizes that there may be other measures of program effectiveness.

The Enterprise Zone program differs from the other programs under review in that it is a non-discretionary entitlement program with limited reporting requirements. Unlike the other programs, there is no prequalification of "projects" by an executive agency and no pre-award evaluation of estimated economic benefit to the state. Program outputs necessary for evaluation through the statewide model are unavailable; as such information is not required to be submitted to qualify for individual program benefits. Given this constraint, EDR has elected to use another analytical approach to measuring the effectiveness of the Enterprise Zone program, which could indicate some measure of positive ROI -- at least to local governments in the form of increased property taxes.

Methodology

This analysis revisited the potential impact that Enterprise Zone designation has on property values within the zone, using property tax data from 1999 through 2012. This was an attempt to measure whether the Enterprise Zone program is effective in eliminating conditions of slum and blight within the zone, as measured by changes in property values relative to surrounding areas (See Charts 4, 5, 6). The study also examined whether this impact is at all indicative of any positive return on investment for either the local or state government.

Similar to the 2010 study, the 2013 study measured the change in property values for Enterprise Zones in three counties: Hardee, Hernando and Sarasota. The analysis compared property values before the Enterprise Zone designation and the subsequent years after the establishment of the Enterprise Zone.

However, the 2013 study introduced a new challenge: zone boundaries had changed for all three zones (See Charts 1, 2 & 3). To address this predicament; EDR measured the change in property values only for those parcels that were included in both the 2002 and the current zone boundaries. (Consequently, the total just values of parcels in each zone were lower than that identified in the 2010 study.) Table 1 shows the changes in value over the years for the three Enterprise Zones.

APPENDIX FOUR

Maps show parcels in the Enterprise Zones in 2003 (green diagonals) and 2010 (highlighted yellow) and the parcels that overlap.

Chart 1.

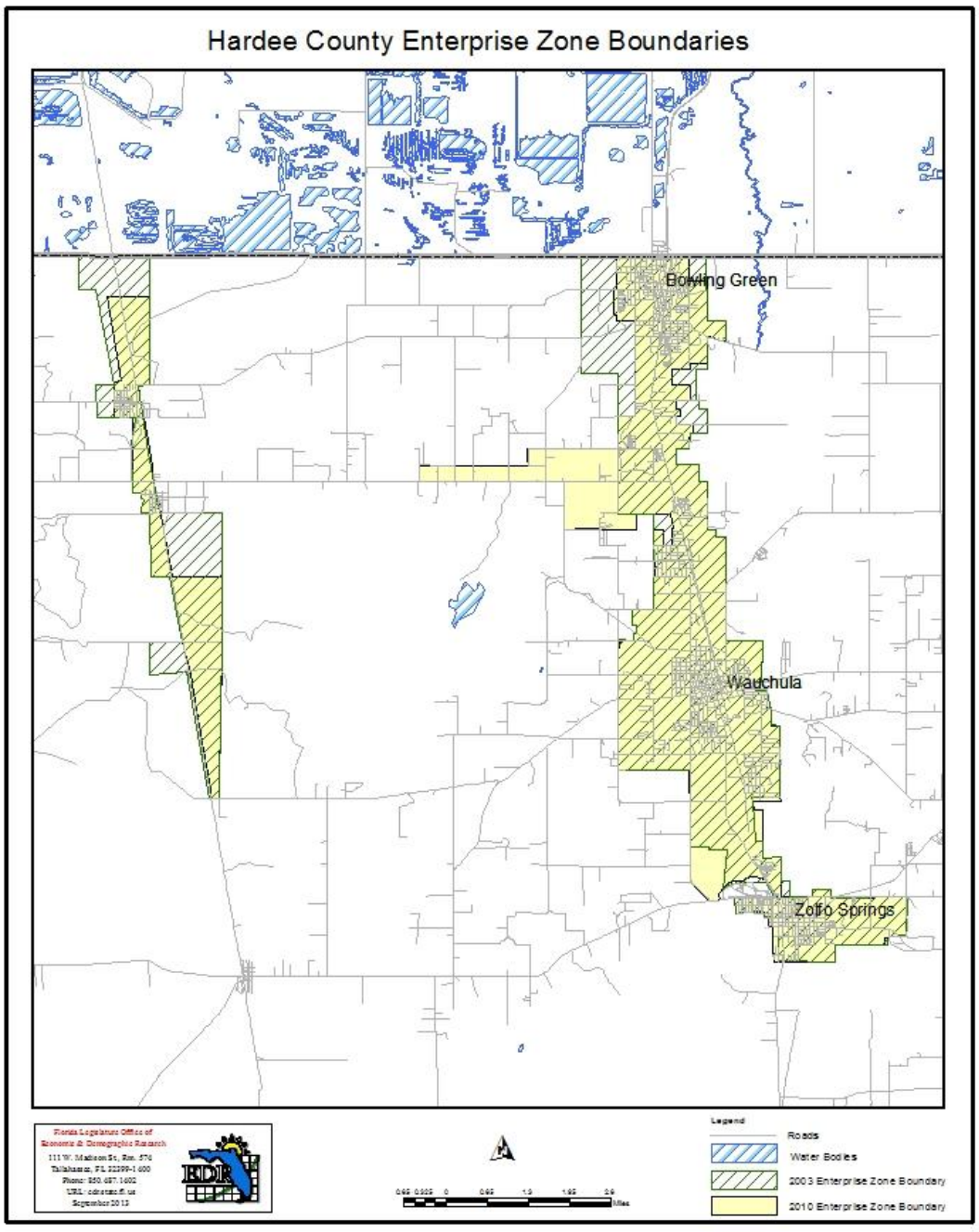

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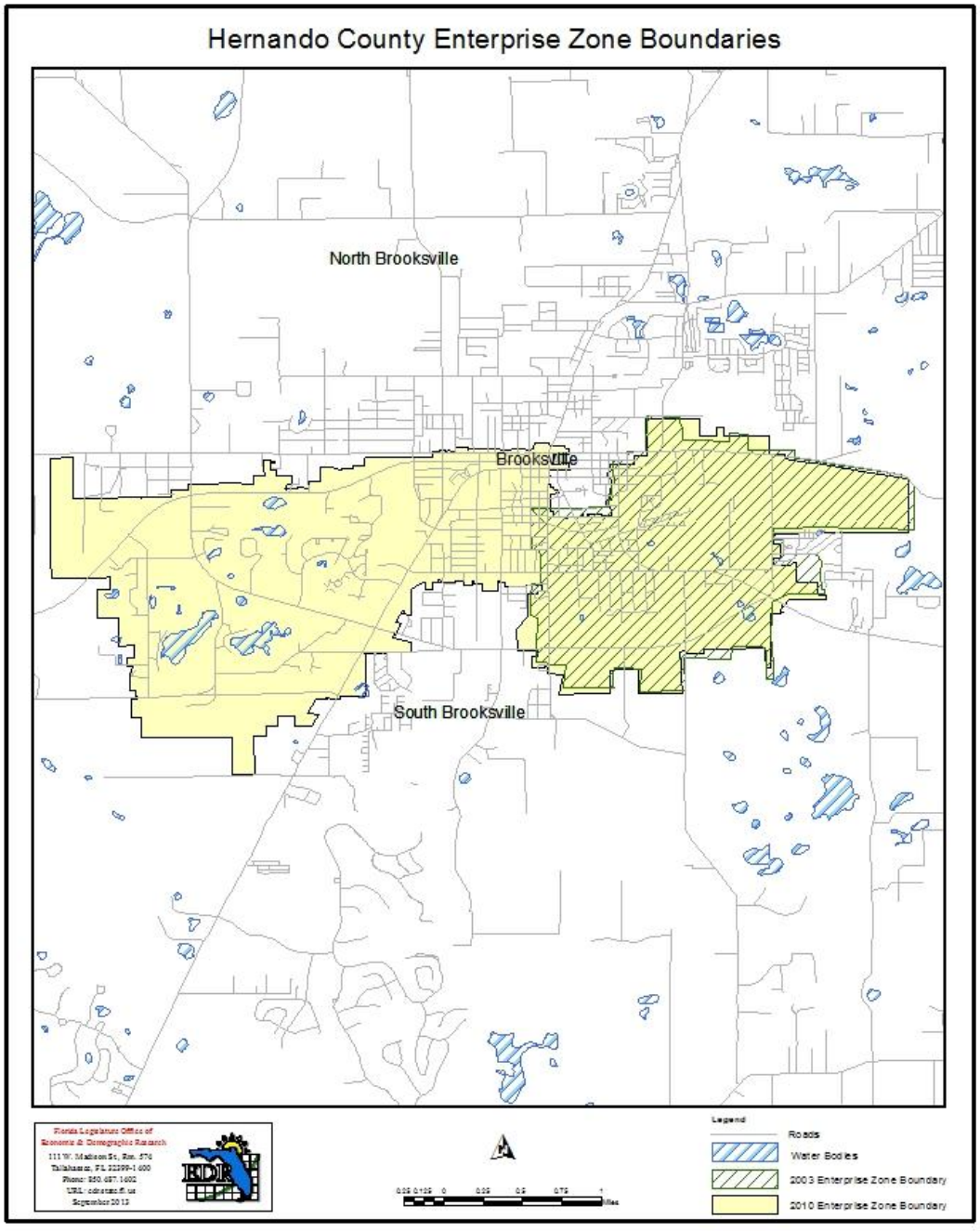
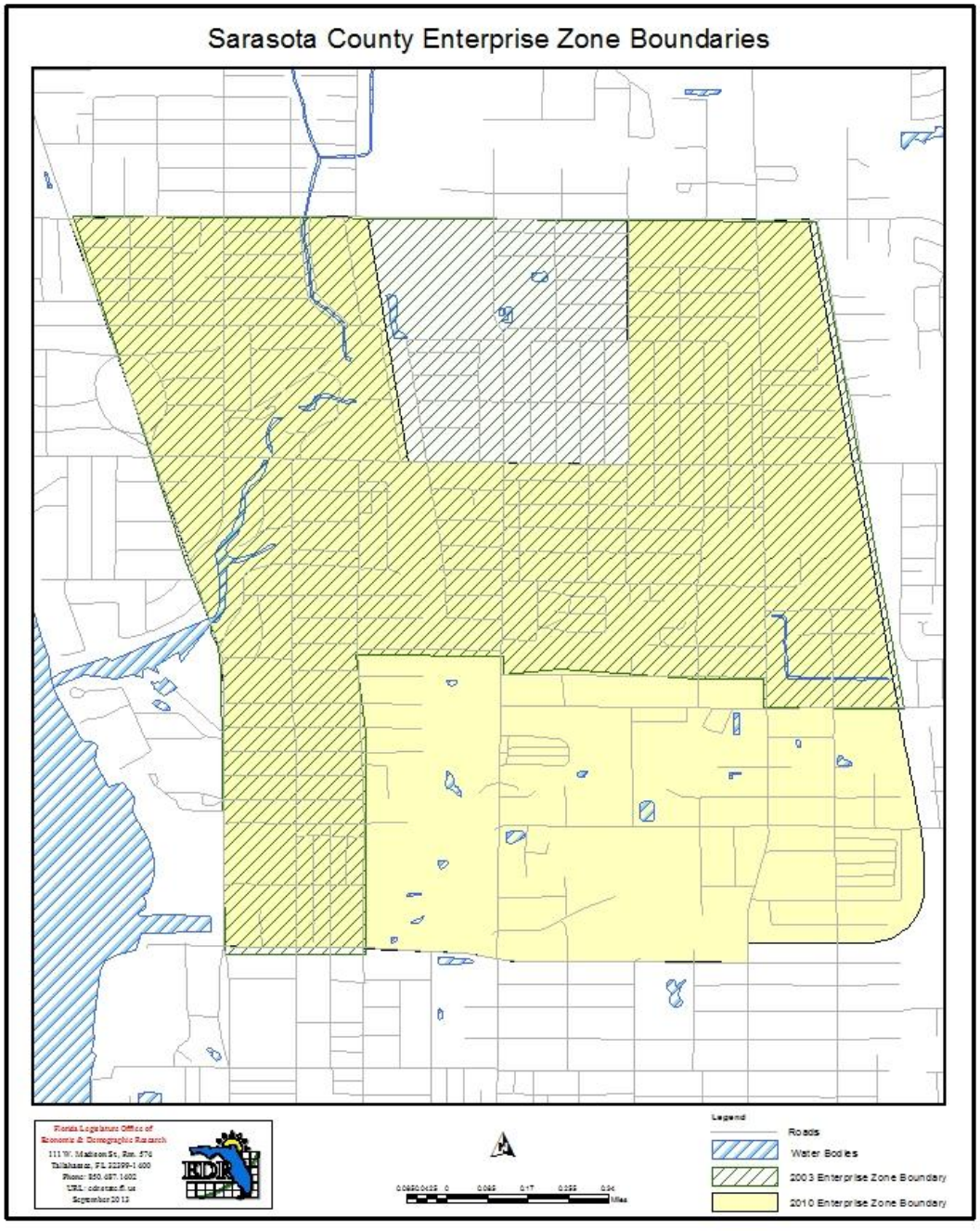
Chart 2.



APPENDIX FOUR

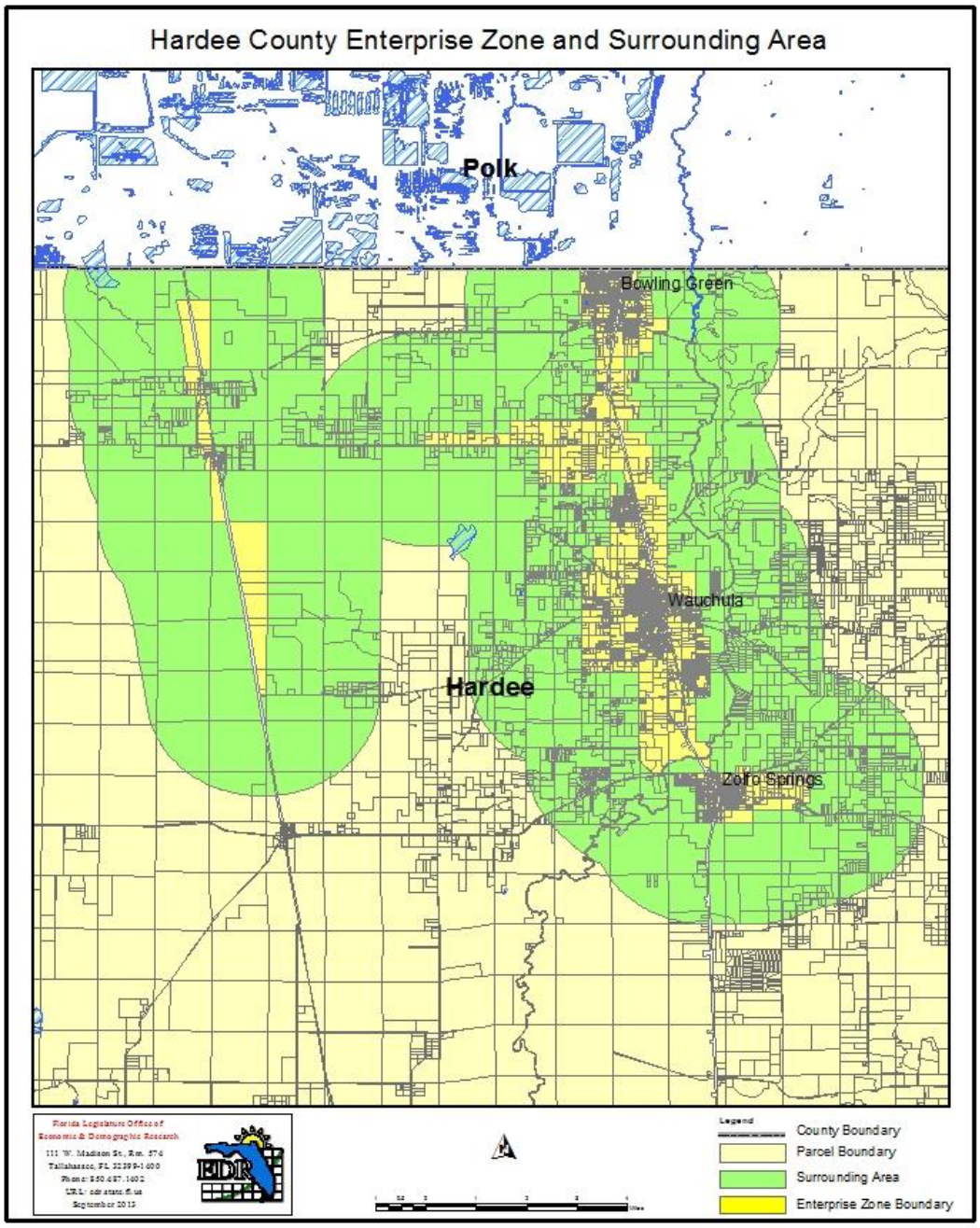
Chart 3.



APPENDIX FOUR

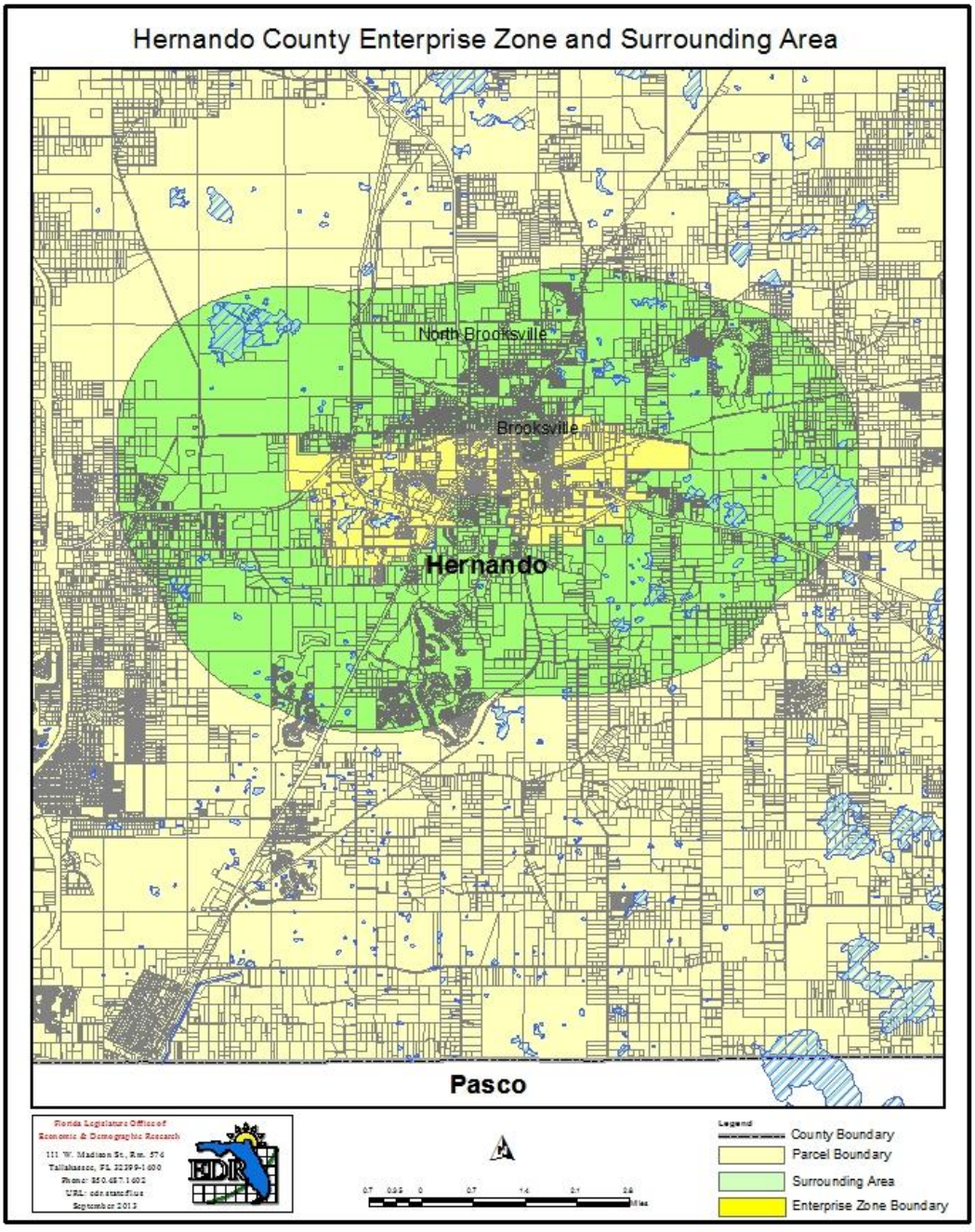
Charts 4-6 represent the parcels located within the zone (yellow) and a two mile radius around the zone that makes up the surrounding area of the zone (green).

Chart 4.



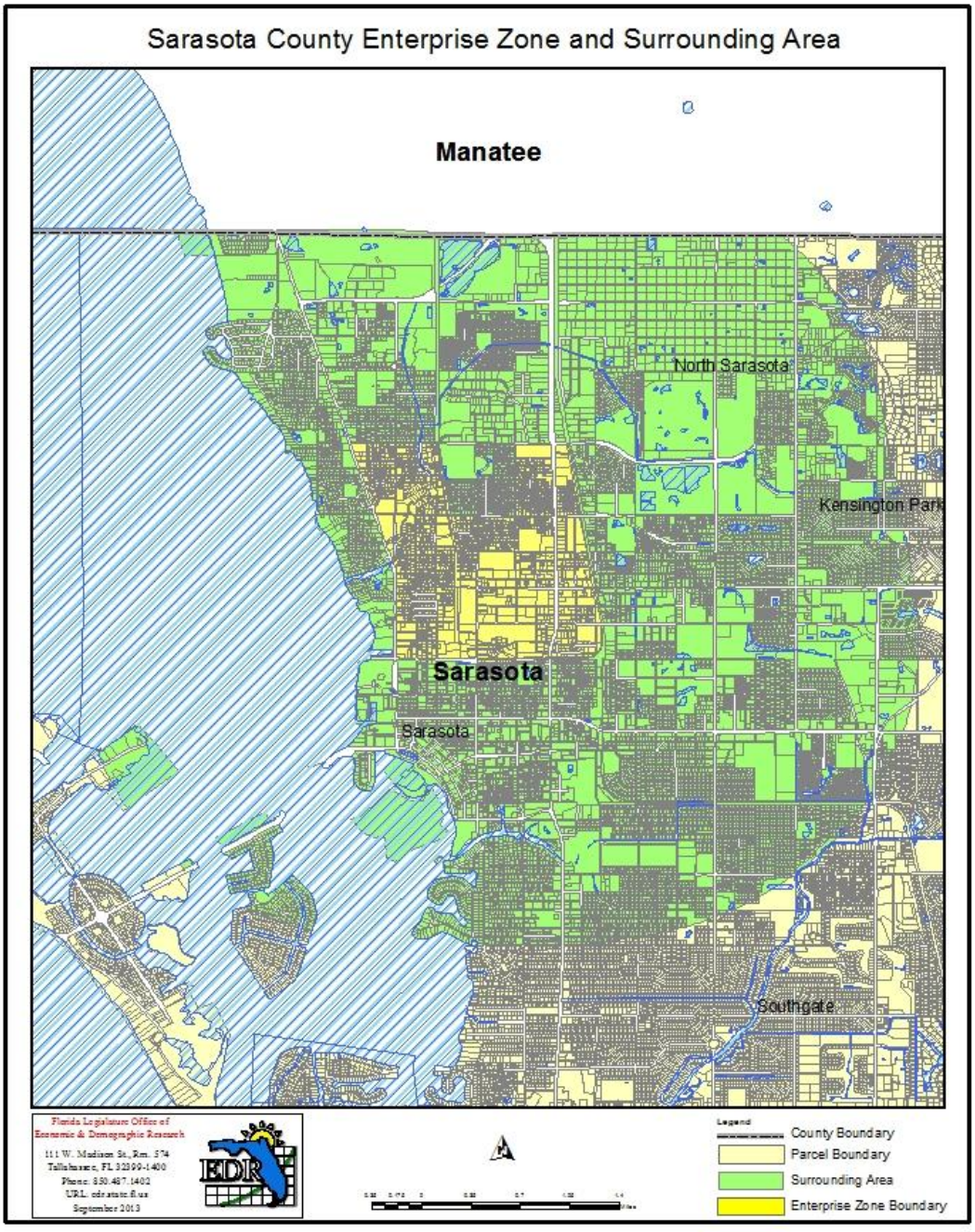
APPENDIX FOUR

Chart 5.



APPENDIX FOUR

Chart 6.



APPENDIX FOUR

Table 1

	Sarasota EZ JV	Sarasota SA JV	Hernando EZ JV	Hernando SA JV	Hardee EZ JV	Hardee SA JV
1999	114,278,489	1,391,627,576	24,425,359	283,915,001	237,211,758	271,705,106
2000	129,451,932	1,490,914,981	25,285,709	297,595,019	241,444,131	278,081,016
2001	135,953,700	1,642,229,066	28,420,073	330,349,316	249,824,501	277,965,807
2002	148,631,500	1,878,639,980	31,382,281	356,578,487	259,507,903	264,140,651
2003	177,360,800	2,168,399,273	33,236,483	380,356,026	268,882,749	271,596,386
2004	203,726,000	2,462,196,050	34,846,369	413,097,995	281,424,943	294,597,321
2005	241,698,760	2,974,598,746	38,982,971	473,730,789	287,082,837	309,293,627
2006	333,694,900	3,931,587,130	49,010,041	561,164,836	378,296,365	400,712,686
2007	373,220,900	4,240,509,756	49,373,615	601,132,097	466,207,989	522,044,889
2008	324,163,870	3,550,846,300	51,575,472	603,009,172	482,878,213	527,428,472
2009	261,359,400	3,080,712,700	47,064,989	533,830,271	460,053,342	435,074,545
2010	248,583,600	2,622,081,900	45,459,561	477,848,195	411,408,856	376,584,063
2011	206,326,500	2,356,729,020	44,067,659	453,717,135	356,744,189	342,951,669
2012	193,469,800	2,394,037,100	41,676,326	435,608,561	353,385,364	336,318,111

1999-2002	30.06%	35.00%	28.48%	25.59%	9.40%	-2.78%
2003-2012	9.08%	10.41%	25.39%	14.53%	31.43%	23.83%

Note: SA is an abbreviation for the 2 mile buffer surrounding the Enterprise Zone.

Findings and Conclusions

To measure the effectiveness of the Enterprise Zones, EDR looked at the differential growth rate between the parcels in the Enterprise Zone and parcels outside the Enterprise Zone located within a 2-mile buffer. If the differential growth rate changes favorably towards the EZ parcels then it would suggest that appreciation grew at a faster rate within the Enterprise Zones. The analysis showed that this was true in two out of the three Enterprise Zones. While the Sarasota County Enterprise Zone did not show this pattern, the growth rate within the Enterprise Zone still came close to matching the surrounding area.

The analysis of property values in Hardee, Hernando, and Sarasota Enterprise Zones from 1999 to 2012 did support a conclusion that Enterprise Zones have a direct and positive impact on property values. Consequently, this analysis does indicate that there is a potential positive return on investment for local government through additional property tax revenue.

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