

# Review and Update of Florida's Child Support Guidelines

**Report to the Florida Legislature  
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**Thomas S. McCaleb, Ph.D.  
David A. Macpherson, Ph.D.  
Stefan C. Norrbin, Ph.D.**

**Department of Economics  
Florida State University  
Tallahassee, Florida**

## Executive Summary

The Family Support Act of 1988 mandated that every state adopt a set of child support guidelines to be used as a “rebuttable presumption” in child support cases. The guidelines were to be based on economic data. The 1988 act also required the states to periodically review and update their schedules of child support obligations.

The Florida schedule of obligations was reviewed in 1992 and updated in 1993 to reflect changes in the Consumer Price Index. The guidelines were reviewed again in 1997 and in 2004,<sup>1</sup> both times with recommendations for significant changes in both the schedule and the underlying methodology. Neither set of recommendations was adopted by the Florida Legislature. Although specific provisions of the guidelines have been modified, the schedule that specifies the dollar amount of child support obligation for each income level has remained unchanged since 1993.

In October 2007, the Florida Legislature through its Office of Economic and Demographic Research contracted with the Department of Economics at Florida State University to undertake the present review. The review included eight tasks:

1. Update Florida’s existing schedule amounts based on the latest available economic data in anticipation of Florida continuing to use the income shares model to incorporate more recent data on family income shares allocated to children to the extent such data is publicly available.
2. Update the existing schedule amounts to reflect the effects of inflation and evaluate the methodological validity of this approach.
3. Within the context of the income shares model, determine how selected other states using the income shares model treat the apportionment of child support to accommodate visitation arrangements and cases of joint or shared custody.
4. Within the context of the income shares model, evaluate the treatment of low-income parents and suggest possible alternatives based on the experience in other states that mitigate or avoid the anomalies created by the “self-support reserve” in the income shares model.
5. Evaluate the problems created by imputation of income and consider alternative methods of imputing income, including the possible consequences of not

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<sup>1</sup> Thomas S. McCaleb, David Macpherson, and Stefan Norrbin, *Review and Update of Florida’s Child Support Guidelines, Report to the Florida Legislature*, Department of Economics, Florida State University, March 5, 2004.

imputing income, based on experience in other states using the income shares model.

6. Evaluate the methodological validity of adjusting the schedule of obligations to account for intrastate variations in the cost of living.
7. Provide continuing consulting services through the 2009 Legislative Session to the end of the contract period.
8. Itemize the tax benefits and burdens of child support in regard to the child care tax credit.

The updated estimates of expenditures on children are based on data from the 2004-2006 U.S. Consumer Expenditure Survey (the most recent available) recent data but adhere as closely as possible to the methodology of the original estimates from which Florida's current schedule was derived. The proposed updated schedule is contained in Appendix 2.1.

For a small range of relatively low-income parents, child support payments are higher under the proposed schedule than under the current schedule. For most parents, the support payments are lower. However, the differences are large only for relatively high-income cases that constitute a small proportion of the total number of child support cases.

- *Recommendation:* Adopt the updated schedule of child support obligations to replace the 1993 schedule.

Appendix 3.1 displays an updated schedule of obligations based on the Consumer Price Index as an alternative to the schedule in Appendix 2.1. Updating the schedule based on the Consumer Price Index avoids the necessity of re-estimating the cost of children and is therefore relatively less costly, simpler, and can be done more frequently. While CPI updating may be a reasonable approach for short-term adjustments, however, it is not a methodologically sound approach if the interval between updates is more than a few years. Because Florida's existing schedule of obligations has not been updated since 1993, adoption of the CPI adjusted schedule is not recommended.

- *Recommendation:* Implement annual or biannual revisions to the schedule of obligations based on the CPI but do not adopt the CPI-adjusted 1993 schedule.

Because child support obligations are tied to income and incomes are higher in high cost-of-living areas of the state, the typical noncustodial parent in a high cost area pays more in child support than an otherwise similar noncustodial parent in a low cost area. Therefore, adjusting support obligations for intrastate geographic cost of living differentials is unnecessary and would in fact result in overcompensation.

- *Recommendation:* Do not adopt intrastate differences in child support obligations based on geographic cost-of-living differentials.

Florida's schedule of child support obligations, like those in other income shares states, includes a "self-support reserve" and a range of incomes over which the full child support obligation is phased in. The purpose of these provisions is to ensure that the payment of child support does not push a noncustodial parent into poverty. The analysis in this review shows that these provisions are not effective because they apply to very few parents. Their applicability is unintentionally limited by certain features of the child support guidelines:

- applicability is determined by comparing the parents' *combined* income to the *single-person* poverty guideline.
- the amount of the self-support reserve has not been indexed to the poverty guideline and is now substantially out of date.
- the provisions are applied only to the basic child support obligation and not to the total obligation including childcare and children's health expenses.

The following three recommendations are intended to mitigate these problems.

- *Recommendation:* Apply the self-support reserve and the phase-in to the noncustodial parent's income alone.

This eliminates the inconsistency in using combined income with the single-person poverty guideline. It also avoids the anomalous situation in which more income received by the *custodial* parent increases the *noncustodial* parent's child support payment.

- *Recommendation:* Adopt procedures for annual or biannual updating of the schedule of basic child support obligations to reflect changes in the federal single-person poverty guideline.

Over time, provisions designed to prevent child support from pushing parents into poverty lose their applicability and effectiveness if these provisions are not regularly updated.

- *Recommendation:* Apply the self-support reserve to the total child support payment rather than to the basic support obligation only.

If the objective is to prevent child support from pushing parents into poverty, it is the total support payment that matters, not just the basic obligation.

An additional reason that the low-income provisions fail to prevent parents from being pushed into poverty by the payment of child support is the requiring for imputing income to a parent who has none or whose income is unknown. The justification for imputing income is to reduce or eliminate incentives for parents to hide income, remain

voluntarily unemployed, seek part-time employment when full-time employment is available, and fail to provide relevant information or appear in court.<sup>2</sup>

Income is usually imputed as if the parent earned the minimum wage for full-time year-round work. As a result, 34 percent of the Title IV-D cases and five percent of the private cases in a sample of Florida child support cases had this level of income despite the fact that only one percent of U.S. workers earn the minimum wage.<sup>3</sup> This indicates an overreliance on the use of minimum wage incomes for imputation of income in Florida. If income is imputed to both parents at this level, then the low-income provisions will not be effective.

- *Recommendation:* Limit imputation of incomes to those cases where one of the parties does not appear and no information is available from any other source and impute more realistic incomes based on the actual earnings of similar individuals.

To account the costs of shared parenting incurred by the noncustodial parent, child support payments in Florida may be reduced whenever the noncustodial parent's parenting time equals or exceeds 40 percent of the overnights in a year. This creates a "cliff" effect where a very small change in parenting time causes a very large change in the child support payment. Such a cliff can be a source of excessive disputes and litigation among the parents. Furthermore, imposing such a high threshold before allowing any adjustment discourages parents from adopting any alternative custody arrangement less than 40 percent.

- *Recommendation:* Adopt a visitation and shared parenting adjustment that applies to all levels of shared parenting but increases with the amount of the noncustodial parent's parenting time.

A noncustodial parent's child support payment equals the parent's prorated share of the basic obligation plus the parent's prorated share of actual childcare and children's health expenses. However, the amount of the payment for childcare expenses is reduced by 25 percent. The rationale for this reduction appears to be the availability to the custodial parent of a federal income tax credit for childcare expenses. In fact, the 25 percent tax credit is not available to all custodial parents, applies only over a narrow range of custodial parent incomes, and for most custodial parents in the upper range of incomes, the tax benefit is only about 20 percent.

The reduction in the noncustodial parent's share of childcare expenses is the only recognition in the child support guidelines of the tax benefits associated with children. However, other tax benefits exist and can be substantial. In low-income cases, these tax benefits are as high as 72 percent of the estimated cost of a child. By only recognizing the childcare credit, the current guidelines treat the tax benefits inconsistently.

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<sup>2</sup> Paul Legler, "Low-Income Fathers and Child Support: Starting Off on the Right Track", Denver: Policy Studies, Inc., (2003), p. 23.

<sup>3</sup> U.S. Census Bureau *Statistical Abstract of the United States*, (2002), Table 617 from: <http://www.census.gov/prod/2003pubs/02statab/labor.pdf>

Two recommendations follow from this analysis.

- *Recommendation:* Reduce or eliminate the 25 percent reduction in the noncustodial parent's share of childcare expenses.
- *Recommendation:* Include in the child support worksheet as shown in Appendix 7.1 an adjustment to the child support obligation to reflect the tax benefits of children.

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## Introduction and Overview

Federal law requires that each state periodically review and update its child support guidelines based on the most recently available economic data. In October 2007, the Florida Legislature, through its Office of Economic and Demographic Research, contracted with the Department of Economics at Florida State University to undertake this review. The members of the team conducting the review were:

Thomas S. McCaleb, Ph.D., Associate Professor of Economics  
David A. Macpherson, Ph.D., Rod and Hope Brim Eminent Scholar and Abba P. Lerner Professor of Economics  
Stefan C. Norrbin, Ph.D., Professor of Economics  
M. Paula Arce-Trigatti, Graduate Research Assistant in Economics  
Jennifer Baynes, Graduate Research Assistant in Economics  
Adrienne Mills, Graduate Research Assistant in Economics

The review consisted of eight tasks:

1. Update Florida's existing schedule amounts based on the latest available economic data in anticipation of Florida continuing to use the income shares model to incorporate more recent data on family income shares allocated to children to the extent such data is publicly available.
2. Update the existing schedule amounts to reflect the effects of inflation and evaluate the methodological validity of this approach.
3. Within the context of the income shares model, determine how selected other states using the income shares model treat the apportionment of child support to accommodate visitation arrangements and cases of joint or shared custody.
4. Within the context of the income shares model, evaluate the treatment of low-income parents and suggest possible alternatives based on the experience in other states that mitigate or avoid the anomalies created by the "self-support reserve" in the income shares model.
5. Evaluate the problems created by imputation of income and consider alternative methods of imputing income, including the possible consequences of not imputing income, based on experience in other states using the income shares model.

6. Evaluate the methodological validity of adjusting the schedule of obligations to account for intrastate variations in the cost of living.
7. Provide continuing consulting services through the 2009 Legislative Session to the end of the contract period.
8. Itemize the tax benefits and burdens of child support in regard to the child care tax credit.

The methodology used to develop Florida's schedule of child support obligations is described in Chapter 2, and the appendix to Chapter 2 contains an updated schedule of obligations based on the most recent available economic data.

Chapter 3 updates Florida's schedule of child support obligations for inflation based on cost-of-living data and discusses the validity of this approach to updating the schedule. The appendix to Chapter 3 presents an alternative table of child support obligations updated using the Consumer Price Index. Chapter 3 also discusses the use of geographic cost-of-living differentials in child support obligations.

Chapter 4 discusses the treatment of low-income families, and Chapter 5 discusses the related topic of imputation of income where the obligor either has no income or the obligor's income is unknown. Chapter 6 examines the treatment of visitation and shared parenting arrangements in child support guidelines, and Chapter 7 looks at the implications for child support payments of the federal income tax credit for childcare.

### ***Overview of the Report***

Chapter 1 describes the history of child support guidelines nationally, discusses the alternative approaches taken by the states to develop child support guidelines, and provides a cross-state comparison of the major features of child support guidelines. The analysis shows that there is no systematic relationship between the level of child support payments in a state and the particular model used although the models differ significantly in simplicity and transparency. The discussion in this chapter also shows that, in fact, there is little fundamental difference between the two most prevalent models.

Chapter 2 presents the results of updating the Florida's current schedule of child support obligations using data from the 2004-2006 U.S. Consumer Expenditure Survey (the most recent available). Updating the schedule requires first updating the estimates of expenditures on children from which the obligations are derived. The updated estimates of expenditures on children are based on recent data but adhere as closely as possible to the methodology of the original estimates from which Florida's current schedule was derived. The proposed updated schedule is presented in Appendix 2.1. The support obligations in the proposed schedule are generally lower than in the current schedule but the differences are not dramatic except at very low incomes. The reduction for low-

income parents is a result of the adjustment of the self-support reserve and phase-in range commensurate with the increase in the poverty guideline since 1993. Child support payments in the proposed schedule are higher for incomes just above the phase-in range except for parents with one child.

The third chapter updates the schedule of obligations using the Consumer Price Index rather than the Consumer Expenditure Survey. Updating based on the Consumer Price Index avoids the necessity of re-estimating the cost of children and is therefore relatively less costly, simpler, and can be done more frequently. While CPI updating may be a reasonable approach for short-term adjustments, however, it becomes much more problematic as the interval between updates increases. Over an interval as long as fourteen years, the time elapsed since Florida's schedule was last updated, the underlying distribution of consumer expenditures is unlikely to have remained unchanged as CPI-updating requires.

Chapter 3 also discusses adjusting child support obligations for intrastate geographic cost of living differences. This chapter argues that wages and incomes are typically higher in higher cost of living areas. Because child support obligations are correlated with income, the typical child support obligation in high cost-of-living areas is already higher than in low cost-of-living areas. To further adjust child support obligations based on differences in cost of living would amount to overcompensation. Furthermore, different measures of geographic cost-of-living differentials yield substantially different estimates, making any such adjustment somewhat arbitrary and dependent on one's choice of measure.

The fourth chapter considers the treatment of low-income parents. Florida's child support guidelines include provisions that are intended to prevent child support from pushing low-income noncustodial parents into poverty. However, the analysis here shows that these provisions are ineffective for several reasons: the use of combined income with the single-person poverty guideline, the application of the low-income provisions to the basic obligation rather than to the total child support obligation, and the failure to update the child support schedule regularly to reflect increases in the poverty guideline. An alternative approach is to move the adjustment for low incomes from the schedule of obligations to the child support worksheet. An appendix to Chapter 4 provides a modified version of Florida's worksheet that accomplishes this.

Another reason for the failure of the low-income provisions is the imputation of income to many noncustodial parents who have no income or whose income is unknown. The problems created by imputing income are discussed in Chapter 5 where it is shown that there is an overreliance in Florida on minimum wage, full-time, year-round work to impute income.

Originally, most states' child support guidelines made no provision for visitation or shared parenting. More recently, states have changed their guidelines in a variety of ways to compensate for the costs incurred by noncustodial parents who exercise visitation rights or have shared parenting arrangements. To account for these costs, child support

payments in Florida may be reduced whenever visitation exceeds 40 percent of the overnights in a year. The analysis in Chapter 6 shows that the 40 percent threshold creates a “cliff” effect where a very small change in visitation or custody causes a very large change in the child support payment. This can be a source of excessive disputes and litigation among the parents. Furthermore, imposing a high threshold before allowing any adjustment discourages parents from adopting any alternative custody arrangement less than 40 percent. An appendix to Chapter 6 provides a child support worksheet modified to include an adjustment for visitation and shared parenting with no threshold.

Finally, Chapter 7 takes up the treatment in the guidelines of the tax benefits associated with children, especially the tax benefits associated with childcare expenses. The child-related tax benefits offset some of the expenditures on which the child support obligation is based, but the child support guidelines do not take these benefits into account with one major exception. The exception is a 25 percent reduction in the amount of childcare expenses that are included in the child support payment based on the federal childcare tax credit. The guidelines worksheet can, however, be amended so that all the tax benefits are taken into account and shared proportionately between the two parents.

### ***Typical Child Support Cases***

As part of a previous review of child support guidelines in 2001, the Office of Program Policy Analysis and Government Accountability (OPPAGA) collected a sample of child support cases in Florida.<sup>1</sup> The OPPAGA sample was intended to be representative of the entire population and included cases from each county in Florida. The OPPAGA sample is described in greater detail in the 2004 review and update of Florida’s child support guidelines.<sup>2</sup>

While the OPPAGA sample may be representative of all child support cases in which a court order is filed, it is unlikely to be truly representative of all child support cases in Florida. Where the parents negotiate a private settlement that is endorsed by the court, no child support order may be entered and even if there is an order it may not be complete.<sup>3</sup> The cases of negotiated settlement are likely to involve higher income parents who can afford representation by an attorney. Therefore, the OPPAGA sample is likely biased toward lower income parents, which explains why the OPPAGA sample makes it appear that child support is overwhelmingly a low-income issue. Despite the bias in the sample, however, it provides the most complete and representative data available on child support cases in Florida.

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<sup>1</sup> Office of Program Policy Analysis and Government Accountability, Florida Legislature, *Special Review: Adherence to Florida’s Child Support Guidelines Appears to Be Improving*, Report No. 02-13, February 2002.

<sup>2</sup> Thomas S. McCaleb, David Macpherson, and Stefan Norrbin, *Review and Update of Florida’s Child Support Guidelines, Report to the Florida Legislature*, Department of Economics, Florida State University, March 5, 2004.

<sup>3</sup> Information obtained from an informal survey of selected court circuits.

The previous review extracted a subsample from the OPPAGA sample and used the subsample for analysis and illustration. From the subsample, six “typical” cases—three Title IV-D and three private—were constructed to show how alternative provisions and policy changes would impact Florida’s child support cases. This review relies on the same subsample and also utilizes these six typical cases. However, the incomes of the six cases have been updated to their 2006 equivalents, the most recent year available, using the Social Security Administration’s Index of National Average Wages. The child support obligation for each case has been recalculated based on the updated income.

# 1. History and Current Status of Child Support Guidelines

Before the mid-1970's, child support was almost exclusively governed by the states. Significant involvement by the federal government began with the passage of Title IV-D of the Social Security Act.<sup>1</sup> The federal involvement initially focused primarily on child support enforcement, with an emphasis on families eligible for the Aid to Families with Dependent Children (AFDC) program. Title IV-D mandated that the states establish a variety of offices and programs as well as adopt techniques to aid in child support collection.

Although formal child support guidelines first appeared in 1975 in Illinois and Maine, the Federal Child Support Enforcement Amendments of 1984 required all states to adopt advisory child support guidelines. Between 1984 and 1988, federal interest in child support significantly increased with the appointment of the Federal Advisory Panel on Child Support Guidelines. The panel released its recommendations in 1987 along with a report by Robert Williams, which developed a model for determining child support obligations including a proposed schedule of child support payments.

One year later, the Family Support Act of 1988 mandated that every state adopt a set of child support guidelines to be used as a “rebuttable presumption” in child support cases. The guidelines were to be based on the most current economic data. The 1988 act also required the states to periodically review and update their schedules of child support obligations. With little time to consider the issues involved, states tended to adopt one of two existing models for guidelines. The two choices were either the “percent-of-obligor” model developed earlier in Wisconsin or Robert Williams’s “income shares” model.

Florida adopted the income shares model. The Florida schedule of obligations was subsequently reviewed in 1992 and updated in 1993 to reflect changes in the Consumer Price Index. The guidelines were reviewed again in 1997 and in 2004<sup>2</sup>, both times with recommendations for significant changes in both the schedule and the underlying methodology. Neither set of recommendations was adopted by the Florida Legislature. Although specific provisions of the guidelines have been modified, the schedule that

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<sup>1</sup> This discussion draws heavily from Andrea H. Beller and John W. Graham, *Small Change: The Economics of Child Support*, New Haven and London: Yale University Press (1993), p. 162-69.

<sup>2</sup> Thomas S. McCaleb, David Macpherson, and Stefan Norrbin, *Review and Update of Florida's Child Support Guidelines, Report to the Florida Legislature*, Department of Economics, Florida State University, March 5, 2004.

specifies the dollar amount of child support obligation for each income level has remained unchanged since 1993.

### ***1.1 The Income Shares Model***

The income shares model is the basis for state child support guidelines in 36 states and the District of Columbia.<sup>3</sup> The premise of the income shares model is that a child should receive the same amount of expenditure as if the family were intact, even if the child is not the product of an intact family. The child support obligation is determined as a percentage of the combined income of both parents. In Williams's original formulation of the model, the percentage was derived from estimates of average expenditures on children as a function of the income of intact two-parent households.

In this approach, the incomes of the custodial and noncustodial parents are combined. The basic child support obligation equals the average amount that an intact family with this level of income spends on the child(ren), not including expenditures on childcare or children's health care<sup>4</sup>. This basic support obligation is apportioned to the parents in proportion to their respective shares of the combined income. The custodial parent is simply assumed to spend the apportioned amount on the child(ren). The guidelines create at most a "moral obligation" but not a legal obligation for the custodial parent. The noncustodial parent's share of the basic obligation becomes a court-ordered, legally-mandated child support payment from the noncustodial parent to the custodial parent

Expenditures on childcare and on children's health care (primarily health insurance) are excluded from the expenditure estimates from which the basic child support obligations are derived. After determining the basic obligation, the actual amounts expended by the parents for these items are added to the basic obligation and apportioned between the parents. The noncustodial parent's share of these expenses is then added to the court-ordered child support payment.<sup>5</sup>

Williams's original formulation of the income shares model relied on estimates of expenditures on children by Thomas Espenshade using what is known as the Engel approach to determining family equivalence.<sup>6</sup> More recently, alternative estimates of expenditures on children have been developed by David Betson using a Rothbarth approach to determining family equivalence.<sup>7</sup> Both approaches are more fully described in Chapter 2.

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<sup>3</sup> Within the last four years, three states and the District have replaced their previous guidelines with guidelines based on the income shares model.

<sup>4</sup> The basic obligation is supposed to include a minimal amount for routine health care. In most states, this amount is in the range of \$200-\$300 annually.

<sup>5</sup> In practice, the additional amount for children's health care is usually the premium cost of health insurance coverage for the child.

<sup>6</sup> Espenshade, Thomas J., 1984, *Investing in Children*, The Urban Institute Press, Washington, DC, 1984.

<sup>7</sup> David Betson, "Alternative Estimates of the Cost of Children from the 1980-1986 Consumer Expenditure

Many states that have revised their child support guidelines since 1990 have converted from the Espenshade-Engel estimates to the Betson-Rothbarth estimates. Because Florida continues to use the guidelines adopted from Williams's original proposal, they are based on the Espenshade-Engel estimates.

## ***1.2 Other Child Support Guidelines Models***

Fourteen states base their child support guidelines on models other than the income shares model. Ten states use the earlier percent-of-obligor model developed in Wisconsin. Three states base their guidelines on the "Melson formula" which originated in Delaware, and Massachusetts uses a hybrid of the income shares model and the percent of obligor model.

### *Percent of Obligor Income*

The percent-of-obligor model is the simplest and most transparent of the models. It calculates the child support payment as a percentage of the noncustodial parent's income alone. Therefore, the payment is not affected by the custodial parent's income. Wisconsin's guidelines lay out the underlying premise of the percent-of-obligor model: "a child's standard of living should, to the degree possible, not be adversely affected because his or her parents are not living together."<sup>8</sup>

Child support guidelines in the ten states that use the percent-of-obligor methodology exhibit considerable variation. The major differences among the states arise from the definition of income and the percentages applied to that income. Some states apply the percentage to gross income, as in Nevada and New York, while others like Illinois and Mississippi use net income.<sup>9</sup> The percentages in all states increase with the number of children, but only in North Dakota does the percentage vary with the noncustodial parent's income.<sup>10</sup> Table 1.1 compares the percentages applied to noncustodial parent income in selected states.

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Survey," U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, September (1990). Betson subsequently updated his estimates using data from the 1996-1998 Consumer Expenditure Survey in "Chapter 5: Parental Expenditures on Children." in Judicial Council of California, *Review of Statewide Uniform Child Support Guideline*. San Francisco, California (2001). His most recent estimates are in "Appendix I: New Estimates of Child-Rearing Costs", *State of Oregon Child Support Guidelines Review: Updated Obligation Scales and Other Considerations*, Report to State of Oregon, Prepared by Policy Studies Inc., Denver Colorado (2006).

<sup>8</sup> Wisconsin Child Support Guidelines, Chapter DWD 40.

<sup>9</sup> Note that Mississippi's guidelines claim to use "adjusted gross income" but then proceed to define "adjusted gross income" as gross income less taxes and other payments.

<sup>10</sup> North Dakota's percentages decrease with income. For example, the percentage for one child is 25% for \$1000 per month income but 16.8% for \$12,500 per month income.



**Table 1.1**  
**Percentages Utilized by Selected Percent of Obligor Income States**

Number of Children	Percentage of Income			
	Gross Income		Net Income	
	<i>New York</i>	<i>Nevada</i>	<i>Mississippi</i>	<i>Illinois</i>
1	17%	18%	14%	20%
2	25%	25%	20%	28%
3	29%	29%	22%	32%
4	31%	31%	24%	40%
5	35%	33%	26%	45%
6	35%	35%	26%	50%

The differences between the income shares model and the percent-of-obligor income model are easily exaggerated. In fact, the income shares model is, as Appendix 1.1 shows, only a variant of a percent-of-obligor income model where the percentage depends on both parent’s incomes. Indeed, New Hampshire, which is typically classified as a percent-of-obligor state, determines its child support obligation using the combined income of both parents. On the other hand, in California, an income shares state, when the noncustodial parent lacks custody or visitation rights, the child support obligation is often a fixed percent of the noncustodial parent’s income.

It is often claimed that a key feature of the income shares model is that child support obligations are based on actual family expenditures on children, the so-called “cost of children”. But the percentages in the original Wisconsin percent-of-obligor model were derived from estimates of the cost of children by Jacques Van der Gaag,<sup>11</sup> and Arkansas bases its guidelines on the Betson-Rothbarth estimates of the cost of children, the same estimates used by many income shares states.<sup>12</sup>

*Melson Formula*

The Melson formula model is used in three states (Delaware, Hawaii, and Montana). Delaware’s Melson formula consists of two parts. First, a primary support allowance, based solely on the number of children, is determined. If, after paying the primary support allowance, the noncustodial parent still has income available above the amount needed to maintain a minimum standard of living, then a standard-of-living adjustment (SOLA) is applied. The standard-of-living adjustment lets the child share in the portion of the parent’s income that exceeds the amount needed to maintain a minimum standard of living. Table 1.2 shows Delaware’s primary support allowances and SOLA percentages.

<sup>11</sup> Jacques Van der Gaag, “On Measuring the Cost of Children,” *Child Support: Technical Papers*, Volume III, SR32C, Institute for Research on Poverty, Special Report Series, University of Wisconsin, 1982.

<sup>12</sup> See *Report on the Michigan Child Support Formula*, Policy Studies Inc., 2002, p. 30.

**Table 1.2  
Delaware's Primary Support Allowance and SOLA Percentage<sup>13</sup>**

<b>Number of Children</b>	<b>Primary Support Allowance</b>	<b>SOLA Percentage</b>
1	\$350	16%
2	\$650	26%
3	\$920	33%
4	\$1,170	39%
Each additional	+\$220	+4%

*Hybrid Model*

Massachusetts uses a “hybrid” model, a combination of the percent-of-obligor and income shares models. The hybrid model attempts to capture the simplicity of the percent-of-obligor income model while also allowing the child support payment to respond to both parents’ incomes.

The basic order is determined according to the percent-of-obligor model. The percentages, which vary by income, are displayed in Table 1.3. When the custodial parent’s gross annual income minus childcare expenses exceeds \$20,000, the basic order is reduced by a fraction whose numerator equals the custodial parent’s excess income (gross income in excess of \$20,000) divided by the sum of the noncustodial parent’s income and the custodial parent’s excess income.<sup>14</sup> This results in an adjustment percentage that ensures that the child support payment is sensitive to the custodial parent’s income as well as the noncustodial parent’s income. Effectively, this means that once the custodial parent’s income rises above \$20,000, the noncustodial parent is allowed a credit against the basic support obligation. The credit increases as the custodial parent’s income increases.

**Table 1.3  
Massachusetts's Formula for Determining Child Support<sup>15</sup>**

<b>Gross Weekly Income</b>	<b>Number of Children</b>		
	<b>1</b>	<b>2</b>	<b>3</b>
\$0 - 100	Discretion of the court, but not less than \$80 per month		
\$101 - 280	21%	24%	27%
\$281 - 750	\$59 + 23%	\$67 + 28%	\$76 + 31%
<b>(% refers to all dollars over \$280)</b>			
\$751 and over	\$167 + 25%	\$199 + 30%	\$222 + 33%
<b>(% refers to all dollars over \$750)</b>			

<sup>13</sup> Delaware Child Support Guidelines, Adapted from: <http://courts.state.de.us/family/formula02.pdf>

<sup>14</sup> “Excess” income is gross income above \$20,000.

<sup>15</sup> Massachusetts Child Support Guidelines, “Child Support Obligation Schedule” Adapted from: <http://www.cse.state.ma.us/parents/cseguide.htm>

### ***1.3 Comparison of Child Support Obligations across States***

Figures 1.1-1.6 show the amount of child support that the noncustodial parent in each of the six typical Florida cases would pay in each state. Each set of comparisons assumes only the most basic facts: the income of each parent and the number of children. No adjustment is made for visitation or joint or shared custody. It is assumed that there are no pre-existing child support orders. The comparisons show the basic obligation only and do not include any additional amounts for childcare, extraordinary health expenses, or health insurance premiums. To compute a support obligation in those states that use gross rather than net income, the Florida Department of Revenue electronic child support worksheet has been used to generate a gross income corresponding to each parent's net income.

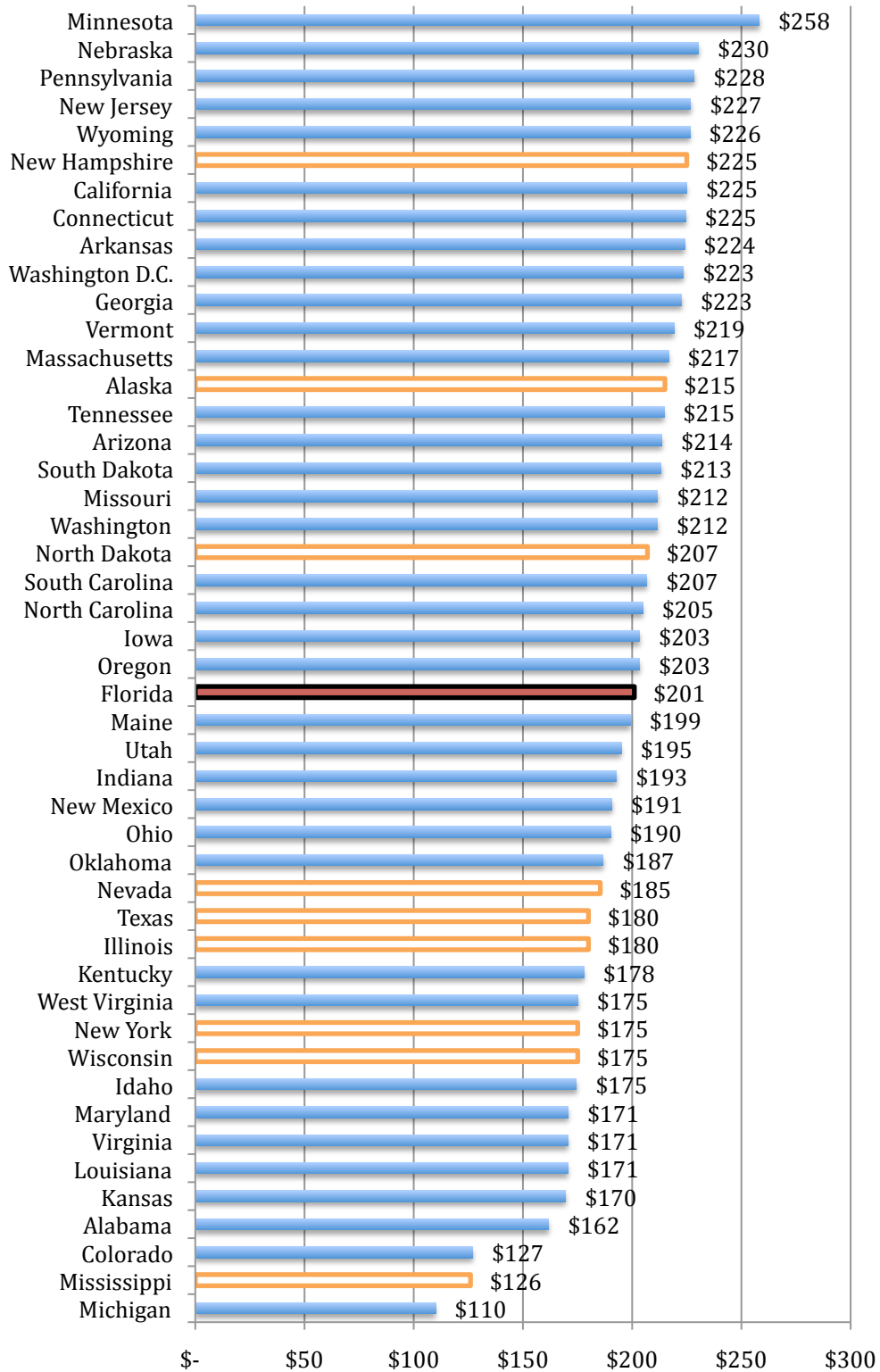
There are several noteworthy points illustrated by the figures. First, the variation among the states in each case is approximately 100 percent; that is, in each case, the monthly payment in the highest state is approximately twice the monthly payment in the lowest state. This is a somewhat surprising result given that most of the states use the same data and similar methodologies to derive their schedules. In part, the variation is accounted for by the fact that some states have updated more recently than others and therefore have used data from more recent years. But in part, it is accounted for by the fact that ultimately each state's child support schedule is the result of a political process. The schedule derived from the underlying data on expenditures on children is only a starting point from which political negotiation and maneuvering proceeds.

Second, the figures show that except in the private high-income case where there are two children, Florida ranks at or slightly above the median among the states. For the private high-income case, Florida's child support payment is among the highest in the nation.

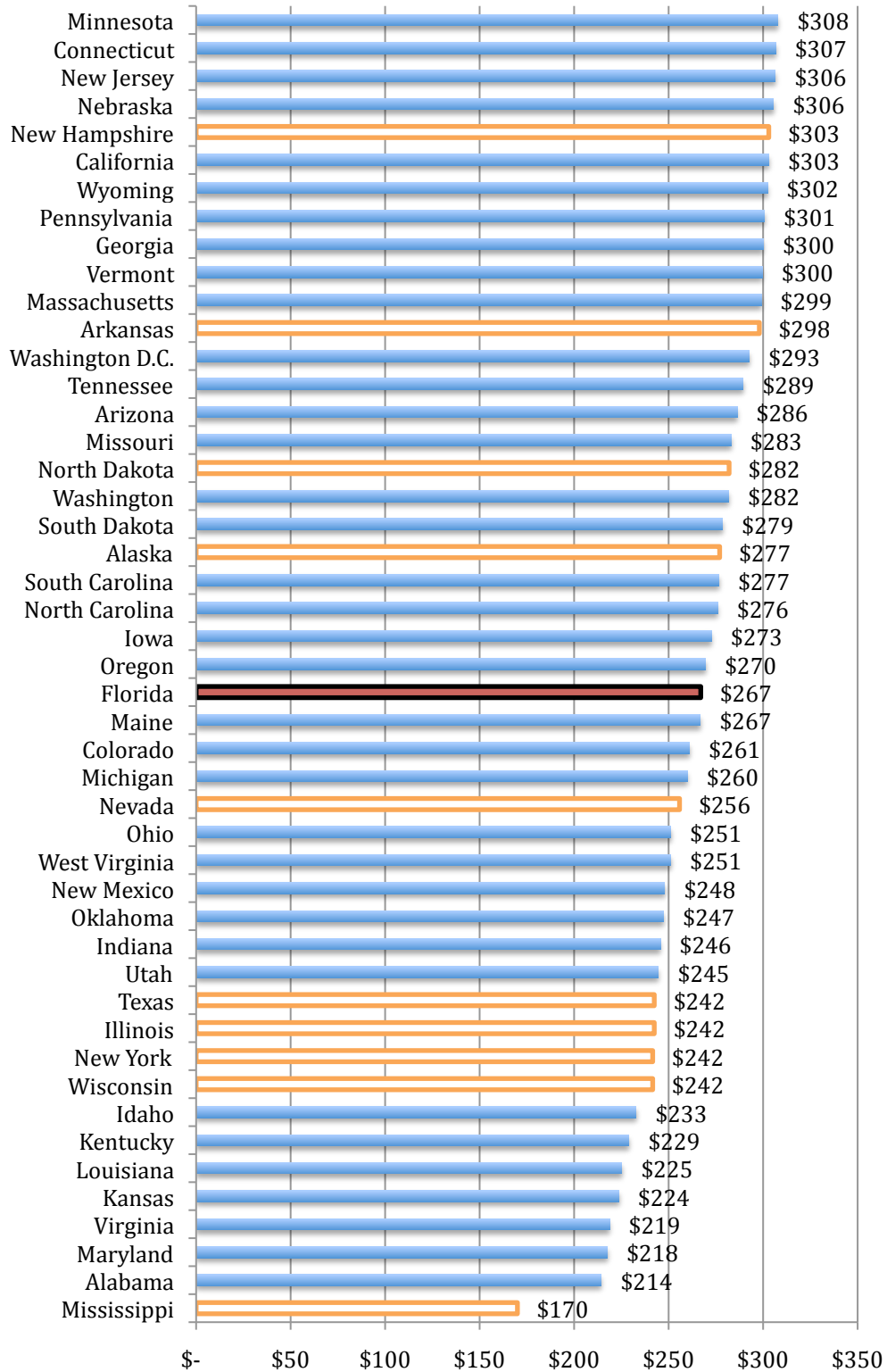
The third feature is that a state's choice of model has little impact on the amount of child support. The states with the highest child support payments include (depending on the particular case) New Hampshire, Alaska, Arkansas, and Nevada, all of which are percent-of-obligor states, as well as New Jersey and Nebraska, both income shares states. At the lower end, are Mississippi, a percent-of-obligor state, and Alabama, an income shares state. This reinforces the previous observation that the determination of child support in any state is as much or more a political exercise as it is model-driven.

Finally, the rank ordering of the states is most different in the private high-income case. What distinguishes this case from the others is the presence of two children rather than one. This suggests that in addition to the wide variations among the states in the dollar amounts of child support, there is also wide variation in the marginal impact of additional children.

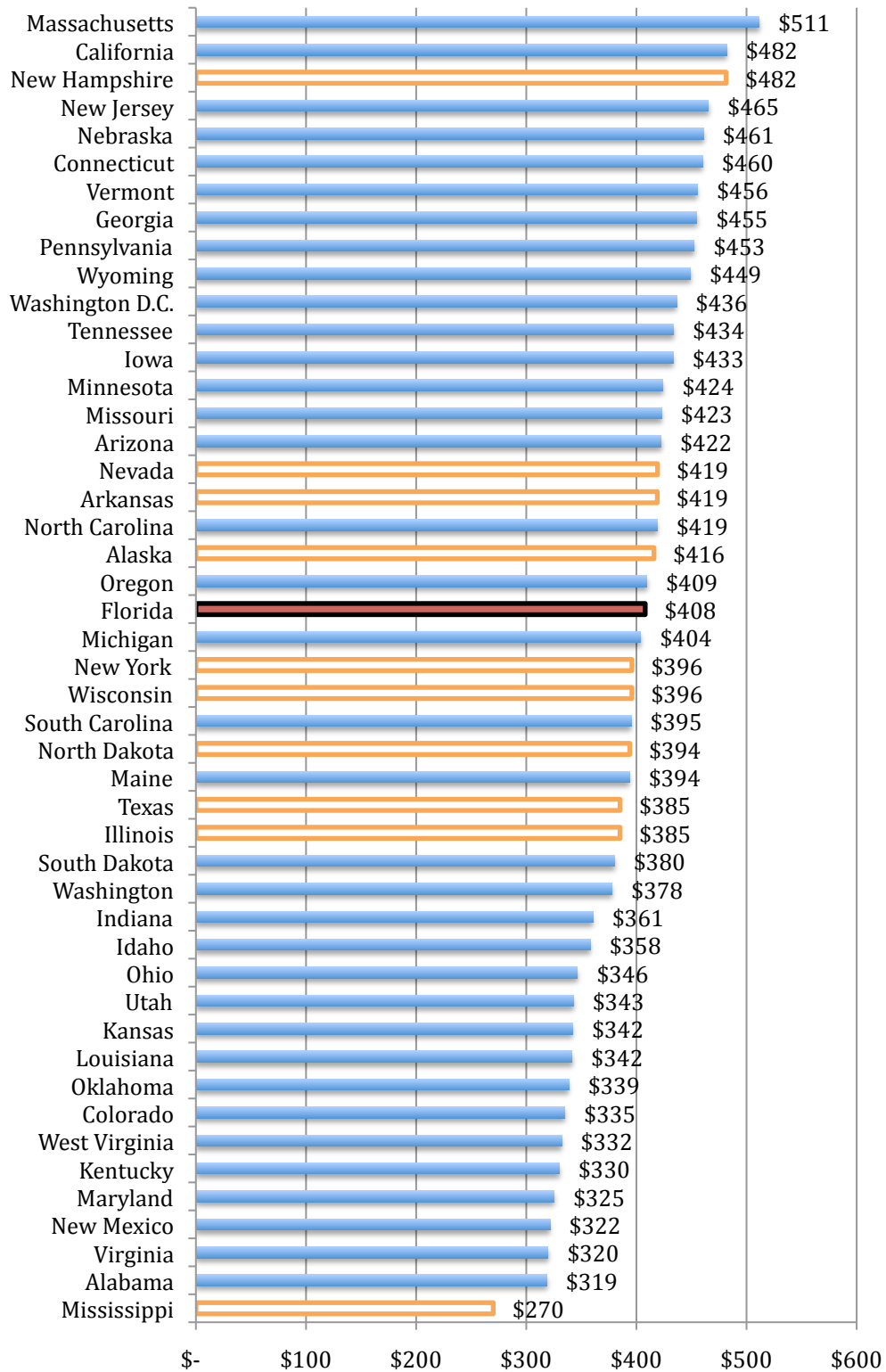
**Figure 1.1: Comparison of Income Shares and Percent-of-Obligor States: IV-D Low Income**



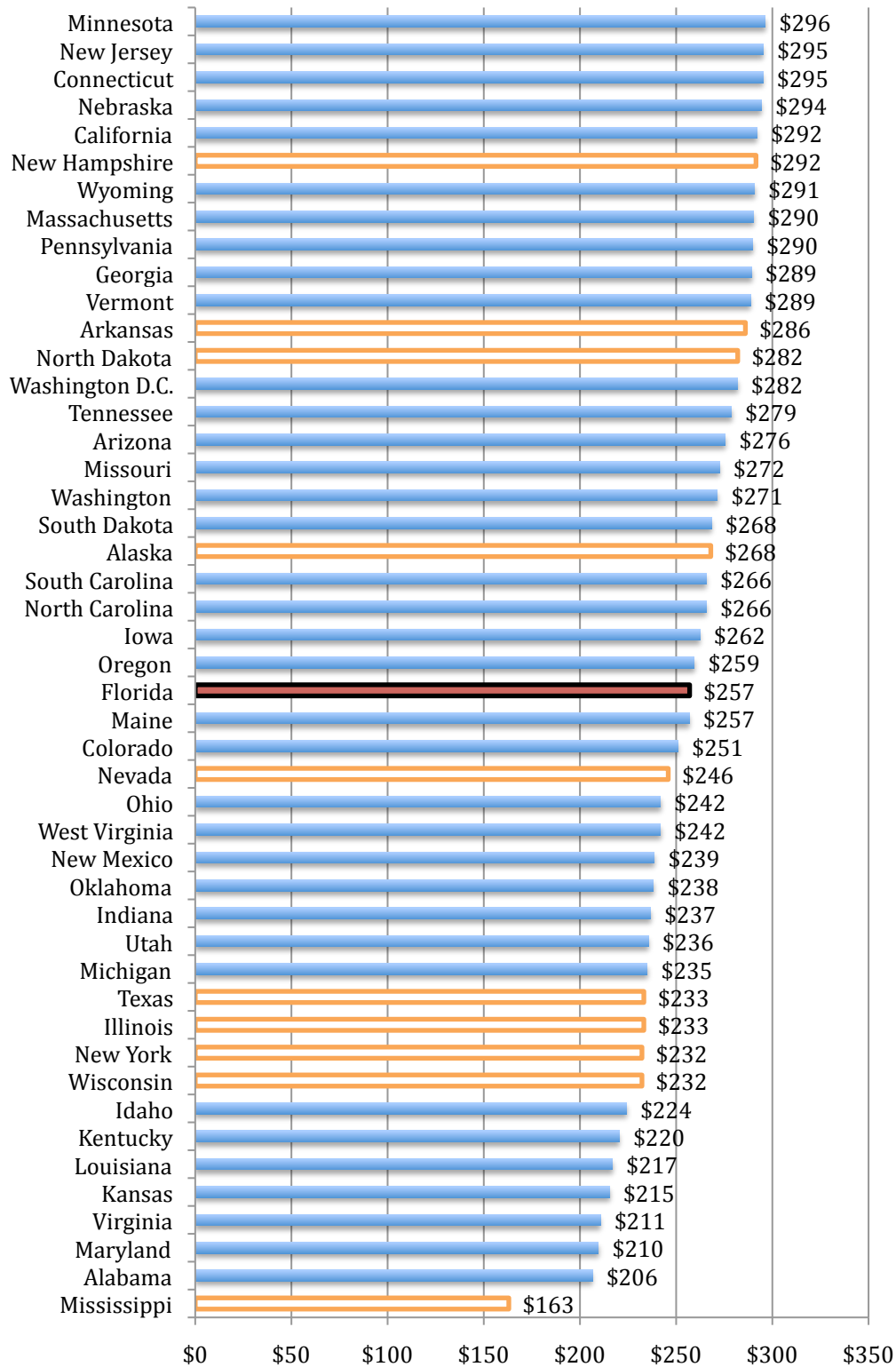
**Table 1.2: Comparison of Income Shares and Percent-of-Obligor States: IV-D Middle Income**



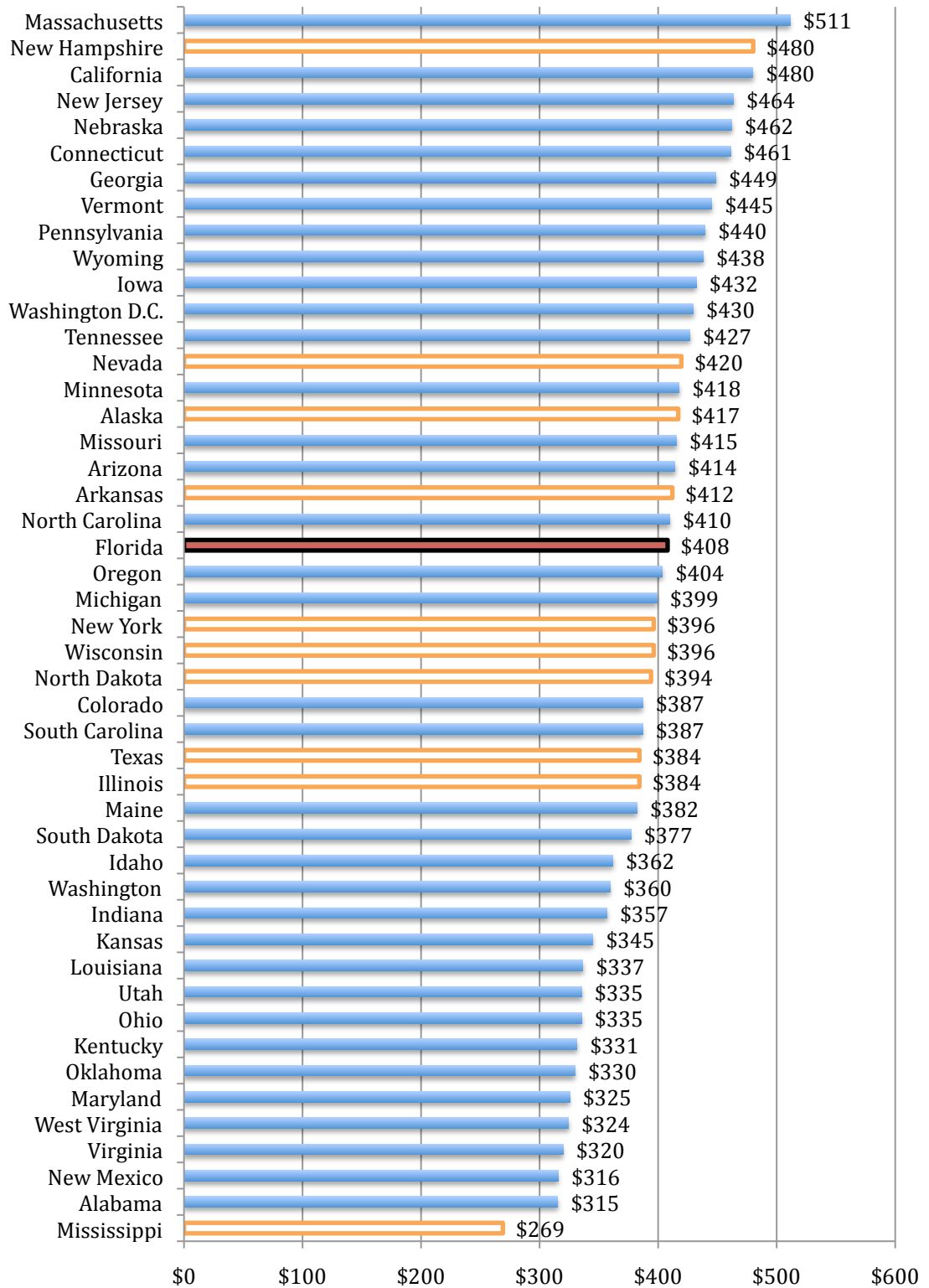
**Figure 1.3: Comparison of Income Shares and Percent-of-Obligor States: IV-D High Income**



**Figure 1.4: Comparison of Income Shares and Percent-of-Obligor States: Private Low Income**

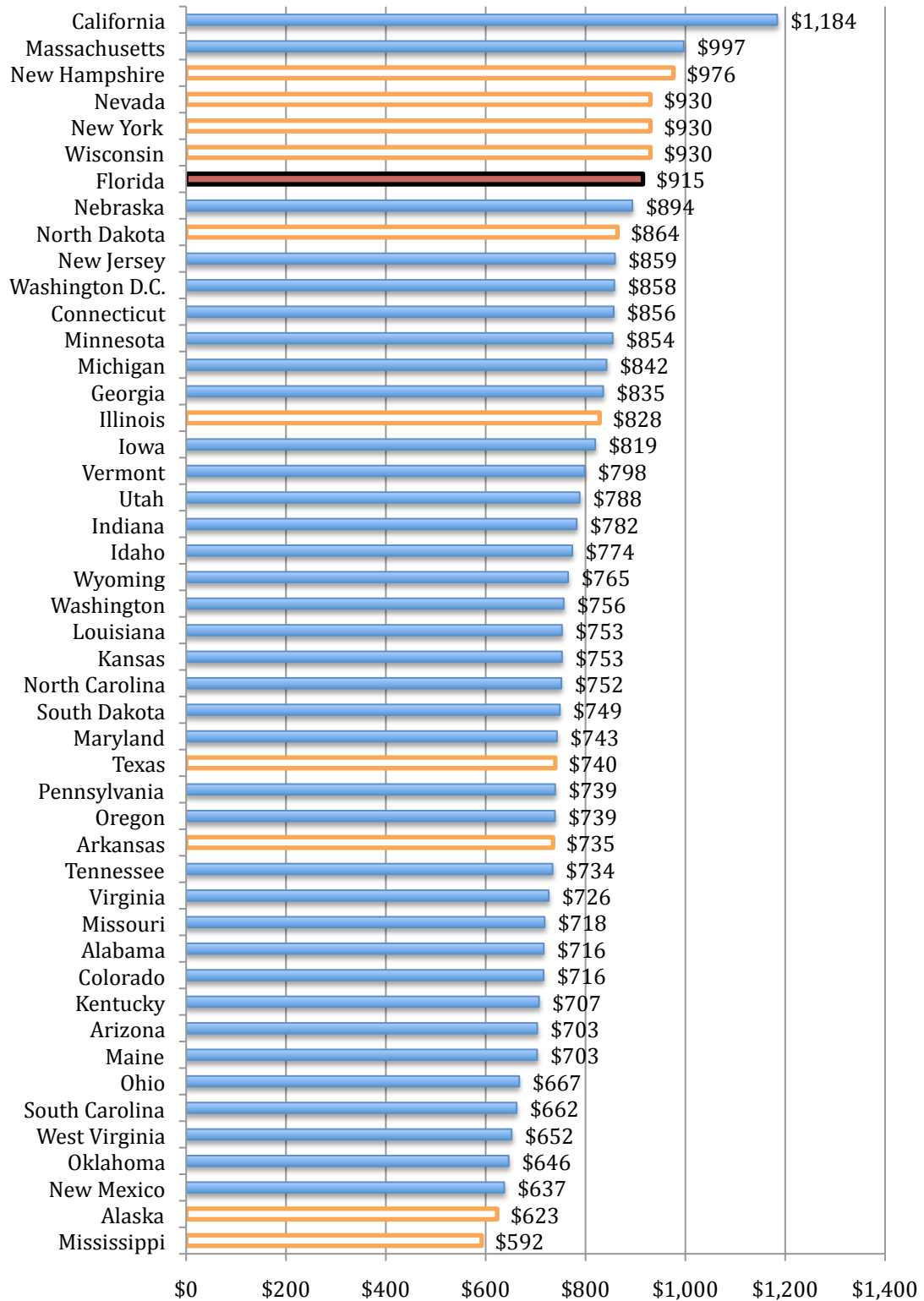


**Figure 1.5: Comparison of Income Shares and Percent-of-Obligor States: Private Middle Income**





**Figure 1.6: Comparison of Income Shares and Percent-of-Obligor States: Private High Income**



## **Appendix 1.1**

### **Equivalence of Income Shares and Percent-of-Obligor Models**

Whatever the guiding principles and philosophy expressed in a state's child support guidelines and whatever the stated purposes and objectives, the only legal and economic function of the guidelines is to determine an amount of money to be transferred from the noncustodial parent to the custodial parent. When stripped down to this basic element, the income shares model and the percent-of-obligor model are almost equivalent.

The amount of the child support payment in the majority of states using the percent-of-obligor model is calculated by multiplying the noncustodial parent's income by a percentage that depends on the number of children but not on income:

$$\text{Payment} = \text{Percentage}(\text{Number of Children}) * \text{NCP Income}$$

In New Hampshire and New York, the child support payment is calculated in two steps. First, a total child support obligation is calculated by multiplying the combined income of both parents by a percentage that depends on the number of children:

$$\text{Obligation} = \text{Percentage}(\text{Number of Children}) * (\text{NCP Income} + \text{CP Income})$$

Then, the total obligation is prorated between the parents in proportion to each one's share of the combined income. The amount of the child support payment is the noncustodial parent's share of the total obligation:

$$\begin{aligned} \text{Payment} &= [(\text{NCP Income})/(\text{NCP Income} + \text{CP Income})] * \text{Obligation} \\ &= [(\text{NCP Income})/(\text{NCP Income} + \text{CP Income})] * [\text{Percentage}(\text{Number of Children}) * \\ &\quad (\text{NCP Income} + \text{CP Income})] \\ &= \text{Percentage}(\text{Number of Children}) * \text{NCP Income} \end{aligned}$$

Despite the extra steps in calculating a total obligation based on both parents' incomes, the final result is exactly the same as in the other percent-of-obligor states. The child support payment depends only on the number of children and the noncustodial parent's income.<sup>1</sup>

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<sup>1</sup> In North Dakota, the percentage depends on both the number of children and the noncustodial parent's income:

$$\text{Payment} = \text{Percentage}(\text{Number of Children, NCP Income}) * \text{NCP Income}$$

Although North Dakota does not stipulate a percentage and instead uses a look-up table, calculating the child support payment in the table as a percentage of the corresponding income of the noncustodial parent shows that the payment as a percent of income decreases as the noncustodial parent income increases. This is similar to the income shares model, but the percentage in the income shares model depends on the combined income of the parents, not just the noncustodial parent income.

The income shares states use the same two-step process as New Hampshire and New York. First, a total obligation is determined based on the combined incomes of the two parents. Then, the total obligation is prorated between the parents in the same proportion as their respective shares of the combined income. The child support payment in the income shares model is:

$$\text{Payment} = \text{Percentage}(\text{Number of Children, NCP Income} + \text{CP Income}) * \text{NCP Income}$$

The only difference between the income shares model and the percent-of-obligor model is that the percentage by which the noncustodial parent's income is multiplied in the income shares model depends on the combined income of both parents rather than the noncustodial parent's income alone. This is the basis for classifying each state's guidelines as income shares or as percent-of-obligor.

The inclusion of the custodial parent's income in the income shares formula has only a very small effect on the actual child support payment. Economists use the concept of elasticity to show the degree of responsiveness in one variable to changes in another variable. The elasticity of the child support payment with respect to changes in the custodial parent's income equals the ratio of the percentage change in the payment to the percentage change in income. Elasticity numbers can range from zero, indicating no responsiveness, to infinity, indicating maximum responsiveness. The elasticity of the income shares model is typically 0.05 or lower, which is only marginally higher than the zero elasticity of the percent-of-obligor model.

## 2. Updating Florida's Child Support Schedule

Federal law requires that each state periodically review and update its child support guidelines to reflect the most recently available economic data. Florida's guidelines were last updated in 1993, and the data from which the schedule of child support obligations is derived are from 1972-1973. The update of the Florida schedule proposed here adheres closely to the methodology of the current schedule while using data from the 2004-2006 Consumer Expenditure Survey.

The first step in updating the child support schedule is to estimate expenditures on children. The current schedule is based on Thomas Espenshade's expenditure estimates, which use Ernst Engel's approach to comparing living standards among families. Other income shares states use David Betson's estimates, which are based on Erwin Rothbarth's approach. The two approaches—Engel and Rothbarth—are described in turn, followed by a detailed description of the data sources and estimation techniques used to update the schedule. The proposed schedule is displayed in Appendix 2.1.

### *2.1 Alternative Approaches to Estimating Expenditures on Children*

Direct estimates of family expenditures on children are generally problematic because a majority of a family's expenditures are for shared goods (housing, for example) rather than for goods that are consumed by a specific individual within the family. This has led to the use of indirect estimates. The indirect approach estimates expenditures on children by comparing families with children to families without children who are assumed to have the same standard of living. The difference between total consumption expenditures of these two types of families is assumed to be an estimate of expenditures on children. The approaches most commonly used to estimate expenditures on children for developing child support schedules are the Engel and the Rothbarth approaches.

#### *Engel Approach*

The underlying premise of the Engel approach is that families that spend the same proportion of their incomes on food are equally well off.<sup>1</sup> The Engel approach assumes that (1) as total spending increases, the budget share or percent devoted to food should decrease, freeing up expenditures for other goods, and (2) as family size increases, the food share of the budget should also increase. Espenshade used the Engel approach to

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<sup>1</sup> Ernst Engel, 1857, "Die Productions und Consumtionsverhältnisse des Königsreichs Sachsen,": *Zeitschrift des Statiscshen Bureaus des Koniglich Sachishen Ministeriums des Innern*.

estimate expenditures on children within the family.<sup>2</sup> Florida's current child support schedule is based on his analysis.

To implement the Engel approach, Espenshade used data from the 1972-73 Consumer Expenditure Survey. He selected food consumed at home as a percentage of total consumption spending as his dependent variable and examined the relationship between this dependent variable and total consumption expenditures. Estimating expenditures on children using this approach is a two-step process. First, expenditures on a single child are computed as the difference between total consumption expenditures for a one-child family and total consumption expenditures for a childless couple, each of whom spends the same share of their budget on food consumed at home (and hence are assumed to have the same standard of living). Second, expenditures on additional children are estimated by examining how expenditure patterns vary between families with different numbers of children.<sup>3</sup>

### *Rothbarth Approach*

The Rothbarth approach measures the family's standard of living using the level of "excess income" available to the household after all necessary expenditures have been made.<sup>4</sup> Rothbarth postulated that this excess income would be used for savings and luxuries, which he considered to be alcohol, tobacco, entertainment, and sweets.<sup>5</sup> Subsequent implementation of the Rothbarth approach to develop child support guidelines has used expenditures on "adult goods" (specifically, adult clothing, tobacco, and alcohol) as the measure of excess income.

The Rothbarth approach assumes that (1) expenditure on adult goods increases as total consumption expenditure increases, and (2) expenditure on adult goods decreases as household size increases. Many states now base their schedule of child support obligations on estimates of expenditures on children made by David Betson using the Rothbarth approach.<sup>6</sup> Betson tested several different measures of adult consumption goods but found that the results were only minimally affected by the choice of expenditure items to include. Once a variable for adult consumption goods has been chosen, the Rothbarth approach proceeds in the same way as the Engel approach.

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<sup>2</sup> Thomas J. Espenshade, *Investing in Children*, The Urban Institute Press, Washington, DC, 1984.

<sup>3</sup> Lewin/ICF, "Estimates of Expenditures on Children and Child Support Guidelines," submitted to Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, October (1990).

<sup>4</sup> *Ibid.*

<sup>5</sup> Erwin Rothbarth, "Note on a Method of Determining Equivalent Income for Families of Different Composition," in *War-Time Pattern of Saving and Spending* (ed. C. Madge). Cambridge: Cambridge University Press, (1943).

<sup>6</sup> David Betson, "Alternative Estimates of the Cost of Children from the 1980-1986 Consumer Expenditure Survey," U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, September (1990).

## ***2.2 Data and Methodology Used to Update Florida's Schedule of Child Support Obligations***

The proposed schedule of child support obligations developed here adheres as closely as possible to the methodology underlying the current schedule. Therefore, the proposed schedule, like the current schedule, is based on estimates of expenditures on children derived using the Engel estimator.

### *Consumer Expenditure Survey*

Data for the analysis comes from the 2004-2006 Consumer Expenditure Survey (CEX) conducted by the U.S. Bureau of the Census for the U.S. Bureau of Labor Statistics (BLS). The CEX provides comprehensive information on family expenditures and income as well as on socioeconomic and demographic characteristics of U.S. families.

The 2004-2006 survey consists of two parts: (1) a quarterly interview survey which includes monthly out-of-pocket expenditures on such items as housing, apparel, transportation, health care, insurance, and entertainment, and (2) a diary survey which includes weekly expenditures on frequently purchased items such as food and beverages, tobacco, personal care products, and nonprescription drugs and supplies.<sup>7</sup> The update uses only the public use file from the quarterly interview survey.

Interviews were conducted for each consumer unit. A consumer unit consists of (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; (2) a person living alone or sharing a household with others, or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who use their income to make joint expenditure decisions. Financial independence is determined by the three major expense categories: housing, food, and other living expenses. To be considered financially independent, at least two of the three major expense categories have to be provided entirely or in part by the respondent.<sup>8</sup>

The quarterly interview data file was used to construct a hypothetical annual data set. Each household was identified by a unique number and linked across quarters. All variables except income were measured quarterly. Household income was constructed as the arithmetic average of the quarterly data. The BLS definition of income after taxes includes social security contributions and private and government retirement. These items represent saving and hence are excluded from the net income variable used here.

The number of children in a household was also averaged across quarters. It is therefore possible for some households to have fractional children if a child was present in the household for less than the full year. Total expenditures, childcare, and medical

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<sup>7</sup> CEX Overview, <http://www.bls.gov/cex/csxgloss.htm>

<sup>8</sup> CEX Glossary of Terms, <http://www.bls.gov/cex/csxgloss.htm>

care are averaged across quarters and multiplied by four to arrive at an estimate of the annual amount.

The original sample of 37,302 households in the CEX data was reduced to 10,150 by making the deletions summarized in Table 2.1. The first major restriction involved the deletion of non-husband and wife households, which resulted in a loss of 20,775 households. Secondly, households that contained husbands and wives over the age of 60 were also deleted.

**Table 2.1**  
**Number of Sample Deletions by Reason**

Total Number of Households in the 2004-2006 Consumer Expenditure Survey	37,302
<b><i>Reduction for:</i></b>	
a) Non-husband and wife households	-20,775
b) Husband or wife over 60 years old	- 4,308
c) Topcoded variables (income before tax, income after tax)	- 1,912
d) Households with more than 6 children	- 10
e) Households with zero or negative incomes	- <u>147</u>
Usable Sample	10,150

The income variable in the CEX is topcoded.<sup>9</sup> Because topcoded observations bias the regression results, it is customary to eliminate them from the sample. This resulted in the loss of 1,912 household records. Households that contained more than six children were also deleted, as this particular demographic characteristic level is thought to represent extreme cases and is essentially irrelevant to most households. Finally, those households with negative income but positive consumption were also eliminated from the sample.<sup>10</sup> These households would likewise bias the regression results.

#### *Calculating the Relationship between Income and Consumption*

The Engel approach relates food consumption as a share of total expenditures to total expenditures, not to income. However, Florida's child support schedule relates child support obligations to net income. Therefore, the relationship of expenditures on children to total expenditures must be converted to a relationship between expenditures on children and net income.

The methodology used here first projects an amount of total consumption expenditure for each level of net income. Then, the Engel approach is used to estimate expenditures on children for that level of consumption and its corresponding net income.

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<sup>9</sup> "Sensitive CU data are changed so that users will not be able to identify CUs who participated in the survey. Topcoding refers to the replacement of data in cases where the value of the original data exceeds prescribed critical values. Critical values for each variable containing sensitive data are calculated in accordance with Census Disclosure Review Board guidelines. Each observation that falls outside the critical value is replaced with a topcoded value that represents the mean of the subset of all outlying observations." CEX 2001 Interview Survey Public Use Microdata Documentation, p 244.

<sup>10</sup> Negative income may result from business losses for self-employed individuals.

The estimated expenditure on children for that net income level is the child support obligation.

The amount of consumption is projected based on the CEX data from the following regression:

$$(1) \quad S = \alpha_0 + \alpha_1(Y) + \alpha_2(Y)^2 + \alpha_3(Y)^3 + \alpha_4(Y)^4$$

where the dependent variable,  $S$ , is total consumption spending and the independent variable,  $Y$ , is net income. The exponential terms are included to allow for a nonlinear relationship between income and consumption. For all observations in the sample with consumption greater than income ( $S > Y$ ),  $S$  is set equal to  $Y$  in the regression equation.<sup>11</sup> The results of the regression are shown in Table 2.2. As expected, total spending increases with income but at a slower rate so that the ratio of spending to income is lower at higher income levels.

**Table 2.2**  
**Total Consumption Spending Model Results**

Dependent Variable: Total consumption spending	
<i>Variable</i>	<i>Coefficient</i>
Y	0.21213* (0.10552)
Y <sup>2</sup>	0.05024** (0.01756)
Y <sup>3</sup>	-0.00346** (0.00112)
Y <sup>4</sup>	0.00006** (0.00002)
Constant	2.09779** (0.20237)
N	10,150
$\overline{R^2}$	0.2637

Standard errors are reported in parentheses. \*\* indicates significance at the 1% level and \* indicates significance at the 5% level in a two-tailed test.

<sup>11</sup> Blumberg (1999) argues for requiring consumption spending to be no greater than net income: “. . . consumer expenditure data may be read to suggest that consumers spend more than they earn. Even if true, such overspending is properly disregarded by a child support formula. Legally imposed child support obligations should not require obligors to spend beyond their incomes, even if they regularly do so on a voluntary basis.” From: Grace Ganz Blumberg, “Balancing the Interests: The American Law Institute’s Treatment of Child Support,” *Family Law Quarterly*, v33, n1 (1999).



The range of monthly net incomes in the updated schedule of child support obligations is \$850-\$12,500 which is displayed in \$50 increments. The bottom of the range, \$850, is determined by the self-support reserve, which in turn is based on the 2008 federal poverty guideline for a single-person household. The top of the range, \$12,500, equals the top of the range in the current Florida schedule, \$10,000, adjusted for inflation. For each income level in the schedule, equation (1) predicts the corresponding amount of consumption. If the predicted consumption is greater than the corresponding net income, then predicted consumption for that income is set equal to income.

#### *Deriving the Engel Estimator*

The predicted value of consumption is substituted into the following equation for food as a share of total consumption:

$$(2) \quad \ln(F/(1-F)) = \delta \ln(S) + \beta \ln(S)^2 + \alpha(K) + \gamma(X)$$

The dependent variable,  $\ln(F/(1-F))$  is the log of the ratio of the food budget share to one minus the food budget share. The variable from the CEX used to measure the food budget share is food purchased for home consumption.<sup>12</sup> The food budget share is assumed to be a linear function of (1) the log of per capita total spending,  $\delta \ln(S)$ , and its square,  $\beta \ln(S)^2$ ; (2) the number of children in the family,  $\alpha(K)$ ; and (3) a set of characteristics of the adults in the family,  $\gamma(X)$ . Again, the exponential term is included to allow for nonlinearity in the relationship between food and total consumption.

If food is a necessity, then  $\delta$  should be negative. If the food share is to increase with the number of children, assuming total consumption spending ( $S$ ) is held constant, then  $(\alpha(K)) > 0$ . The Engel methodology assumes that if the food share equation meets these restrictions, then the food budget share is a good indicator of the family's standard of living.

Variables such as race, education, and employment can affect budget decisions of the family independently of family size or total consumption. For example, blacks spend less of their budget on food than similarly situated non-blacks, and families where both parents are working, spend less of their budget on food for home consumption than families with only one parent working. The final term,  $\gamma(X)$ , is included to capture the effect of these differences among families. These variables are assumed to be invariant to the presence of children so they do not affect the estimates of expenditures on children or the percentage of the family's budget devoted to children.

#### *Estimating Expenditures on Children*

Equation (1) predicts the amount of consumption corresponding to a net income level in the schedule of child support obligations. This predicted consumption is used in

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<sup>12</sup> This is the same dependent variable used by Betson (1990) to estimate the Engel model.

equation (2) to estimate the share of total consumption that is spent on food consumed at home by a family with  $K$  children,  $S_K$ . The next step is to find the level of total spending by a family with no children,  $S_0$ , that spends the same share of their budget on food consumed at home as the family with  $K$  children.

To find this level of spending, the food shares of the two families are set equal and the equation is solved for  $S_0$ :

$$(3) \quad F[0, S_0, X] = F[K, S_K, X]$$

$$(4) \quad \gamma(X) + \alpha(0) + \delta \ln(S_0) + \beta \ln(S_0)^2 = \gamma(X) + \alpha(K) + \delta \ln(S_K) + \beta \ln(S_K)^2$$

The difference between  $S_K$  and  $S_0$  is an estimate of the amount that a family with this net income spends on children. This is the amount, after deducting expenditures on childcare and children's medical expenses, that is included in the schedule of child support obligations for  $K$  children.

This methodology is used to calculate basic child support obligations for one, two, and three children. The methodology cannot be used for families with more than three children because the CEX contains too few observations to support it. Instead, support obligations for four, five, and six children are extrapolated from the amounts for one, two, and three children. The proportion of net income spent on children at each income level was regressed on the number of children and the number of children squared. The resulting regression coefficients were used to estimate the proportion of net income spent on children by families with four, five, and six children. These proportions were multiplied by net income to generate a basic child support obligation.<sup>13</sup>

### ***2.3 Empirical Implementation of the Analysis***

Table 2.3 shows the results of estimating equation 2. The variables are defined in Table 2.4. The explanatory power is quite high for cross-sectional data. The model captures 47 percent of the variation in the share of a family's budget devoted to food consumed at home. The assumptions of the Engel approach are satisfied: (1) as total spending rises, the budget share devoted to food at home declines at a decreasing rate, and (2) holding total spending constant, the food share increases when family size (number of children) increases.

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<sup>13</sup> The basic child support obligations for four, five, and six children in the current Florida schedule were also extrapolated from the obligations for one, two, and three children. The method of extrapolation was different from the method used here. The current schedule relies on the Bureau of Labor Statistics family equivalency scales developed in the 1960's.

**Table 2.3**  
**Engel Model Results**

Dependent Variable: log of food share at home relative to non-food share	
<i>Variable</i>	<i>Coefficient</i>
Total Expenditure	-0.71101** (0.03475)
(Total Expenditure) <sup>2</sup>	-0.02982** (0.01138)
Kid1	0.14698** (0.01334)
Kid2	0.27189** (0.01313)
Kid3	0.34019** (0.01882)
Kid4	0.4338** (0.03277)
Kid5	0.65205** (0.0466)
Black	-0.07549** (0.01951)
Midwest	-0.12224** (0.01639)
West	-0.06823** (0.01634)
South	-0.07751** (0.01546)
Husband no HS	0.05304** (0.01923)
Husband HSplus	-0.00172 (0.01247)
Wife no HS	0.00785 (0.02032)
Wife HSplus	-0.03445** (0.01249)
Both work	-0.09989** (0.01801)

Wife work weeks	0.05667** (0.0202)
Wife Full-time	-0.00036 (0.01358)
Constant	-0.91053** (0.03013)
<hr/>	
$\overline{N}$	10,150
$\overline{R^2}$	0.4589
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Standard errors reported in parentheses. \*\* indicates significance at the 1% level, and \* indicates significance at the 5% level in a two-tailed test.

**Table 2.4**  
**Variable Definitions for Equation (2)**

Total Expenditure (Total Expenditure) <sup>2</sup>	the log of total expenditures (in \$10,000) the square of the log of total expenditures
<b><u><math>\alpha(K)</math> variables:</u></b>	
Kid1	dummy variable, takes value of 1 if one child, 0 otherwise;
Kid2	dummy variable, takes value of 1 if two children, 0 otherwise;
Kid3	dummy variable, takes value of 1 if three children, 0 otherwise;
Kid4	dummy variable, takes value of 1 if four children, 0 otherwise;
Kid5	dummy variable, takes the value of 1 if more than four children, 0 otherwise;
<b><u><math>\gamma(X)</math> variables:</u></b>	
Black	dummy variable, takes value of 1 if race of household head is black, 0 otherwise;
Midwest	dummy variable, takes value of 1 if family resides in Midwest, 0 otherwise;
West	dummy variable, takes value of 1 if family resides in West, 0 otherwise;
South	dummy variable, takes value of 1 if family resides in South, 0 otherwise;
Husband no HS	dummy variable, takes value of 1 if the husband has less than a high school diploma, 0 otherwise;
Husband HSplus	dummy variable, takes value of 1 if the husband has more than 12 years of education, 0 otherwise;
Wife no HS	dummy variable, takes value of 1 if the wife has less than a high school diploma, 0 otherwise;
Wife HSplus	dummy variable, takes the value of 1 if the wife has more than 12 years of education, 0 otherwise;
Both work	1 if both the husband and wife work, 0 otherwise;
Wife work weeks	number of weeks worked by the wife, 0 otherwise;
Wife full-time	1 if the usual work week of the wife was greater than 35 hours, 0 otherwise.
<hr/>	

*Deducting Costs of Childcare*

The basic support obligation in the income shares model excludes the costs of work-related childcare and the child(ren)’s share of extraordinary medical expenses. The noncustodial parent’s proportional share of actual expenditures on these items is added to the basic obligation in the child support order. Therefore, the data must be adjusted to exclude these expenditures.

The relationship between childcare expenditures as a proportion of total spending (*CC*) and total spending (*S*) is estimated from the CEX data by the following regression:

$$(5) \quad CC = \beta_0 + \beta_1(S) + \beta_2(S)^2$$

Again, the exponential term is included to allow for nonlinearity in the relationship. The regression is estimated over observations with at least one child in the family. The results are shown in Table 2.5.

**Table 2.5  
Childcare Cost Model Results**

Dependent Variable: Childcare cost per child as a proportion of total spending	
<i>Variable</i>	<i>Coefficient</i>
S	0.00199** (0.0003)
S <sup>2</sup>	-0.0001** (0.00002)
Constant	0.00528** (0.00121)
N	6,234
$\overline{R^2}$	0.0053

Standard errors reported in parentheses. \*\* indicates significance at the 1% level and \* indicates significance at the 5% level in a two-tailed test.

Spending on childcare as a proportion of total spending rises as total spending rises but at a decreasing rate. Using the result from equation (5), the adjustment for childcare costs is:

$$\text{Childcare Cost} = CC * \text{Number of Children} * S.$$

*Deducting the Child’s Share of Unreimbursed Medical Expenses*

The adjustment for unreimbursed medical expenses is similar to the adjustment for childcare costs, although not as easily computed since medical expenses in the CEX data are not itemized for each household member. To compute an adjustment for medical

expenses, the child’s share of family medical expenditures is assumed to be the same as the child’s share of total consumption.

The relationship between medical expenses as a proportion of total spending ( $M$ ) and total spending ( $S$ ) is estimated from the CEX data using the following regression:

$$M = \beta_0 + \beta_1(S) + \beta_2(S)^2$$

The regression is estimated over all observations. The results are shown in Table 2.6.

**Table 2.6**  
**Medical Expense Model Results**

Dependent Variable: Medical expense as a proportion of total spending	
<i>Variable</i>	<i>Coefficient</i>
S	0.000669** (0.00049)
S <sup>2</sup>	-0.0001** (0.00003)
Constant	0.05978** (0.00178)
N	10,150
$\overline{R^2}$	0.0034

Standard errors reported in parentheses. \*\* indicates significance at the 1% level and \* indicates significance at the 5% level in a two-tailed test.

Medical expenses as a proportion of total consumption spending fall as total consumption spending rises. The adjustment for medical costs is calculated as:

$$\text{Medical Cost} = M * (S_K - S_0) / S_K.$$

### *Self-Support Reserve*

The current Florida schedule of basic child support obligations includes a self-support reserve based on the 2008 single-person federal poverty guideline. The inclusion of a self-support reserve ensures that obligors have sufficient income to maintain a minimum standard of living, that is, to avoid being pushed into poverty by payment of child support or, if they are already in poverty, to avoid exacerbation of poverty. The self-support reserve in the proposed schedule is \$738, equal to the 2002 poverty guideline. Although no minimum order amount is specified in the Florida guidelines, the proposed schedule like the current schedule implicitly assumes that all noncustodial parents are obligated to pay at least \$50.

For incomes above the self-support reserve, the calculated child support obligation based on economic data is phased in gradually until the point at which the

obligor can pay the full support obligation and still have sufficient remaining income to remain above poverty. This preserves the integrity of the self-support reserve. For one child, the basic support obligation shown in the schedule is the smaller of (1) the calculated amount based on the estimated expenditures on children, or (2) 90% of the difference between the obligor's income level and the poverty threshold. For two children, the percentage is 91% of the difference, 92% for 3 children, 93% for 4 children, 94% for 5 children, and 95% for 6 children.

#### ***2.4 Revised Schedule of Basic Child Support Obligations***

The proposed updated schedule of basic child support obligations is contained in Appendix 2.1. Figures 2.1-2.6 compare the proposed obligations at different income levels for each number of children with the current obligations. For all numbers of children, the proposed obligations are lower at the low end of the schedule where the self-support reserve and the phase-in range apply. The lower proposed obligations in this range result from the increase in the poverty guideline since 1993.

At incomes just above the phase-in range, the proposed obligations are higher for multiple children but lower for one child. Above this range of incomes, the proposed obligations are lower or about the same as the current obligations. Except for the case of one child and for incomes just above the phase-in range for cases with multiple children, the differences between the two schedules are relatively small.

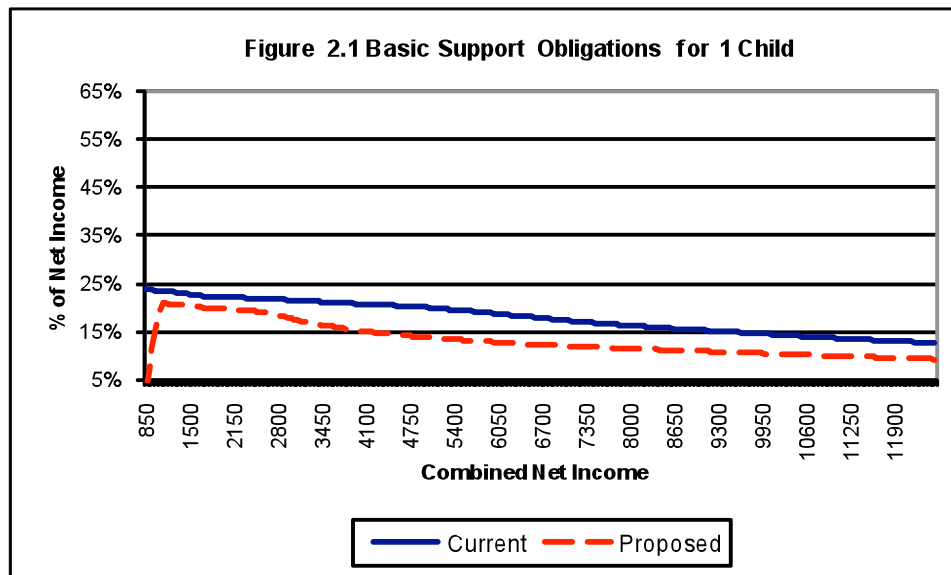


Figure 2.2 Basic Support Obligations for 2 Children

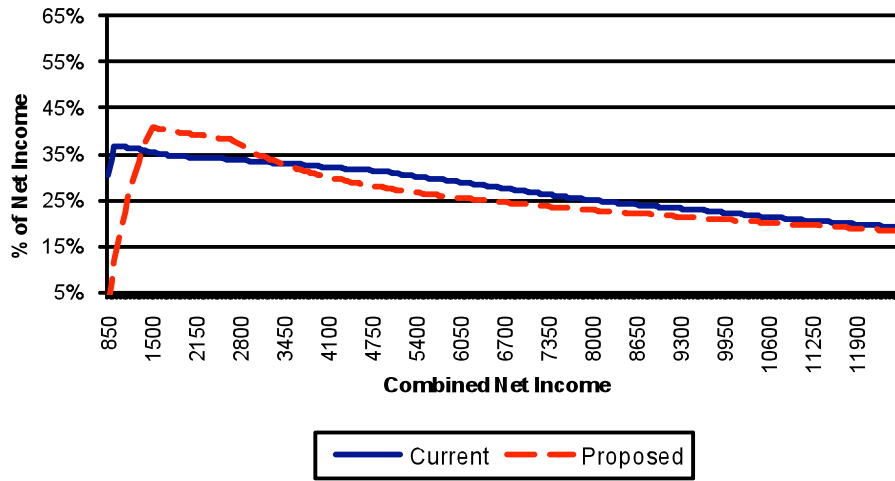
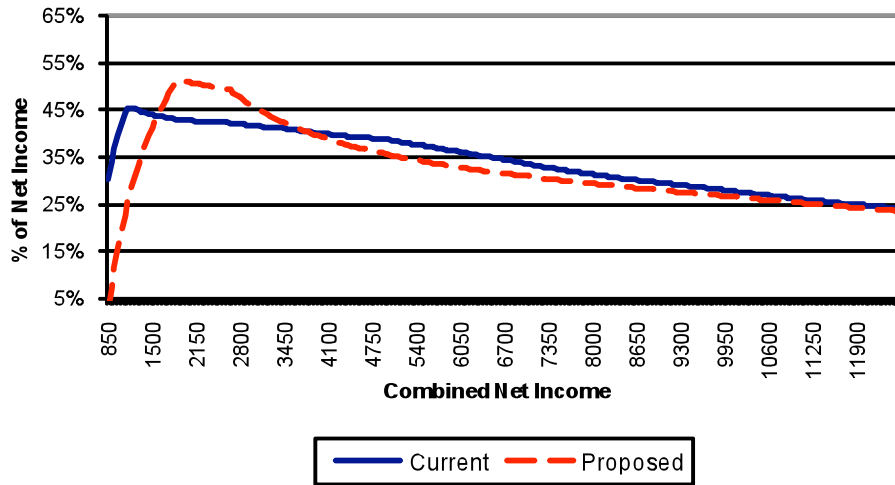
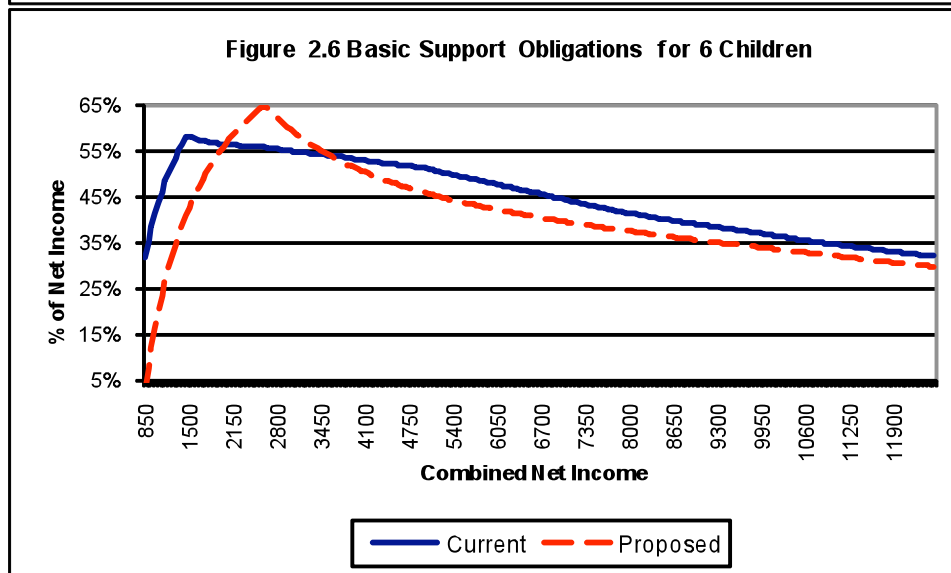
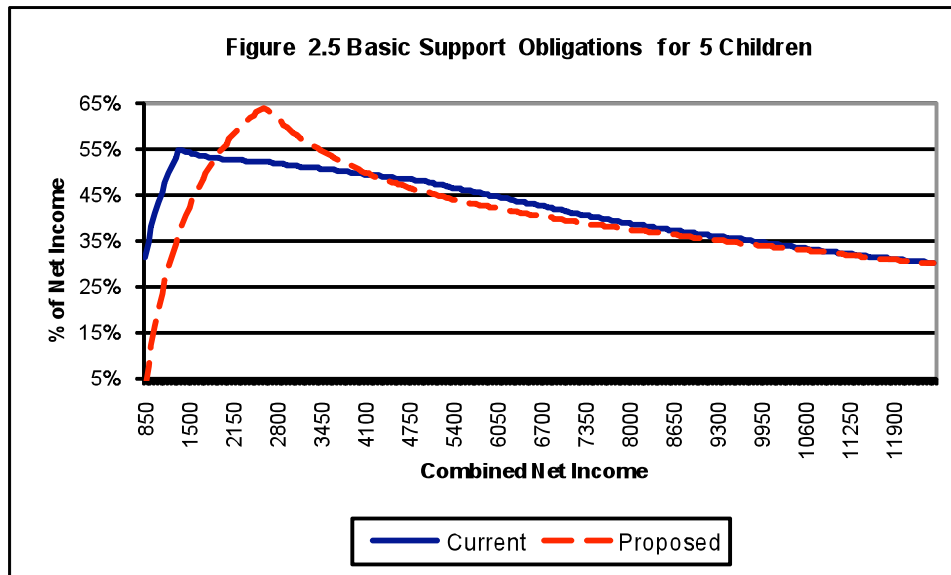


Figure 2.3 Basic Support Obligations for 3 Children







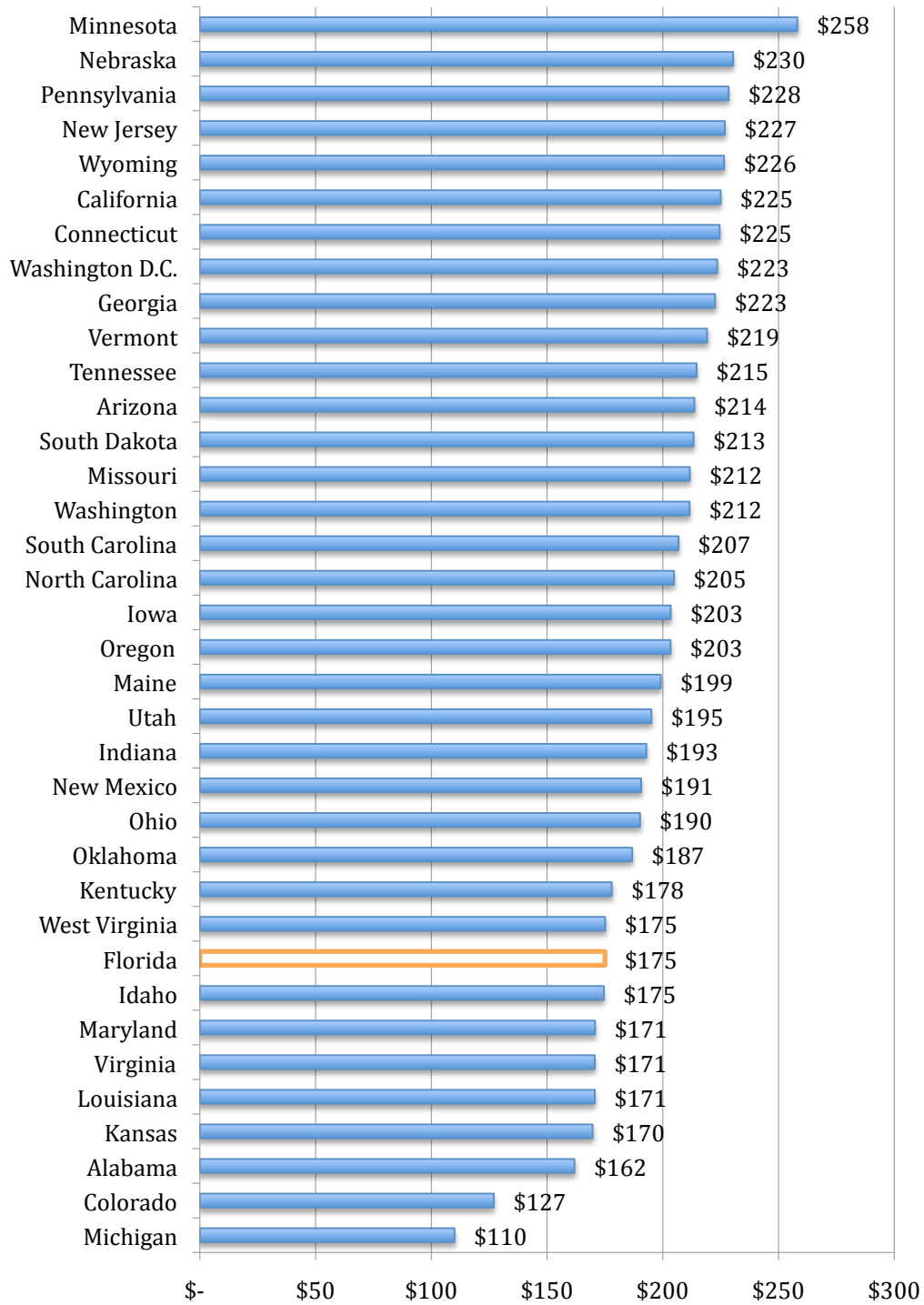
*Comparison of Revised Schedule with Other States*

Figures 2.7-2.12 compare the basic child support obligations shown in the revised schedule in Appendix 2.1 with the current obligations in other income shares states for the typical Florida child support cases. The revised obligations move Florida from the middle range of income shares states to the bottom quartile for all of the cases except the private high-income case. For the private high-income case, Florida would rank last among income shares states.

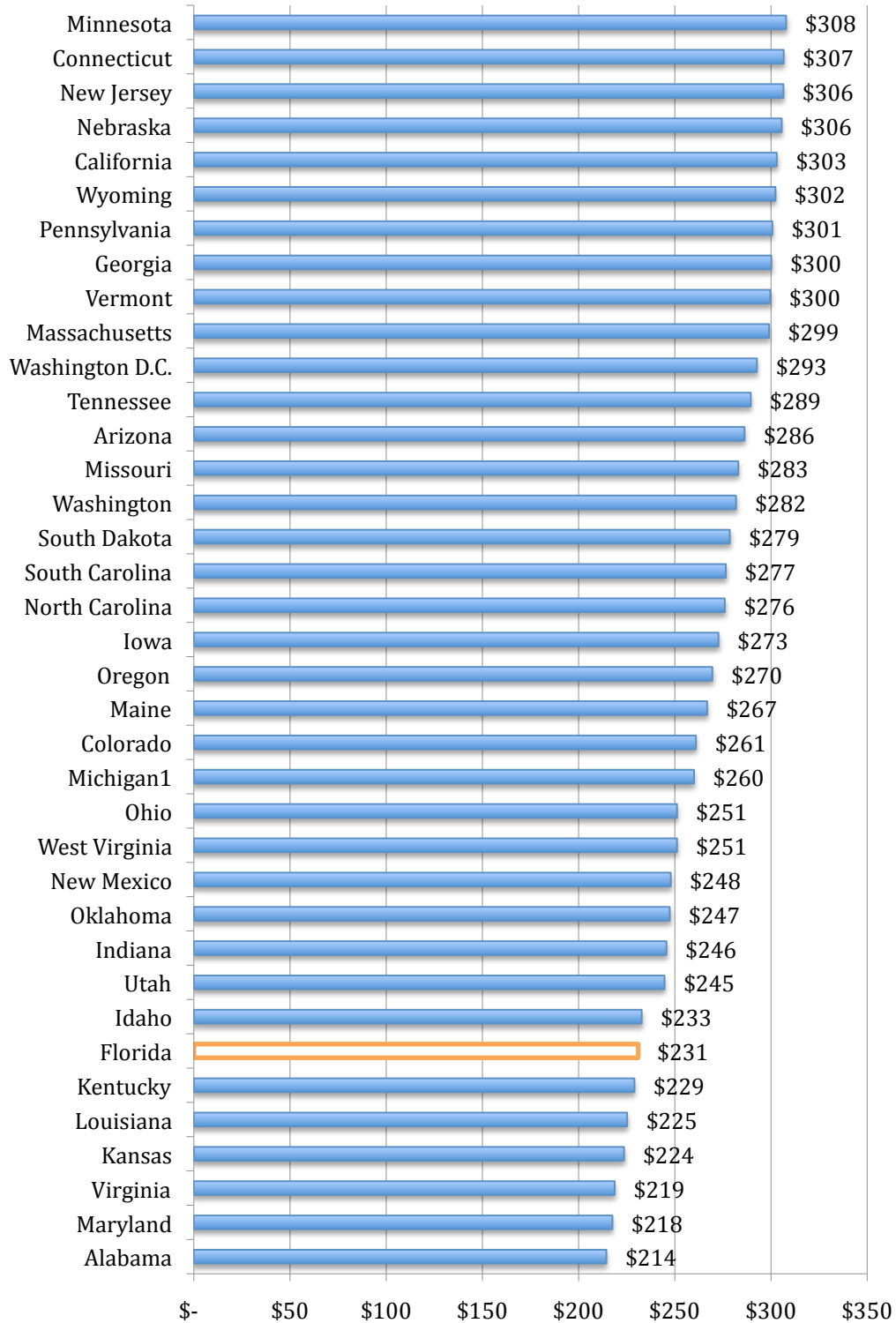
As it is in all comparisons, the private high-income case is an outlier. If the revised schedule were implemented, Florida would no longer rank among the three states with the highest child support payment, but it would continue to be well above the median. As pointed out elsewhere in this review, because this is the only case that

involves more than one child, it suggests that the marginal support obligation for an additional child in Florida is relatively higher in Florida than in most other income shares states.

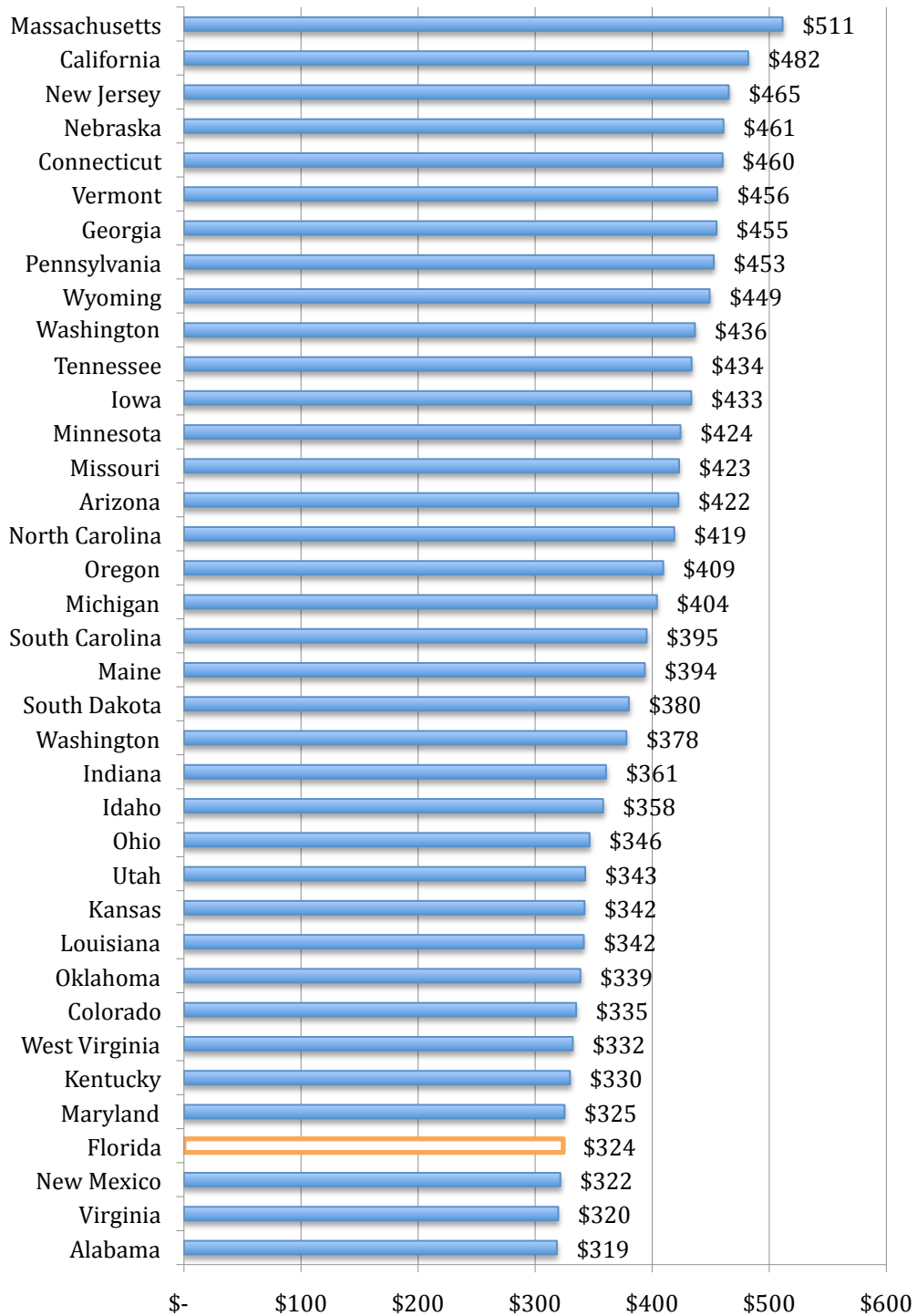
**Figure 2.7: Child Support Payments in Income Shares States: IV-D Low Income**



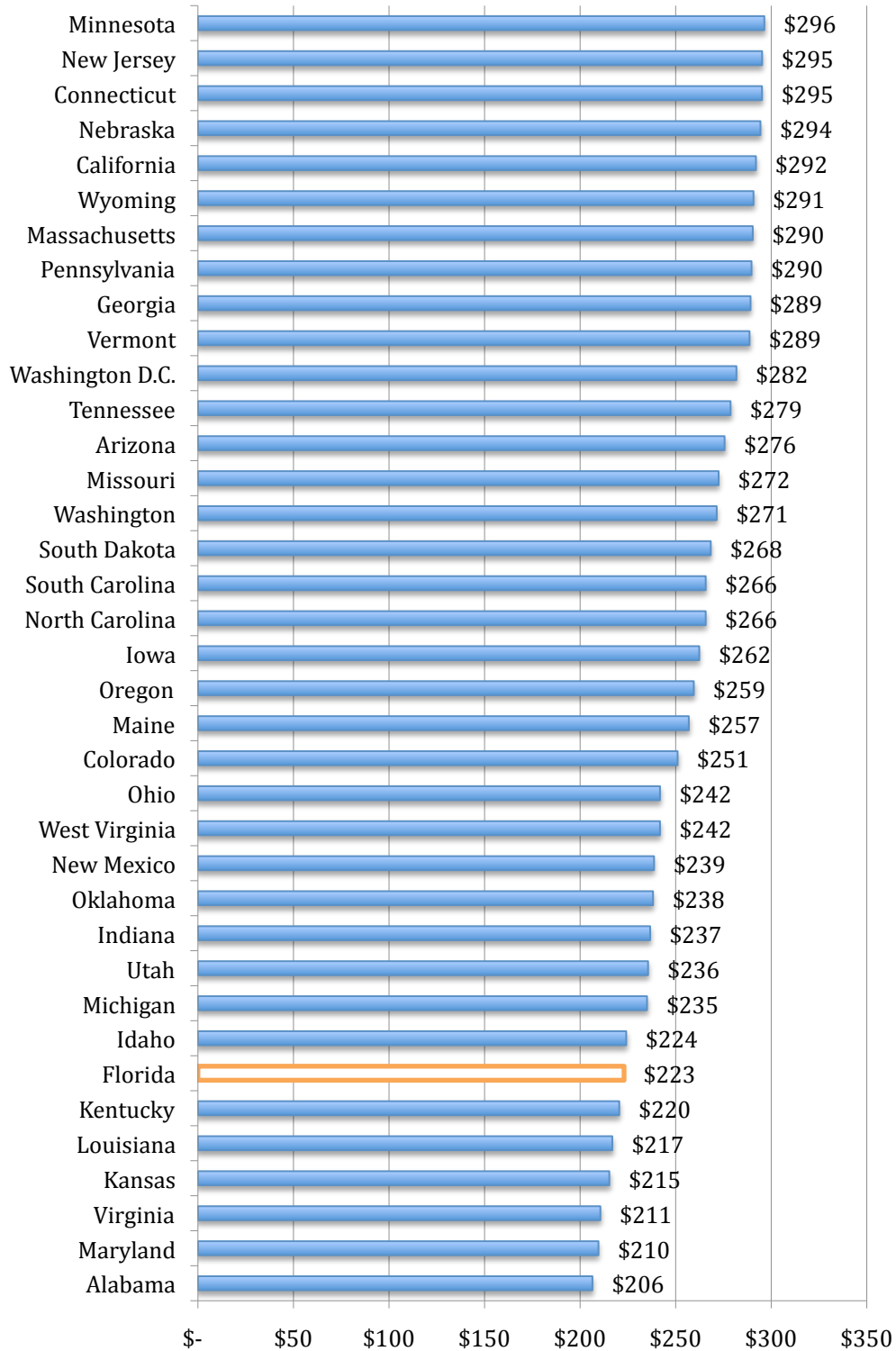
**Figure 2.8: Child Support Payments in Income Shares States: IV-D Middle Income**



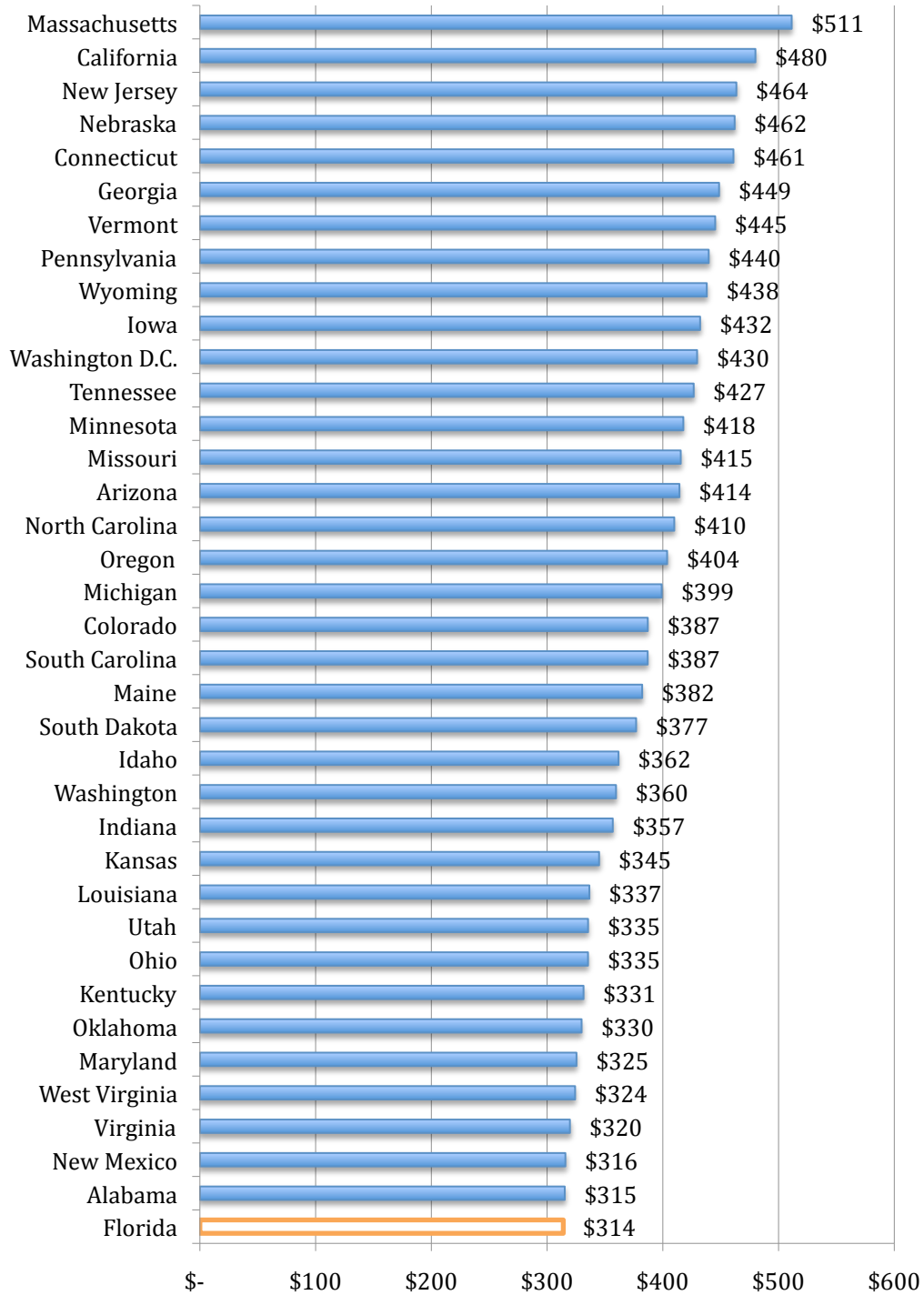
**Figure 2.9: Child Support Payments in Income Shares States: IV-D High Income**



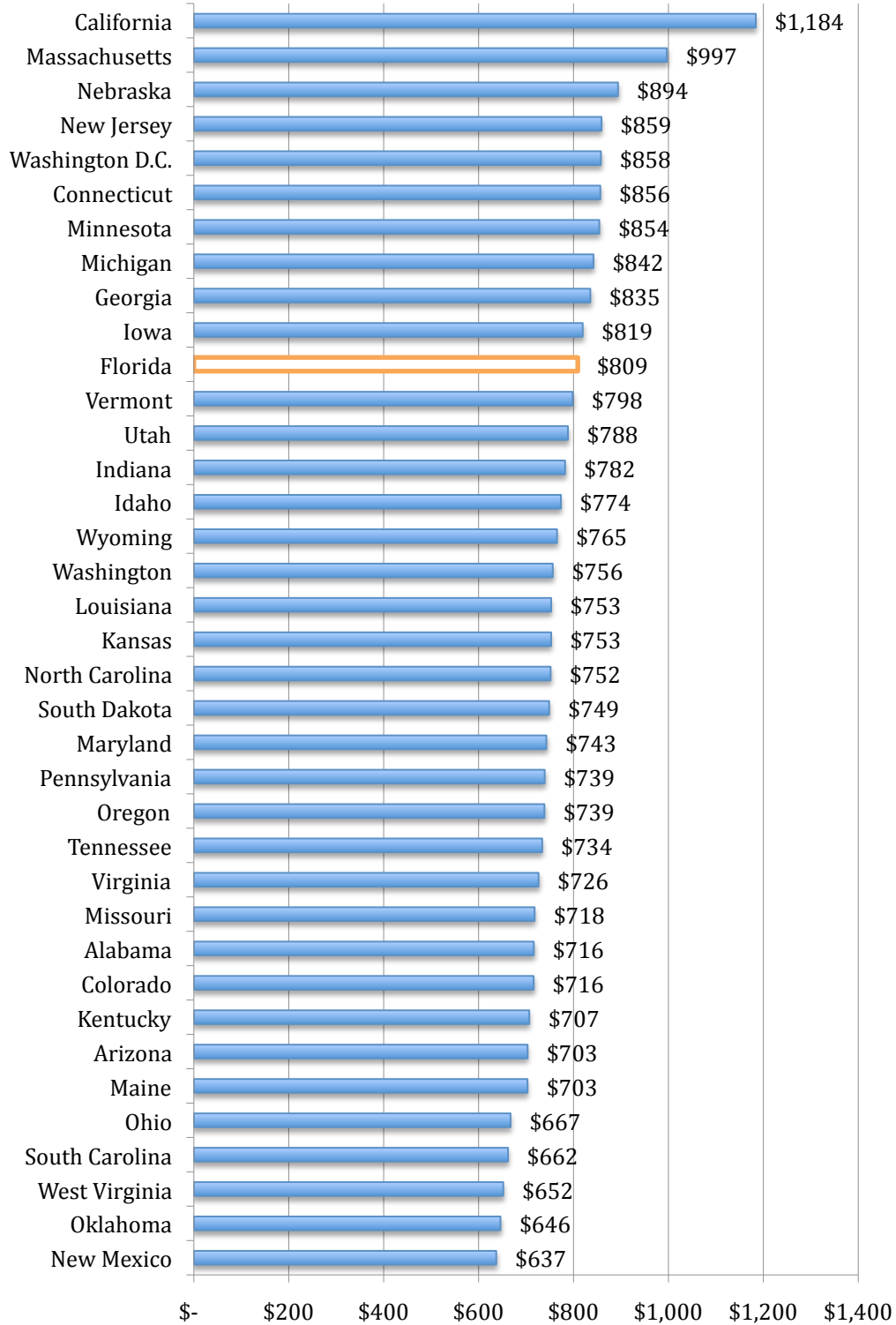
**Figure 2.10: Child Support Payments in Income Shares States: Private Low Income**



**Figure 2.11: Child Support Payments in Income Shares States: Private Middle Income**



**Figure 2.12: Child Support Payments in Income Shares States: Private High Income**





**Appendix 2.1**  
**Proposed Support Obligations by Number of Children**

<b>Proposed Schedule of Basic Child Support Obligations</b>						
Combined Net Income	Number of Children					
	1	2	3	4	5	6
\$850	\$19	\$19	\$19	\$20	\$20	\$20
\$900	\$64	\$65	\$65	\$66	\$67	\$67
\$950	\$109	\$110	\$111	\$113	\$114	\$115
\$1,000	\$154	\$156	\$157	\$159	\$161	\$162
\$1,050	\$199	\$201	\$203	\$206	\$208	\$210
\$1,100	\$231	\$247	\$249	\$252	\$255	\$257
\$1,150	\$240	\$292	\$295	\$299	\$302	\$305
\$1,200	\$249	\$338	\$341	\$345	\$349	\$352
\$1,250	\$259	\$383	\$387	\$392	\$396	\$400
\$1,300	\$268	\$429	\$433	\$438	\$443	\$447
\$1,350	\$277	\$474	\$479	\$485	\$490	\$495
\$1,400	\$286	\$520	\$525	\$531	\$537	\$542
\$1,450	\$295	\$565	\$571	\$578	\$584	\$590
\$1,500	\$304	\$609	\$617	\$624	\$631	\$637
\$1,550	\$313	\$627	\$663	\$671	\$678	\$685
\$1,600	\$322	\$645	\$709	\$717	\$725	\$732
\$1,650	\$331	\$663	\$755	\$764	\$772	\$780
\$1,700	\$340	\$680	\$801	\$810	\$819	\$827
\$1,750	\$349	\$698	\$847	\$857	\$866	\$875
\$1,800	\$358	\$716	\$893	\$903	\$913	\$922
\$1,850	\$367	\$733	\$939	\$950	\$960	\$970
\$1,900	\$376	\$751	\$974	\$996	\$1,007	\$1,017
\$1,950	\$384	\$768	\$996	\$1,043	\$1,054	\$1,065
\$2,000	\$393	\$786	\$1,019	\$1,089	\$1,101	\$1,112
\$2,050	\$402	\$803	\$1,041	\$1,136	\$1,148	\$1,160
\$2,100	\$411	\$820	\$1,063	\$1,182	\$1,195	\$1,207
\$2,150	\$419	\$837	\$1,085	\$1,229	\$1,242	\$1,255
\$2,200	\$428	\$855	\$1,107	\$1,275	\$1,289	\$1,302
\$2,250	\$437	\$872	\$1,129	\$1,322	\$1,336	\$1,350
\$2,300	\$445	\$889	\$1,151	\$1,368	\$1,383	\$1,397
\$2,350	\$454	\$906	\$1,173	\$1,402	\$1,430	\$1,445
\$2,400	\$462	\$923	\$1,195	\$1,428	\$1,477	\$1,492
\$2,450	\$471	\$940	\$1,217	\$1,454	\$1,524	\$1,540
\$2,500	\$479	\$957	\$1,238	\$1,479	\$1,571	\$1,587
\$2,550	\$488	\$974	\$1,260	\$1,505	\$1,618	\$1,635
\$2,600	\$496	\$990	\$1,282	\$1,531	\$1,657	\$1,681

## Proposed Schedule of Basic Child Support Obligations

Combined Net Income	Number of Children					
	1	2	3	4	5	6
\$2,650	\$504	\$1,006	\$1,302	\$1,554	\$1,682	\$1,706
\$2,700	\$508	\$1,013	\$1,311	\$1,565	\$1,694	\$1,717
\$2,750	\$512	\$1,021	\$1,320	\$1,576	\$1,706	\$1,729
\$2,800	\$515	\$1,028	\$1,330	\$1,587	\$1,717	\$1,741
\$2,850	\$519	\$1,035	\$1,339	\$1,599	\$1,729	\$1,753
\$2,900	\$523	\$1,043	\$1,349	\$1,610	\$1,741	\$1,765
\$2,950	\$526	\$1,050	\$1,358	\$1,621	\$1,753	\$1,777
\$3,000	\$530	\$1,058	\$1,368	\$1,632	\$1,766	\$1,789
\$3,050	\$534	\$1,065	\$1,378	\$1,644	\$1,778	\$1,801
\$3,100	\$538	\$1,073	\$1,387	\$1,655	\$1,790	\$1,813
\$3,150	\$542	\$1,080	\$1,397	\$1,667	\$1,802	\$1,825
\$3,200	\$546	\$1,088	\$1,407	\$1,678	\$1,814	\$1,837
\$3,250	\$549	\$1,095	\$1,416	\$1,690	\$1,827	\$1,849
\$3,300	\$553	\$1,103	\$1,426	\$1,701	\$1,839	\$1,861
\$3,350	\$557	\$1,111	\$1,436	\$1,713	\$1,851	\$1,874
\$3,400	\$561	\$1,118	\$1,446	\$1,724	\$1,864	\$1,886
\$3,450	\$565	\$1,126	\$1,456	\$1,736	\$1,876	\$1,898
\$3,500	\$569	\$1,134	\$1,466	\$1,748	\$1,888	\$1,911
\$3,550	\$573	\$1,142	\$1,476	\$1,759	\$1,901	\$1,923
\$3,600	\$577	\$1,149	\$1,485	\$1,771	\$1,913	\$1,935
\$3,650	\$580	\$1,157	\$1,495	\$1,783	\$1,926	\$1,948
\$3,700	\$584	\$1,165	\$1,505	\$1,795	\$1,938	\$1,960
\$3,750	\$588	\$1,173	\$1,515	\$1,807	\$1,951	\$1,973
\$3,800	\$592	\$1,181	\$1,525	\$1,818	\$1,964	\$1,985
\$3,850	\$596	\$1,188	\$1,535	\$1,830	\$1,976	\$1,997
\$3,900	\$600	\$1,196	\$1,545	\$1,842	\$1,989	\$2,010
\$3,950	\$604	\$1,204	\$1,556	\$1,854	\$2,001	\$2,022
\$4,000	\$608	\$1,212	\$1,566	\$1,866	\$2,014	\$2,035
\$4,050	\$612	\$1,220	\$1,576	\$1,878	\$2,027	\$2,047
\$4,100	\$616	\$1,228	\$1,586	\$1,890	\$2,039	\$2,060
\$4,150	\$620	\$1,236	\$1,596	\$1,901	\$2,052	\$2,073
\$4,200	\$624	\$1,244	\$1,606	\$1,913	\$2,065	\$2,085
\$4,250	\$628	\$1,251	\$1,616	\$1,925	\$2,077	\$2,098
\$4,300	\$632	\$1,259	\$1,626	\$1,937	\$2,090	\$2,110
\$4,350	\$636	\$1,267	\$1,636	\$1,949	\$2,103	\$2,123
\$4,400	\$640	\$1,275	\$1,647	\$1,961	\$2,115	\$2,135
\$4,450	\$644	\$1,283	\$1,657	\$1,973	\$2,128	\$2,148
\$4,500	\$648	\$1,291	\$1,667	\$1,985	\$2,141	\$2,160
\$4,550	\$652	\$1,299	\$1,677	\$1,997	\$2,154	\$2,173
\$4,600	\$656	\$1,307	\$1,687	\$2,009	\$2,166	\$2,186

## Proposed Schedule of Basic Child Support Obligations

Combined Net Income	Number of Children					
	1	2	3	4	5	6
\$4,650	\$660	\$1,315	\$1,697	\$2,021	\$2,179	\$2,198
\$4,700	\$664	\$1,323	\$1,708	\$2,033	\$2,192	\$2,211
\$4,750	\$668	\$1,331	\$1,718	\$2,045	\$2,204	\$2,223
\$4,800	\$672	\$1,339	\$1,728	\$2,057	\$2,217	\$2,236
\$4,850	\$676	\$1,347	\$1,738	\$2,069	\$2,230	\$2,248
\$4,900	\$680	\$1,355	\$1,748	\$2,081	\$2,242	\$2,261
\$4,950	\$684	\$1,363	\$1,758	\$2,093	\$2,255	\$2,273
\$5,000	\$688	\$1,371	\$1,768	\$2,105	\$2,268	\$2,286
\$5,050	\$692	\$1,379	\$1,779	\$2,117	\$2,281	\$2,298
\$5,100	\$696	\$1,386	\$1,789	\$2,129	\$2,293	\$2,311
\$5,150	\$700	\$1,394	\$1,799	\$2,140	\$2,306	\$2,323
\$5,200	\$704	\$1,402	\$1,809	\$2,152	\$2,318	\$2,336
\$5,250	\$708	\$1,410	\$1,819	\$2,164	\$2,331	\$2,348
\$5,300	\$712	\$1,418	\$1,829	\$2,176	\$2,344	\$2,361
\$5,350	\$716	\$1,426	\$1,839	\$2,188	\$2,356	\$2,373
\$5,400	\$720	\$1,434	\$1,849	\$2,200	\$2,369	\$2,385
\$5,450	\$724	\$1,442	\$1,860	\$2,212	\$2,381	\$2,398
\$5,500	\$728	\$1,450	\$1,870	\$2,224	\$2,394	\$2,410
\$5,550	\$732	\$1,458	\$1,880	\$2,235	\$2,407	\$2,422
\$5,600	\$736	\$1,465	\$1,890	\$2,247	\$2,419	\$2,435
\$5,650	\$740	\$1,473	\$1,900	\$2,259	\$2,432	\$2,447
\$5,700	\$744	\$1,481	\$1,910	\$2,271	\$2,444	\$2,459
\$5,750	\$748	\$1,489	\$1,920	\$2,283	\$2,456	\$2,472
\$5,800	\$752	\$1,497	\$1,930	\$2,294	\$2,469	\$2,484
\$5,850	\$756	\$1,505	\$1,940	\$2,306	\$2,481	\$2,496
\$5,900	\$760	\$1,512	\$1,950	\$2,318	\$2,494	\$2,508
\$5,950	\$764	\$1,520	\$1,959	\$2,329	\$2,506	\$2,520
\$6,000	\$768	\$1,528	\$1,969	\$2,341	\$2,518	\$2,533
\$6,050	\$772	\$1,536	\$1,979	\$2,353	\$2,531	\$2,545
\$6,100	\$776	\$1,543	\$1,989	\$2,364	\$2,543	\$2,557
\$6,150	\$780	\$1,551	\$1,999	\$2,376	\$2,555	\$2,569
\$6,200	\$783	\$1,559	\$2,009	\$2,387	\$2,567	\$2,581
\$6,250	\$787	\$1,566	\$2,019	\$2,399	\$2,580	\$2,593
\$6,300	\$791	\$1,574	\$2,028	\$2,410	\$2,592	\$2,605
\$6,350	\$795	\$1,582	\$2,038	\$2,422	\$2,604	\$2,617
\$6,400	\$799	\$1,589	\$2,048	\$2,433	\$2,616	\$2,629
\$6,450	\$803	\$1,597	\$2,058	\$2,445	\$2,628	\$2,640
\$6,500	\$807	\$1,605	\$2,067	\$2,456	\$2,640	\$2,652
\$6,550	\$810	\$1,612	\$2,077	\$2,467	\$2,652	\$2,664
\$6,600	\$814	\$1,620	\$2,087	\$2,479	\$2,664	\$2,676

## Proposed Schedule of Basic Child Support Obligations

Combined Net Income	Number of Children					
	1	2	3	4	5	6
\$6,650	\$818	\$1,627	\$2,096	\$2,490	\$2,676	\$2,688
\$6,700	\$822	\$1,635	\$2,106	\$2,501	\$2,688	\$2,699
\$6,750	\$826	\$1,642	\$2,115	\$2,512	\$2,700	\$2,711
\$6,800	\$829	\$1,650	\$2,125	\$2,524	\$2,712	\$2,723
\$6,850	\$833	\$1,657	\$2,134	\$2,535	\$2,723	\$2,734
\$6,900	\$837	\$1,665	\$2,144	\$2,546	\$2,735	\$2,746
\$6,950	\$841	\$1,672	\$2,153	\$2,557	\$2,747	\$2,757
\$7,000	\$844	\$1,679	\$2,163	\$2,568	\$2,759	\$2,769
\$7,050	\$848	\$1,687	\$2,172	\$2,579	\$2,770	\$2,780
\$7,100	\$852	\$1,694	\$2,181	\$2,590	\$2,782	\$2,791
\$7,150	\$856	\$1,701	\$2,191	\$2,601	\$2,793	\$2,803
\$7,200	\$859	\$1,709	\$2,200	\$2,612	\$2,805	\$2,814
\$7,250	\$863	\$1,716	\$2,209	\$2,623	\$2,816	\$2,825
\$7,300	\$867	\$1,723	\$2,218	\$2,633	\$2,828	\$2,837
\$7,350	\$870	\$1,730	\$2,228	\$2,644	\$2,839	\$2,848
\$7,400	\$874	\$1,737	\$2,237	\$2,655	\$2,851	\$2,859
\$7,450	\$877	\$1,745	\$2,246	\$2,666	\$2,862	\$2,870
\$7,500	\$881	\$1,752	\$2,255	\$2,676	\$2,873	\$2,881
\$7,550	\$885	\$1,759	\$2,264	\$2,687	\$2,884	\$2,892
\$7,600	\$888	\$1,766	\$2,273	\$2,697	\$2,896	\$2,903
\$7,650	\$892	\$1,773	\$2,282	\$2,708	\$2,907	\$2,914
\$7,700	\$895	\$1,780	\$2,291	\$2,718	\$2,918	\$2,925
\$7,750	\$899	\$1,787	\$2,300	\$2,729	\$2,929	\$2,936
\$7,800	\$902	\$1,794	\$2,309	\$2,739	\$2,940	\$2,946
\$7,850	\$906	\$1,801	\$2,317	\$2,750	\$2,951	\$2,957
\$7,900	\$909	\$1,808	\$2,326	\$2,760	\$2,962	\$2,968
\$7,950	\$913	\$1,814	\$2,335	\$2,770	\$2,972	\$2,978
\$8,000	\$916	\$1,821	\$2,344	\$2,780	\$2,983	\$2,989
\$8,050	\$920	\$1,828	\$2,352	\$2,791	\$2,994	\$3,000
\$8,100	\$923	\$1,835	\$2,361	\$2,801	\$3,005	\$3,010
\$8,150	\$927	\$1,842	\$2,369	\$2,811	\$3,015	\$3,021
\$8,200	\$930	\$1,848	\$2,378	\$2,821	\$3,026	\$3,031
\$8,250	\$933	\$1,855	\$2,387	\$2,831	\$3,036	\$3,041
\$8,300	\$937	\$1,862	\$2,395	\$2,841	\$3,047	\$3,051
\$8,350	\$940	\$1,868	\$2,403	\$2,851	\$3,057	\$3,062
\$8,400	\$943	\$1,875	\$2,412	\$2,860	\$3,068	\$3,072
\$8,450	\$947	\$1,881	\$2,420	\$2,870	\$3,078	\$3,082
\$8,500	\$950	\$1,888	\$2,428	\$2,880	\$3,088	\$3,092
\$8,550	\$953	\$1,894	\$2,437	\$2,890	\$3,099	\$3,102
\$8,600	\$956	\$1,901	\$2,445	\$2,899	\$3,109	\$3,112

## Proposed Schedule of Basic Child Support Obligations

Combined Net Income	Number of Children					
	1	2	3	4	5	6
\$8,650	\$960	\$1,907	\$2,453	\$2,909	\$3,119	\$3,122
\$8,700	\$963	\$1,913	\$2,461	\$2,918	\$3,129	\$3,132
\$8,750	\$966	\$1,920	\$2,469	\$2,928	\$3,139	\$3,142
\$8,800	\$969	\$1,926	\$2,477	\$2,937	\$3,149	\$3,151
\$8,850	\$972	\$1,932	\$2,485	\$2,947	\$3,159	\$3,161
\$8,900	\$976	\$1,939	\$2,493	\$2,956	\$3,169	\$3,171
\$8,950	\$979	\$1,945	\$2,501	\$2,965	\$3,178	\$3,180
\$9,000	\$982	\$1,951	\$2,509	\$2,974	\$3,188	\$3,190
\$9,050	\$985	\$1,957	\$2,517	\$2,984	\$3,198	\$3,199
\$9,100	\$988	\$1,963	\$2,524	\$2,993	\$3,207	\$3,209
\$9,150	\$991	\$1,969	\$2,532	\$3,002	\$3,217	\$3,218
\$9,200	\$994	\$1,975	\$2,540	\$3,011	\$3,226	\$3,227
\$9,250	\$997	\$1,981	\$2,547	\$3,020	\$3,236	\$3,237
\$9,300	\$1,000	\$1,987	\$2,555	\$3,028	\$3,245	\$3,246
\$9,350	\$1,003	\$1,993	\$2,563	\$3,037	\$3,254	\$3,255
\$9,400	\$1,006	\$1,999	\$2,570	\$3,046	\$3,264	\$3,264
\$9,450	\$1,009	\$2,005	\$2,577	\$3,055	\$3,273	\$3,273
\$9,500	\$1,012	\$2,010	\$2,585	\$3,063	\$3,282	\$3,282
\$9,550	\$1,015	\$2,016	\$2,592	\$3,072	\$3,291	\$3,291
\$9,600	\$1,018	\$2,022	\$2,599	\$3,080	\$3,300	\$3,300
\$9,650	\$1,021	\$2,028	\$2,607	\$3,089	\$3,309	\$3,308
\$9,700	\$1,024	\$2,033	\$2,614	\$3,097	\$3,318	\$3,317
\$9,750	\$1,026	\$2,039	\$2,621	\$3,106	\$3,327	\$3,326
\$9,800	\$1,029	\$2,044	\$2,628	\$3,114	\$3,336	\$3,334
\$9,850	\$1,032	\$2,050	\$2,635	\$3,122	\$3,344	\$3,343
\$9,900	\$1,035	\$2,055	\$2,642	\$3,130	\$3,353	\$3,351
\$9,950	\$1,038	\$2,061	\$2,649	\$3,139	\$3,361	\$3,360
\$10,000	\$1,040	\$2,066	\$2,656	\$3,147	\$3,370	\$3,368
\$10,050	\$1,043	\$2,072	\$2,663	\$3,155	\$3,378	\$3,376
\$10,100	\$1,046	\$2,077	\$2,669	\$3,163	\$3,387	\$3,384
\$10,150	\$1,048	\$2,082	\$2,676	\$3,170	\$3,395	\$3,393
\$10,200	\$1,051	\$2,087	\$2,683	\$3,178	\$3,403	\$3,401
\$10,250	\$1,054	\$2,093	\$2,689	\$3,186	\$3,412	\$3,409
\$10,300	\$1,056	\$2,098	\$2,696	\$3,194	\$3,420	\$3,417
\$10,350	\$1,059	\$2,103	\$2,703	\$3,201	\$3,428	\$3,425
\$10,400	\$1,061	\$2,108	\$2,709	\$3,209	\$3,436	\$3,432
\$10,450	\$1,064	\$2,113	\$2,715	\$3,217	\$3,444	\$3,440
\$10,500	\$1,066	\$2,118	\$2,722	\$3,224	\$3,452	\$3,448
\$10,550	\$1,069	\$2,123	\$2,728	\$3,231	\$3,459	\$3,456
\$10,600	\$1,071	\$2,128	\$2,734	\$3,239	\$3,467	\$3,463

## Proposed Schedule of Basic Child Support Obligations

Combined Net Income	Number of Children					
	1	2	3	4	5	6
\$10,650	\$1,074	\$2,133	\$2,741	\$3,246	\$3,475	\$3,471
\$10,700	\$1,076	\$2,138	\$2,747	\$3,253	\$3,482	\$3,478
\$10,750	\$1,079	\$2,142	\$2,753	\$3,260	\$3,490	\$3,486
\$10,800	\$1,081	\$2,147	\$2,759	\$3,267	\$3,498	\$3,493
\$10,850	\$1,084	\$2,152	\$2,765	\$3,275	\$3,505	\$3,500
\$10,900	\$1,086	\$2,156	\$2,771	\$3,281	\$3,512	\$3,507
\$10,950	\$1,088	\$2,161	\$2,777	\$3,288	\$3,520	\$3,514
\$11,000	\$1,091	\$2,166	\$2,783	\$3,295	\$3,527	\$3,522
\$11,050	\$1,093	\$2,170	\$2,788	\$3,302	\$3,534	\$3,529
\$11,100	\$1,095	\$2,175	\$2,794	\$3,309	\$3,541	\$3,536
\$11,150	\$1,097	\$2,179	\$2,800	\$3,315	\$3,548	\$3,542
\$11,200	\$1,100	\$2,184	\$2,805	\$3,322	\$3,555	\$3,549
\$11,250	\$1,102	\$2,188	\$2,811	\$3,329	\$3,562	\$3,556
\$11,300	\$1,104	\$2,192	\$2,816	\$3,335	\$3,569	\$3,563
\$11,350	\$1,106	\$2,197	\$2,822	\$3,341	\$3,576	\$3,569
\$11,400	\$1,108	\$2,201	\$2,827	\$3,348	\$3,582	\$3,576
\$11,450	\$1,111	\$2,205	\$2,833	\$3,354	\$3,589	\$3,582
\$11,500	\$1,113	\$2,209	\$2,838	\$3,360	\$3,595	\$3,589
\$11,550	\$1,115	\$2,213	\$2,843	\$3,366	\$3,602	\$3,595
\$11,600	\$1,117	\$2,217	\$2,848	\$3,373	\$3,608	\$3,601
\$11,650	\$1,119	\$2,221	\$2,854	\$3,379	\$3,615	\$3,608
\$11,700	\$1,121	\$2,225	\$2,859	\$3,385	\$3,621	\$3,614
\$11,750	\$1,123	\$2,229	\$2,864	\$3,390	\$3,627	\$3,620
\$11,800	\$1,125	\$2,233	\$2,869	\$3,396	\$3,633	\$3,626
\$11,850	\$1,127	\$2,237	\$2,874	\$3,402	\$3,640	\$3,632
\$11,900	\$1,129	\$2,241	\$2,878	\$3,408	\$3,646	\$3,638
\$11,950	\$1,131	\$2,245	\$2,883	\$3,413	\$3,652	\$3,644
\$12,000	\$1,133	\$2,248	\$2,888	\$3,419	\$3,658	\$3,650
\$12,050	\$1,134	\$2,252	\$2,893	\$3,425	\$3,663	\$3,655
\$12,100	\$1,136	\$2,256	\$2,897	\$3,430	\$3,669	\$3,661
\$12,150	\$1,138	\$2,259	\$2,902	\$3,435	\$3,675	\$3,666
\$12,200	\$1,140	\$2,263	\$2,907	\$3,441	\$3,680	\$3,672
\$12,250	\$1,142	\$2,267	\$2,911	\$3,446	\$3,686	\$3,677
\$12,300	\$1,144	\$2,270	\$2,916	\$3,451	\$3,692	\$3,683
\$12,350	\$1,145	\$2,273	\$2,920	\$3,456	\$3,697	\$3,688
\$12,400	\$1,147	\$2,277	\$2,924	\$3,462	\$3,702	\$3,693
\$12,450	\$1,149	\$2,280	\$2,929	\$3,467	\$3,708	\$3,699
\$12,500	\$1,150	\$2,284	\$2,933	\$3,472	\$3,713	\$3,704

## Appendix 2.2

### Explaining Differences in Estimates of Expenditures on Children across Models<sup>14</sup>

Estimates of expenditures on children are sensitive to the specification of the estimating equation, the choice of variables to include in the equation, and the data series used in the estimation. In an attempt to reconcile differences in the estimates, this appendix compares the estimates from three different models: the Engel Model, the Rothbarth Model, and an Age-Invariant Model using data from the 1999-2001 CEX proposed by McCaleb, Macpherson, and Norrbin.

**Table 2.2.1**  
**Comparison of Results from Engel, Rothbarth, and Age-Invariant Models**

Author and Year of Study	Model	CEX Years	Estimated Child Expenditures as a Percent of Total Household Expenditures		
			One Child	Two Children	Three Children
Espenshade (1984) <sup>15</sup>	Engel	1972-73	24%	41%	51%
Betson (2000) <sup>16</sup>	Engel	1996-98	30%	44%	52%
Betson (2006) <sup>17</sup>	Rothbarth	1998-2004	25%	37%	44%
McCaleb et al. (2004) <sup>18</sup>	Age-Invariant	1999-2001	22%	38%	53%

Table 2.2.1 presents estimated expenditures on children as a share of total expenditures for the three models tested by Arce-Trigatti. These are the most recent results from each respective author and each study uses a different set of years from the CEX data, as indicated by the table. Using 1972-73 CEX data and under the Engel Model, Espenshade estimates the average cost of one child as 24 percent of total family

<sup>14</sup> Appendix 2.2 was written by M. Paula Arce-Trigatti and summarizes the research in M. Paula Arce-Trigatti, "Investigating Robustness in the Engel and Rothbarth Models: An Empirical Estimation Study," MS Thesis, Florida State University, 2009.

<sup>15</sup> Thomas J. Espenshade, *Investing in Children: New Estimates of Parental Expenditures*, Washington, DC: Urban Institute Press.

<sup>16</sup> David Betson, "Parental Expenditures on Children: A Preliminary Report," Unpublished manuscript, University of Notre Dame, Department of Economics, Retrieved July 27, 2008, from <http://www.nd.edu/~dbetson/research/documents/CostofChildren2000.pdf>.

<sup>17</sup> David Betson, "Parental Expenditures on Children: Rothbarth Estimates," Report Prepared for Policy Studies, Inc., for the State of Oregon, Retrieved July 27, 2008, from <http://www.nd.edu/~dbetson/research/documents/CostofChildren2006.pdf>.

<sup>18</sup> Thomas S. McCaleb, David Macpherson, and Stefan Norrbin, *Review and Update of Florida's Child Support Guidelines, Report to the Florida Legislature*, Department of Economics, Florida State University, March 5, 2004. The Age-Invariant Model is also used to generate the estimates in the present review.

expenditures. He finds the corresponding figures for two and three children to be 41 and 51 percent, respectively.

Betson (2000), which relies on 1996-98 CEX data but also uses the Engel Model, reports estimates that range from one to six percentage points higher than those reported by Espenshade. The difference is six percentage points for one child, three percentage points for two children, and one percentage point for three children.

Betson (2006) uses data from the 1998-2004 CEX in the Rothbarth Model and produces estimates that range from five to eight percentage points lower than the Betson-Engel estimates. Using the Rothbarth Model, Betson finds that the average cost of one child is 25 percent of total family expenditures, while the figures for two and three children are 37 and 44 percent, respectively.

Finally, the last entry in the table corresponds to the estimates found by McCaleb, et al., (2004) in a previous review of Florida's child support guidelines. The Age-Invariant Model uses data from the 1999-2001 CEX and the resulting estimates appear to resemble most closely those from Espenshade's 1984 study. Under the Age-Invariant Model, one child is estimated to cost on average 22 percent of total family expenditures, while two children are estimated to cost 38 percent and three children, 53 percent of total family expenditures.

To investigate the source of the differences between the estimates in this report, which represent an update of the Espenshade and Betson-Engel estimates, Arce-Trigatti compared results obtained from running the three models introduced above on the same sample data set.

The Engel Model is as follows:

$$\ln\left(\frac{F}{(1-F)}\right) = \theta \ln(N_i) + \delta \ln\left(\frac{S_i}{N_i}\right) + \beta \ln\left(\frac{S_i}{N_i}\right)^2 + \alpha(K_i) + \gamma(X_i)$$

where the dependent variable,  $\ln(F/(1-F))$ , is defined to be the natural log of the ratio of total food-at-home expenditures,  $F$ , to one minus total food-at-home expenditures,  $1-F$ ;  $N_i$  is family size,  $S_i$  is total expenditures,  $K_i$  is a collection of variables representing the proportion of kids in a household based on age, and  $X_i$  is a collection of demographic variables specific to the adults found in the family. The Rothbarth Model is as follows:



$$\ln(A) = \theta \ln(N_i) + \delta \ln\left(\frac{S_i}{N_i}\right) + \beta \ln\left(\frac{S_i}{N_i}\right)^2 + \alpha(K_i) + \gamma(X_i)$$

where the dependent variable,  $\ln(A)$ , is the natural log of the *total* amount of expenditures devoted to adult clothing. The remaining variables in the Rothbarth equation are the same as in the Engel equation. The corresponding equation of the third model, the Age-Invariant Model, is shown above in Sections 2.2 and the variable definitions in Section 2.3. Finally, Table 2.2.2 presents the variable definitions used in conducting all three models.

**Table 2.2.2**  
**Variable Definitions**

Variable	Definition
LNFSIZE	Log of family size
LNPCTEXP	Log of per capita total expenditures
LNPCTEXP2	Square term of log of per capita total expenditures
CK02	Number of children 0 to 2 years old divided by family size
CK35	Number of children 3 to 5 years old divided by family size
CK612	Number of children 6 to 12 years old divided by family size
CK1315	Number of children 13 to 14 years old divided by family size
CK1617	Number of children 15 to 17 years old divided by family size
CA1825	Number of adults 18 to 25 years old divided by family size
CA2635	Number of adults 26 to 35 years old divided by family size
CA3645	Number of adults 36 to 45 years old divided by family size (reference group, omitted in regression)
CA4655	Number of adults 46 to 55 years old divided by family size
CA5660	Number of adults 56 to 60 years old divided by family size
BLACK	1 if the Head was black, 0 otherwise
HD_NO_HS	1 if Head's education was less than 12 years, 0 otherwise
HD_COLL	1 if Head's education was greater than 12 years, 0 otherwise
SP_NO_HS	1 if spouse's education was less than 12 years, 0 otherwise
SP_COLL	1 if spouse's education was greater than 12 years, 0 otherwise
W_WORK	Weeks worked by spouse divided by 52
FTIME	1 if the spouse worked more than 30 hours per week, 0 otherwise
TWOERN	1 if both adults worked, 0 otherwise

In order to test each model's sensitivity to the underlying data set, a specific set of criteria guided by the work of Betson (2006) was applied in order to obtain two data sets.

Beginning with a sample size of 34,893 households (91,379 observations), deletions were observations were deleted based on the following two criteria:

- (i) only those households that consisted of a husband and wife, between the ages of 18 and 60, were included, and
- (ii) only those households that contained no other adults (persons over the age of 18) present were included, even if these adults were the children of the parental units.

These two criteria resulted in a loss of 25,432 households. Table 2.2.3 summarizes all deletions.

No mention was made in Betson (2006) as to the exclusion of households that have zero, negative, or missing income. Thus, no deletions were made based on this restriction. Any observations testing positive for topcoding were subsequently deleted; in this instance, an additional 756 deletions were made. Furthermore, households that contained six or more children were also excluded from the final sample, as it was assumed that these represent extreme cases and would only serve to bias the results.

**Table 2.2.3  
Number of Sample Deletions by Reason**

Total Number of Households in the 1999-2001 Consumer Expenditure Survey	<b>34, 893</b>
<b>Reduction for:</b>	
a) Non-husband and wife households	-22,126
b) Spouse # 1 not between 18 and 60 yrs old	- 3,099
c) Spouse # 2 not between 18 and 60 yrs old	- 239
d) Households with topcoded income variables	- 756
e) Households with 6 or more children	- 28
f) Households with zero expenditures on clothing	<u>- 1,386</u>
<b>Usable “Complete” Sample</b>	<b>7, 259</b>
g) Households with less than 3 completed interviews	<u>- 3, 078</u>
<b>Usable “Partial” Sample</b>	<b>4, 181</b>

The final restriction was the exclusion of households that had zero expenditures on adult items; 1,386 additional observations were dropped for this reason.

As Table 2.2.3 shows, the final two major entries are titled “Usable Complete Sample” and “Usable Partial Sample.” The motivation behind this distinction is the attempted investigation into the robustness<sup>19</sup> of the three models. The distinction between these two samples is the response rate to the quarterly interviews of the CEX. If a household completed fewer than three of the four interview attempts, it was included in the complete sample but deleted from the partial sample. Missing information that can result in a household having fewer total responses than expected (due to the failure to

<sup>19</sup> We are defining robustness to be the degree of sensitivity each model exhibits with respect to the underlying data set; that is, a model will be considered more robust the less variance found in its estimates.

state expenditures on food for a certain quarter, for example) also caused households to be deleted for the final partial sample.

There is no strong economic rationale for excluding households that responded to fewer than three interview attempts unless these households are somehow correlated with the dependent variable in one of the models; this is assumed not to be the case. Thus, theoretically, there should be no major difference in results between running the partial sample or the complete sample on the three models, provided the model itself is robust.

Regression results from the three models for both samples are presented in Tables 2.2.4, 2.2.5, and 2.2.6. Table 2.2.4 shows the results from using the Engel Model. They are similar to those reported in Betson (1990)<sup>20</sup> regardless of sample set, which suggests a certain degree of robustness. As in Betson (1990), food share declines as the log of per capita spending and its square rises. In addition, food share declines as the log of family size increases. Finally, food share is greater for older children than for younger children.

Regression results using the Rothbarth Model are in Table 2.2.5. As expected, with either data set, purchases of adult clothing fall as the number of children present in the household rises. However, there do appear to be some differences in the impact of the age of the child on the level of adult expenditures. These results seem to be particularly sensitive to the underlying dataset, but the parameter estimates produced by the partial sample are the only results where these variables are statistically significant.

Additionally, there are some concerns surrounding the family size variable. Because this study restricted the sample to include only households composed of husband and wife, an increase in family size is directly associated with an increase in the number of children. According to Rothbarth, we would expect this variable to be negative when adult clothing is the dependent variable. It is in fact positive regardless of dataset used, violating one of Rothbarth's principal assumptions.

Results from using the Age-Invariant Model are in Table 2.2.6. Nearly all of the variables in this regression are statistically significant, and more importantly, the child variables and the total expenditures variables maintain a negatively correlated relationship with each other, indicating that Engel's assumptions are indeed upheld. Moreover, the numerical impact on the dependent variable (the share of expenditures on food at home) from adding an additional child to the household can be seen very clearly with either data set: an increase in the number of children is correlated with an increase in the share of the budget devoted to food.

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<sup>20</sup> David Betson, "Alternative Estimates of the Cost of Children from the 1980-86 Consumer Expenditure Survey," Report to U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Institute for Research on Poverty, University of Wisconsin-Madison, Special Report Series No. 51.

**Table 2.2.4**  
**Estimation of Engel Equations: Complete and Partial Data Sets**

Dependent Variable: log of total expenditures on food at home shares		
<i>Variable</i>	<i>Coefficient (Complete)</i>	<i>Coefficient (Partial)</i>
LNFSIZE	-0.96141** (0.09022)	-0.96694** (0.11629)
LNPCTEXP	-1.07623** (0.0164)	-1.15038** (0.02136)
LNPCTEXP2	-0.17807** (0.00199)	-0.18505** (0.00253)
CK02	0.34112* (0.15567)	0.44191* (0.1991)
CK35	0.45015** (0.15341)	0.28161 (0.19594)
CK612	0.55482** (0.14068)	0.58785** (0.18167)
CK1315	0.64823** (0.17095)	0.63584** (0.2159)
CK1617	0.66411** (0.15617)	0.67224** (0.19803)
CA1825	-0.44793** (0.05783)	-0.41097** (0.08539)
CA2635	-0.14911** (0.04069)	-0.16014** (0.05142)
CA4655	0.11858** (0.0402)	0.18542** (0.04892)
CA5660	0.0374 (0.05045)	0.08526 (0.06118)
BLACK	-0.15508** (0.03685)	-0.17079** (0.04548)
HD_NO_HS	-0.0119 (0.03669)	-0.00233 (0.04504)
HD_COLL	0.06345** (0.2298)	0.07677** (0.02802)
SP_NO_HS	0.00487 (0.0405)	-0.05929 (0.05149)
SP_COLL	0.05767* (0.02303)	0.04881 (0.02799)
W_WORK	-0.00896 (0.03882)	0.01766 (0.04864)
FTIME	0.00431 (0.02522)	0.03277 (0.03112)
TWOERN	-0.04441 (0.03325)	-0.02863 (0.04134)
Constant	-0.73076** (0.07998)	-0.77744** (0.10021)
$\overline{N}$	7,259	4,181
$R^2$	0.553	0.5966

Standard errors reported in parentheses. \*\* indicates significance at the 1% level, and \* indicates significance at the 5% level in a two-tailed test.

**Table 2.2.5**  
**Estimation of Rothbarth Equations: Complete and Partial Data Sets**

Dependent Variable: log of total expenditures on adult clothing		
<i>Variable</i>	<i>Coefficient (Complete)</i>	<i>Coefficient (Partial)</i>
LNFSIZE	0.18199 (0.12094)	0.56119** (0.16021)
LNPCTEXP	0.66092** (0.02199)	0.72883** (0.02943)
LNPCTEXP2	0.07016** (0.00267)	0.07738** (0.00349)
CK02	-0.2536 (0.20868)	-0.54009* (0.27429)
CK35	-0.17141 (0.20565)	-0.57664* (0.26993)
CK612	-0.16322 (0.18858)	-0.57685* (0.25027)
CK1315	-0.17709 (0.22916)	-0.88518** (0.29743)
CK1617	0.98487** (0.20934)	0.62467* (0.27282)
CA1825	-0.10389 (0.07752)	-0.25832* (0.11764)
CA2635	0.0408 (0.05455)	0.07816 (0.07085)
CA4655	0.00793 (0.05389)	0.06725 (0.0674)
CA5660	-0.0236 (0.06763)	0.10519 (0.08428)
BLACK	0.06939 (0.04939)	0.01497 (0.06265)
HD_NO_HS	-0.08098 (0.04918)	-0.09535 (0.06206)
HD_COLL	0.19259 (0.0308)	0.24346** (0.0386)
SP_NO_HS	-0.05037 (0.0543)	-0.02196 (0.07093)
SP_COLL	0.17763 (0.03087)	0.18083** (0.03857)
W_WORK	0.1196 (0.05203)	0.13453* (0.06701)
FTIME	0.01936 (0.03381)	0.04798 (0.04287)
TWOERN	0.01778 (0.04457)	0.02914 (0.05695)
Constant	5.54752** (0.10721)	5.07618 (0.13806)
$\bar{N}$	7,259	4,181
$R^2$	0.2023	0.2402

Standard errors reported in parentheses. \*\* indicates significance at the 1% level, and \* indicates significance at the 5% level in a two-tailed test.

**Table 2.2.6**  
**Estimation of Age-Invariant Equations: Complete and Partial Data Sets**

Dependent Variable: log of total expenditures on food at home shares		
<i>Variable</i>	<i>Coefficient (Complete)</i>	<i>Coefficient (Partial)</i>
LNPCTEXP	-0.69761** (0.01325)	-0.7554** (0.01731)
LNPCTEXP2	-0.16884** (0.00194)	-0.17571** (0.00249)
KID1	0.15497** (0.02566)	0.17682** (0.03229)
KID2	0.34089** (0.02406)	0.31863** (0.02985)
KID3	0.46915** (0.03341)	0.46272** (0.04067)
KID4	0.51717** (0.0578)	0.56467** (0.07247)
KID5	0.72396** (0.12148)	0.76362** (0.15291)
BLACK	-0.14876** (0.03733)	-0.16166** (0.04639)
HD_NO_HS	-0.02155 (0.03716)	-0.02159 (0.04594)
HD_COLL	0.06415** (0.02324)	0.07932** (0.02854)
SP_NO_HS	-0.0205 (0.04102)	-0.08107 (0.05252)
SP_COLL	0.04256 (0.02321)	0.03072 (0.02846)
W_WORK	0.05335 (0.03899)	0.08255 (0.04924)
FTIME	-0.000277 (0.02549)	0.02471 (0.03167)
TWOERN	-0.08416* (0.03345)	-0.07431 (0.0419)
Constant	-0.91211** (0.03277)	-0.86368** (0.04009)
N	7,259	4,181
$\overline{R^2}$	0.5411	0.5799

Standard errors reported in parentheses. \*\* indicates significance at the 1% level, and \* indicates significance at the 5% level in a two-tailed test.

The final tests for robustness suggest that, of the three models, the Rothbarth model may indeed be the most sensitive to the underlying data set. However, this observation should be considered primarily relevant to the intermediate step of the regression results. Indeed, as shown in Table 2.2.7, when averaging the Rothbarth numbers and collapsing the individual child-age information within the same data set,

there is little difference between the average share estimation from the complete sample and that from the partial sample.

**Table 2.2.7**  
**Average Share Estimates by Model**

Model and Data Set	Number of Children		
	1	2	3
Rothbarth: Complete	32.44%	47.94%	57.85%
Rothbarth: Partial	32.19%	45.61%	55.39%
<b>Average Rothbarth</b>	<b>32.32%</b>	<b>46.78%</b>	<b>56.62%</b>
Engel: Complete	20.86%	30.65%	38.05%
Engel: Partial	21.22%	31.36%	38.89%
<b>Average Engel</b>	<b>21.04%</b>	<b>31.01%</b>	<b>38.47%</b>
Age-Invariant: Complete	35.61%	54.52%	62.01%
Age-Invariant: Partial	35.76%	54.16%	61.99%
<b>Average Age-Invariant</b>	<b>35.69%</b>	<b>54.34%</b>	<b>62.00%</b>

The average share of total expenditures dedicated to one child under the Rothbarth Model is estimated to be 32 percent; for two children, it is nearly 47 percent; and for three children, it is almost 57 percent. The Engel Model generated estimates that are considerably lower than the estimates from the Rothbarth Model. For one child, the Engel Model estimates about 21 percent; for two children, 31 percent; and three children, 38 percent. Finally, the Age-Invariant Model generates the highest cost estimates of the three models, with one child costing almost 37 percent, two children 54 percent, and three children 62 percent.

Table 2.2.7 also indicates sensitivity on the part of the Engel models (i.e., the Engel Model and the Age-Invariant Model) to specification. While the two models are rooted in the same Engel methodology, it is obvious from the table that estimates are quite sensitive to the variables included. It would appear as though including a control for the age of the child lowers the overall estimates.

In summary, there are several factors that account for the differences among estimates of expenditures on children. First, the Rothbarth Model is the most sensitive to the underlying data set and sample restrictions. The regression results under this model vary substantially depending on which data set is used. Second, including the control for the ages of the adults and children within the regression equation produces very different estimates between the two Engel-based models. The estimates are much higher when these controls are not included than when they are.

### 3. Price Level and Cost of Living Adjustments to the Schedule of Child Support Obligations

The first section of this chapter discusses the use of the Consumer Price Index (CPI) to produce periodic updates of the schedule of child support obligations. It provides a methodology for updating, applies the methodology to develop a new schedule of obligations, and discusses the validity of this methodology. Use of the CPI to update the schedule of obligations is much less costly than re-estimating the costs of children from Consumer Expenditure Survey (CEX) data, but as the time between updates grows longer, the validity of the CPI methodology becomes doubtful.

The second section discusses the use of geographic cost of living indexes to adjust child support obligations within the state for differences in the cost of living. While superficially this appears to be a reasonable approach given wide intrastate variations in costs of living, in fact the child support schedule already compensates for these differences. Any explicit adjustment based on a geographic cost of living index would constitute overcompensation. Furthermore, the adjustment, even if it were theoretically valid, suffers from technical difficulties that make it problematic at best.

#### ***3.1 Using the Consumer Price Index to Adjust Child Support Obligations***

Federal law mandates a review of each state's child support obligations every four years taking into account the most recent economic data. The implication, of course, is that if the economic data have changed, the state's schedule of obligations should also be updated. One approach to updating the schedule is to re-estimate the cost of children using the most recent CEX data. A second, less costly approach is to apply the Consumer Price Index (CPI) to the existing schedule.

Some states have revised their schedules using estimates of the cost of children that are based on more recent CEX data than the 1972-73 data on which Florida's current schedule is based. Colorado, for example, updated its schedule, derived from 1980-1986 consumer expenditure data, using the 2001 CPI. Arizona, Connecticut, and Pennsylvania all rely on the 1996-99 CEX, but each has updated the data for price level changes using the CPI. Arizona updated using the 2002 CPI, Pennsylvania updated to 2003, and Connecticut updated to 2004. The most recent estimate of the cost of children was undertaken in 2006 for Oregon, based on 1998-2004 consumer expenditure data.<sup>1</sup> The

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<sup>1</sup> Betson, David M. (2006). "Appendix I: New Estimates of Child-Rearing Costs in *State of Oregon Child Support Guidelines Review: Updated Obligation Scales and Other Considerations*, Report to State of



data were then updated to 2006 prices using the CPI. In each case, a schedule of obligations is derived from estimates of the cost of children and then is adjusted to current dollar amounts using the CPI. It does not appear that any state has relied exclusively on the CPI to revise its schedule as part of the federally mandated four-year review. One state, Michigan, does use the CPI for an annual update of its schedule of obligations.

The methodology used to develop a CPI-adjusted schedule of obligations for Florida is described immediately below. The issues involved in choosing a specific version of the Consumer Price Index to use in applying this methodology are discussed next. A discussion of the validity of this methodology concludes the section. The inflation-adjusted schedule is shown in Appendix 3-1.

*Methodology*

The methodology adopted here is similar to that used in Michigan. First, the net income levels in the current schedule were inflated by 44%, the increase in the CPI from June 1993 to June 2007. Next, the same *percentage* child support obligation associated with each 1993 income level was assigned to the inflation-equivalent 2007 income level. Applying this percentage to the 2007 income level generated a dollar amount for the 2007 child support obligation.

Finally, the inflated net income levels and their associated child support obligations were converted to a scale ranging from \$950 to \$14,400 in \$50 increments. This required interpolating the support obligations associated with the new inflated incomes levels to the income levels to be displayed in the revised schedule. The interpolation procedure is best described by the example in Table 3.1.

**Table 3.1**  
**Example of Calculation of the Support Obligations Associated with**  
**Inflation-Adjusted Incomes**

1993 Net Income	1993 Child Support Obligation with One Child	2007 Inflation-Equivalent Net Income	Income Level Displayed in Inflation-Adjusted Schedule	2007 Child Support Obligation with One Child
950	224	1371		323
			1400	330
1000	235	1443		339

A net income of \$1371 in 2007 is equivalent to \$950 in 1993 and a net income of \$1443 in 2007 is equivalent to \$1000 in 1993. The support obligation for a combined net income of \$950 in 1993 was \$224 (23.58% of net income) and the support obligation for a combined income of \$1000 was \$235 (23.50% of net income). The inflation-adjusted support obligations are \$323 (23.58% of \$1371) and \$339 (23.50% of \$1443).

The new schedule, however, does not display incomes of either \$1371 or \$1443. Instead, the nearest net income displayed in the schedule is \$1400. To interpolate a 2007 child support obligation for a \$1400 net income, calculate the difference between \$1400 and \$1371 as a percent of the entire interval between \$1371 and \$1443. Apply that percentage to the interval between the associated child support obligations, \$323 and \$339. Finally, add the result to \$323 to yield the interpolated 2007 child support obligation of \$330 for a net income of \$1400. In other words, the differences between the child support obligations are proportional to the differences between the net incomes.

The final step in the construction of the inflation-adjusted schedule is to update the self-support reserve. The inclusion of a self-support reserve ensures that obligors have sufficient income to maintain a minimum standard of living. It prevents obligors from being pushed into poverty by the payment of child support. If they are already in poverty, it prevents child support from exacerbating their poverty. The current Florida schedule of basic child support obligations includes a self-support reserve for incomes less than \$650. This is based on the 1992 single-person federal poverty guideline of \$568. Unlike many other states, Florida's child support guidelines do not specify any minimum support order amount. The current schedule, however, implicitly assumes that all noncustodial parents are obligated to pay at least \$50 a month, which is the amount specified in other income shares states with a minimum order. This is the obligation of a noncustodial parent when the combined net income is less than \$650.

For incomes above the self-support reserve, the calculated child support obligation based on economic data is phased in gradually until the point at which the obligor can pay the full obligation and still retain sufficient income to remain above poverty. This preserves the integrity of the self-support reserve. For one child, the basic support obligation shown in the schedule is the smaller of (1) the calculated amount based on the estimated expenditures on children, or (2) 90% of the difference between the obligor's income level and the poverty guideline. For two children, the percentage is 91% of the difference, 92% for 3 children, 93% for 4 children, 94% for 5 children, and 95% for 6 children.

The revised schedule in Appendix 3-1 includes an updated self-support reserve based on the 2007 poverty guideline. The 2007 poverty guideline for a single person is \$851. Therefore, the self-support reserve extends to a combined monthly net income of \$950. Below this amount, the support obligation is determined at the discretion of the court. Beginning at \$950, the calculated support obligations are phased in as in the current schedule. The resulting phase-in range for one child extends from \$950 monthly net income to \$1200 monthly net income, with correspondingly larger ranges for more children.

Except in the phase-in range of net incomes, the child support obligation in the revised schedule is higher than the support obligation for the same income in the current schedule. However, the differences are generally less than the 44% increase in the CPI between 1993 and 2007. Comparing child support obligations for the same monthly net

incomes, however, is inappropriate. Typically, inflation results in an increase in incomes as well as in prices.<sup>2</sup> If the revised schedule were in effect, the average noncustodial parent with one child and combined monthly net income of, for example, \$5050 in 2007 would pay \$1065, or 21.1% of income. In 1993, the same noncustodial parent would, on average, have had combined monthly net income of about \$3500 and would have paid \$738, also 21.1% of income. The problem is the failure to update Florida's existing schedule of child support obligations to accurately reflect changes in both incomes and the cost of children since 1993.<sup>3</sup>

### *Choice of Consumer Price Index*

The Bureau of Labor Statistics publishes not just one consumer price index, but multiple indexes. There are different indexes for different sets of goods as well as for all goods and for different metropolitan areas as well as an All-Urban index.

*U.S. City Average or Miami-Ft. Lauderdale or Tampa-St. Petersburg-Clearwater?* The U.S. City Average Consumer Price Index for All Urban Consumers (CPI-U) for all items was used to derive the updated schedule of child support obligations in Appendix 3:1. If the rate of increase in prices in Florida over the period 1993-2007 tracks closely with the national average rate of increase, the U.S. City Average CPI-U is an appropriate inflator. However, if the rate of increase in Florida is either significantly higher or lower than the national average, then using the U.S. City Average CPI-U either understates or overstates the change in the cost of children in Florida over this period.

The most appropriate inflator would be a Florida-specific CPI, but there is not one. There are separate CPI-U's for two Florida metropolitan areas, Miami-Ft. Lauderdale and Tampa-St. Petersburg-Clearwater.<sup>4</sup> Without statewide average data, however, it is impossible to know whether either of these is more representative of the state as a whole than is the U.S. City Average CPI-U. Table 3.2 provides a comparison of the rates of change between June 1993 and June 2007 in the U.S. City Average CPI-U, the Miami-Ft. Lauderdale CPI-U, and the Tampa-St. Petersburg-Clearwater CPI-U.

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<sup>2</sup> Of course, not everyone's income rises and even those that do rise may increase more than or less than the increase in prices. But the trend is for the average level of incomes and the average level of prices to move in the same direction, particularly over a period as long as fourteen years.

<sup>3</sup> As noted elsewhere, even if Florida's schedule of child support obligations had been updated to reflect changes in the CPI every year since 1993, it would still not accurately reflect the cost of children in 2007 because even the 1993 child support obligations were based on twenty-year-old consumer expenditure data from 1972-73.

<sup>4</sup> Michigan uses the CPI-U for the Detroit metropolitan area, the only metropolitan area in Michigan for which data is available.

**Table 3.2**  
**Increases in CPI-U, 1993-2007**

Consumer Price Index	Rate of Increase June 1993-June 2007
U.S. City Average CPI-U	44.29%
Miami-Ft. Lauderdale CPI-U	53.11% <sup>5</sup>
Tampa-St. Petersburg-Clearwater CPI-U	47.49% <sup>6</sup>

If for no other reason than the increase in housing prices, Miami-Ft. Lauderdale is unlikely to be representative of the state as a whole. Tampa-St. Petersburg-Clearwater may be more representative, but the difference in the rate of increase between the U.S. City Average and Tampa-St. Petersburg-Clearwater is not so large as to result in a significant bias in the revised table of child support obligations.

Another reason for using the U.S. City Average CPI-U is the source of the underlying data. The child support obligations that are being adjusted for changes in the CPI are derived from national average data on consumer expenditures. There is no consumer expenditure survey for Florida (or any other state) or any of its metropolitan areas. It seems more appropriate because the underlying expenditure data is an average of the U.S. as a whole, it seems more appropriate to use similar price level data to derive equivalent 2007 inflation-adjusted child support obligations.

*All Items or exclusive of childcare and medical expenditures?* The basic support obligation in the income shares model excludes the costs of work-related childcare and the child(ren)'s share of extraordinary medical expenses. After calculating a basic child support obligation from the schedule, the noncustodial parent's proportional share of actual expenditures on these items is added to the basic obligation in the child support guidelines worksheet. For consistency, then, the increases in medical prices and in childcare prices in the CPI should be excluded in deriving the CPI-adjusted obligations reported in Appendix 3:1.

In addition to the All-Items CPI-U, the Bureau of Labor Statistics computes an All-Items-Less-Medical CPI-U. The All-Items-Less-Medical CPI-U grew by 43% between 1993 and 2007. This is only 1.29 percentage points less than the rate of increase in the All-Items CPI-U including medical expenditures. In the 2003-2004 Consumer Expenditure Survey, the weight on all medical expenditures is 6.281; that is, medical expenditures represent 6.281% of total consumer expenditures. The bias in using the All-Items CPI-U is therefore approximately 0.4 ( $.06281 \times 1.29$ ); using the All-Items CPI-U

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<sup>5</sup> From 1993 to 1998, data for Miami were reported in the months of May and July but not June. Beginning in 1998, data are reported for June but not May or July. The Miami CPI-U for 1993 was the same in both May and July, so that number has been used to calculate the rate of increase for Miami.

<sup>6</sup> Monthly data are not available for Tampa-St. Petersburg-Clearwater. For 1993, only the annual average consumer price index is available and for 2007 only the average of the first six months of the year is available. These are the CPI values that have been used to calculate the rate of increase in the Tampa-St. Petersburg-Clearwater CPI-U.

inflates the basic child support obligations by approximately 0.4%.

There is no corresponding CPI-U excluding childcare and nursery school expenditures. Childcare and nursery school expenditures increased by 88.83% between 1993 and 2007, substantially more than the All-Items CPI-U. However, these expenditures constituted only 0.735% of total consumer expenditures in the 2003-2004 CEX. Therefore, the bias from using the CPI-U without excluding childcare and nursery school expenditures is only 0.3%.

The combined bias from not excluding medical expenditures and not excluding childcare and nursery school expenditures is about 0.7%. In other words, using the All-Items CPI-U results in overestimating the increase in child support obligations between 1993 and 2007 by less than one percent. Given the relatively small size of the bias, it is preferable to use the published data series on the All-Items CPI-U rather than attempting to construct a separate data series on an All-Items-Less-Medical-and-Child-Care CPI-U.

#### *Validity of Using the Consumer Price Index to Update Child Support Obligations*

The CPI is compiled by the U.S. Bureau of Labor Statistics (BLS) on a monthly basis and comprises about 80,000 prices recorded in 87 urban areas in the U.S. The goal of the CPI is to approximate the price increase of an average basket of goods consumed by a typical U.S. family. Traditionally, the U.S. has used a Laspeyres method to calculate the price index. Each item in the index is weighted in proportion to its relative importance in total household consumption as determined by the CEX. The weights are held constant for a period of time, but the items in the market basket are re-priced at regular intervals.

Historically, re-weighting occurred about every 10 years.<sup>7</sup> The longer the time interval between re-weightings, the less representative the price index becomes. Three general problems exist with creating a measure of how the cost of a basket of goods changes over time, and these problems are particularly important for a Laspeyres type index.

1. As relative prices of goods change this will affect the composition of the basket of goods. For example, following the 1979 oil price increase, consumers became more frugal in their use of oil. Because the item weights remained constant, however, this was not reflected in the CPI, thus overstating inflation in the late 1970's and 1980's.
2. Some items change in quality over time so that price increases reflect higher quality. Such changes are difficult to account for in price indices. Today's large screen, flat-panel, and high definition televisions are not the same items as 1993 televisions. They are more expensive than 1993 televisions, but they are arguably of higher quality than even the best televisions of 1993.

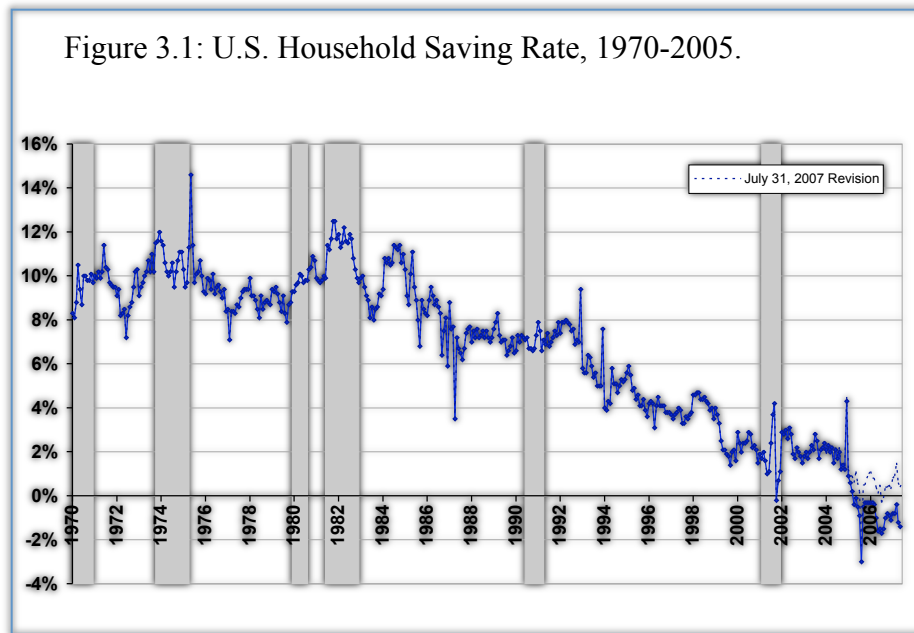
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<sup>7</sup> David S. Johnson, Stephen B. Reed, and Kenneth J. Stewart, "Price Measurement in the United States: A Decade after the Boskin Report," *Monthly Labor Review*, May 2006, p. 10-19.

3. New products are not accounted for in the traditional CPI. Cell phones, unheard of in 1993, are now common consumption items, especially among children.

If the CPI is not accurately estimated—if it does not account for the substitution of items whose prices have risen relatively slowly for those whose prices have risen at a faster rate, if it does not account for changes in the quality of existing items, and if it does not account for the introduction of new items—then using the CPI to revise and update the schedule of child support obligations results in obligations that no longer reflect the cost of children.

Using the CPI to revise and update Florida’s schedule of child support obligations rests upon several implicit assumptions. First, the CPI reflects only price changes, not changes in total consumption as a proportion of net income. Therefore, using the CPI to adjust the schedule of obligations assumes that household consumption expenditures are a constant proportion of net income over the time period in question. That is to say, it assumes that the rate of household saving out of net income is unchanged. This assumption is clearly violated for the 1993-2007 period as Figure 3:1 below shows.<sup>8</sup>



Personal saving as a percent of disposable personal income has fallen from the 6%-8% range in 1993 into the negative range in 2005, the most recent year shown. Even if the *composition* of household consumption expenditures had remained unchanged, *total* household consumption expenditures, including expenditures on children, must have

<sup>8</sup> *The Federal Reserve Bank of St. Louis Review*, November/December 2007, Vol. 89, No. 6, page 492.

increased so that the inflation-adjusted child support obligations now underestimate the cost of children.

Second, it assumes that the average increase in the prices of those goods and services consumed exclusively by a household's children and of household consumption items shared by both adults and children is the same as the average increase in the prices of all goods and services. If the prices of household consumption items that enter into the cost of children increase at a slower rate than other prices, then the cost of children increases more slowly than the overall rate of inflation and the CPI-adjusted schedule of child support obligations overstates the true cost of children. If the prices of children's and shared consumption items increase faster than other prices, the CPI-adjusted schedule understates the true cost of children. If the cost of children were directly estimated from household consumption data, the resulting bias could be estimated and a correction applied. But the cost of children is indirectly estimated from the Consumer Expenditure Survey, making identification of the bias and correction for it impossible.

Third, using the CPI to revise and update the child support obligations assumes that the distribution of total household consumption expenditures among adult consumption items, child consumption items, and shared items remains unchanged, at least during the interval between re-weightings of the CPI. If the proportion of child consumption items or shared items increases, the CPI-adjusted obligation understates the true cost of children; if the proportion of these items decreases, the CPI-adjusted obligation overstates the true cost of children. It is impossible to ascertain either the direction or extent of this bias without re-estimating the cost of children using the most recent household expenditure data. In that event, the re-estimated costs of children, not the CPI, should be used to revise and update the schedule of obligations.

Finally, the CPI has no scale effect. That is, if the cost of a second or third child changes relative to the cost of the first child, this is unaccounted for in using the CPI to adjust the child support obligations. Even if the CPI-adjusted child support obligations for one child accurately reflected the cost of one child, the additional obligation for a second and third child might either overstate or understate the true cost of additional children. Again, without re-estimating the cost of children, it is impossible to know whether such a bias exists or to determine its direction or magnitude. Using the CPI to revise and update the schedule of child support obligations, therefore, implicitly assumes that the cost of a second child relative to the first child and the cost of a third child relative to the second are unchanged.<sup>9</sup>

Recently, a chained version of the CPI (C-CPI-U) has been developed that attempts to correct for some of these problems.

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<sup>9</sup> Available data contain too few observations to allow statistically valid estimation of the cost of four, five, and six children. The child support obligations in the schedule for these larger numbers of children are extrapolated from the obligations for one, two, and three children. Therefore, any change in the relative cost of a second or third child would also impact the accuracy of the obligations for larger numbers of children.

1. The substitution bias is minimized by re-weighting the basket more frequently and using chained weights in place of the traditional Laspeyres method. Since 2002, the weights have been updated every 2 years.<sup>10</sup> The chained weights are partly applied to the CPI-U, which still assumes constant relative expenditures, and fully applied to the C-CPI-U.
2. To account for changes in quality, the BLS is using two methods. It relies heavily on commodity experts to judge whether newer items are equivalent to older items. It also uses a statistical method (hedonic pricing regressions) to determine by imputation what an older item would cost currently if there had been no quality enhancement.
3. The increased frequency of re-weighting also reduces the bias created by the introduction of new items.

These improvements in the CPI may enhance the validity of future CPI adjustments to the schedule of child support obligations.

The improvements are, however, too recent to resolve the problems with using the CPI for the period 1993-2007. Furthermore, even if all these problems were resolved, it is still true that Florida's current schedule of child support obligations is based on household expenditure patterns of 1972-73. Any CPI-adjusted schedule can only be as good as the original schedule that is being adjusted. For CPI adjustment of the schedule to be valid in the future, the current schedule must first be replaced by a new schedule that reflects today's household expenditures on children, not those of 1972-73.

#### *Comparison of CPI-Adjusted Child Support Obligations for Florida with Other States*

Figures 3.2-3.7 compare the basic child support obligations shown in the CPI-adjusted schedule in Appendix 3.1 with the current obligations in other income shares states for the typical Florida child support cases. The CPI-adjusted obligations would rank Florida in the middle range of states for all of the cases except the private high-income case. For the Title IV-D low-income case, Florida would be the median income shares state. For the Title IV-D middle-income case and the private low-income case, Florida ranks slightly below the median. For the Title IV-D high-income and the private middle-income cases, Florida ranks slightly above the median.

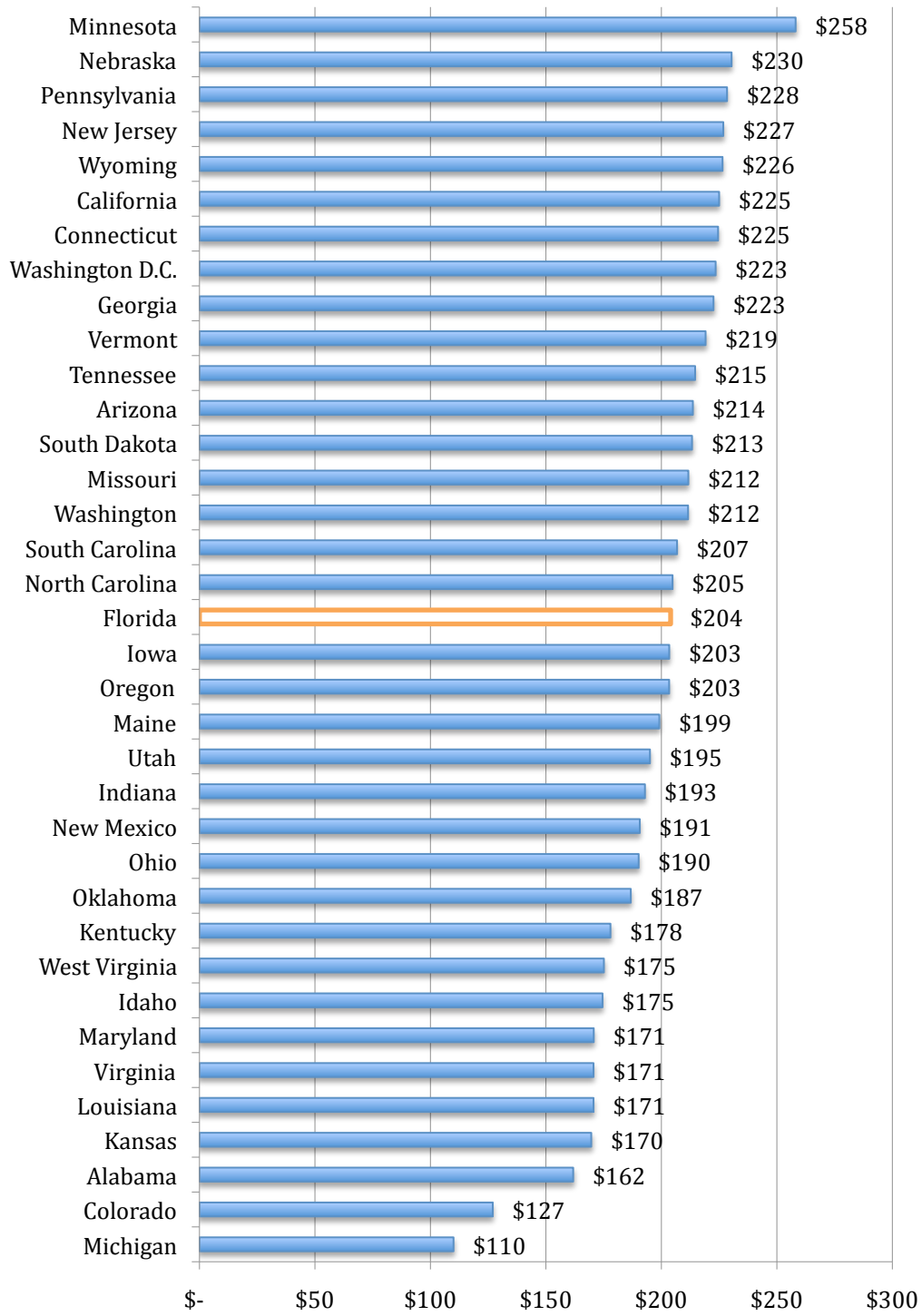
The private high-income case is an outlier. The CPI-adjusted support obligation in this case would be the third highest in the country. Because this is the only case that involves more than one child, it suggests that the marginal support obligation for an additional child in Florida is relatively higher in Florida than in most other income shares states.

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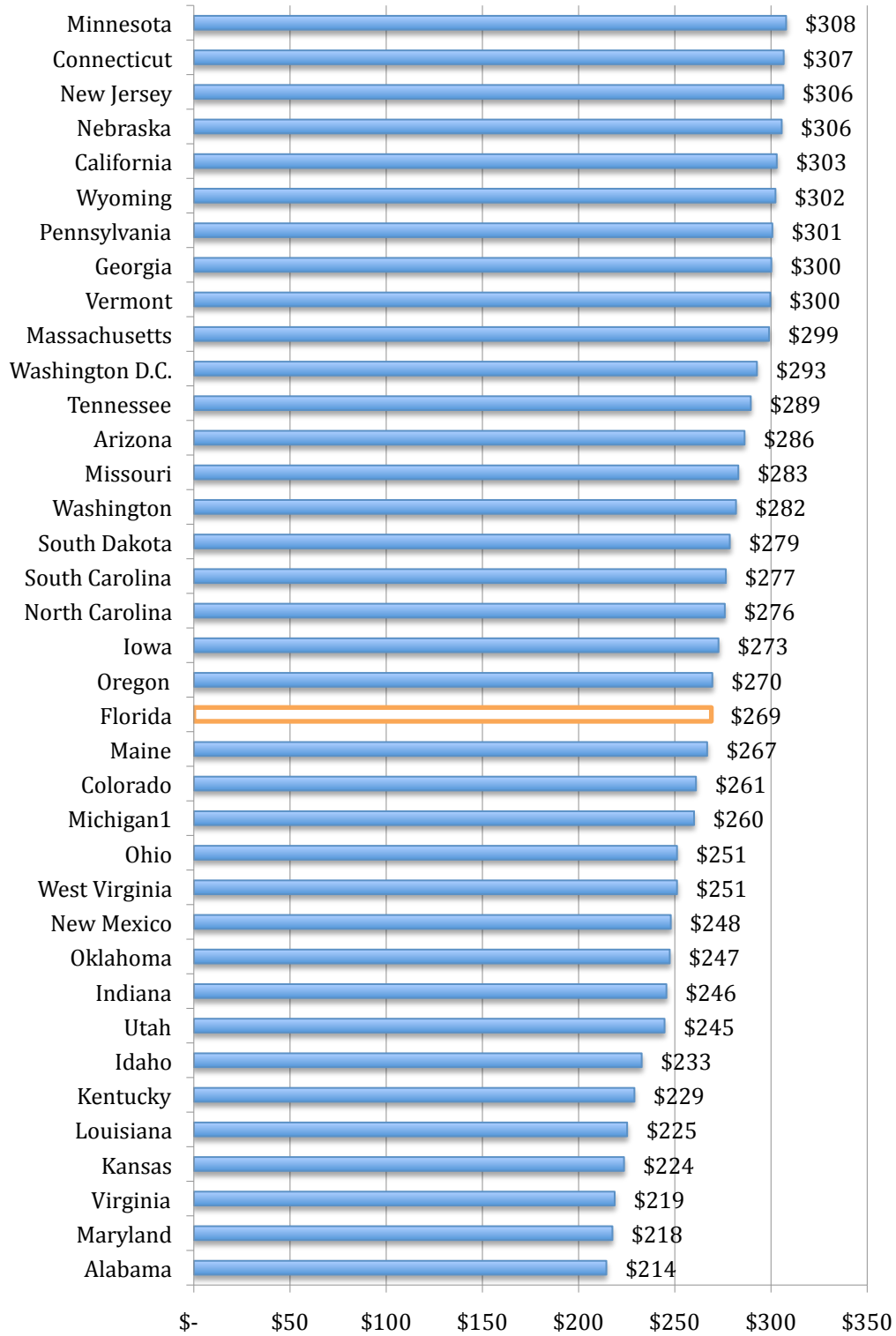
<sup>10</sup> Johnson, et al., 2006.



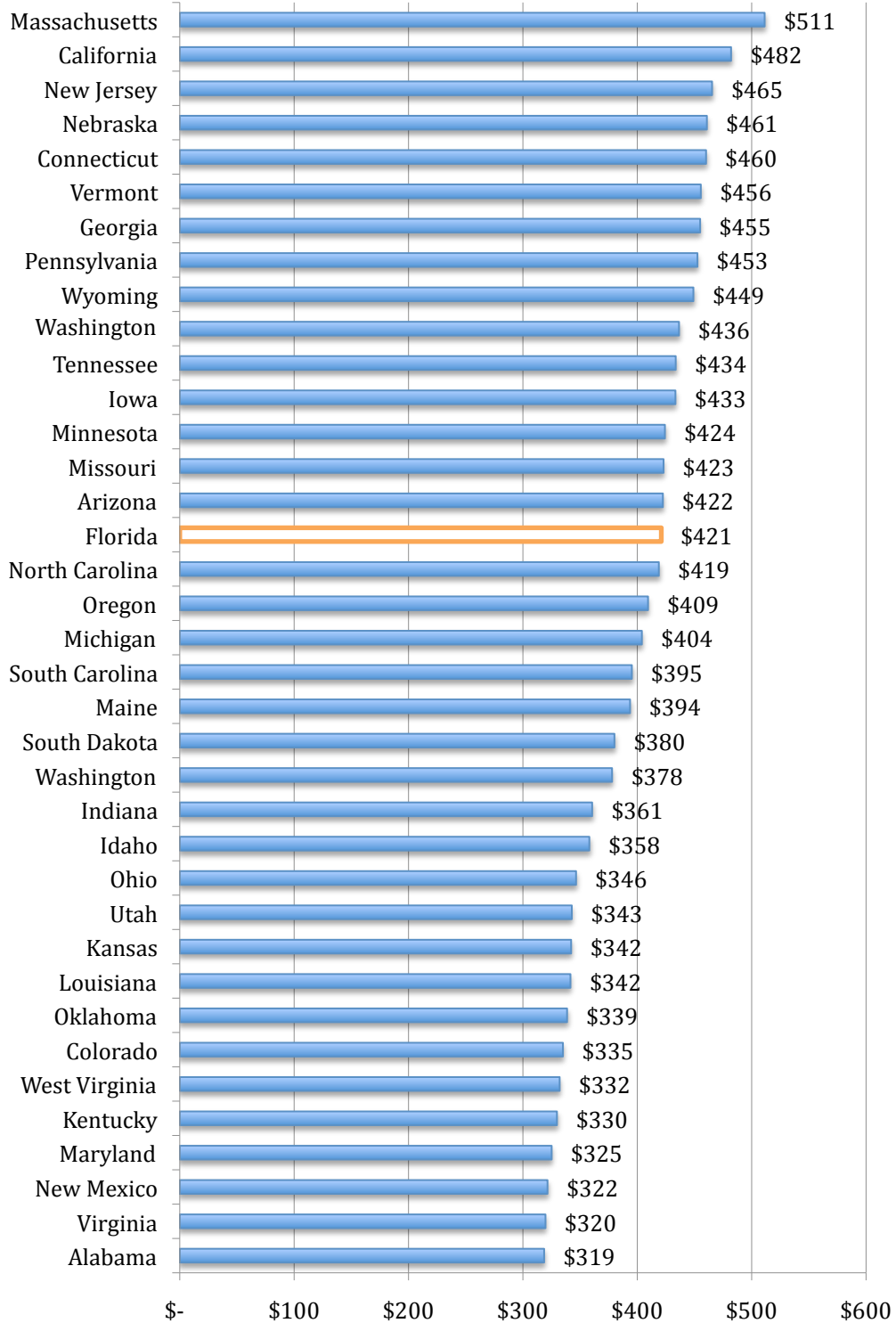
**Figure 3.2: CPI Adjusted Child Support Payments: IV-D  
Low Income**



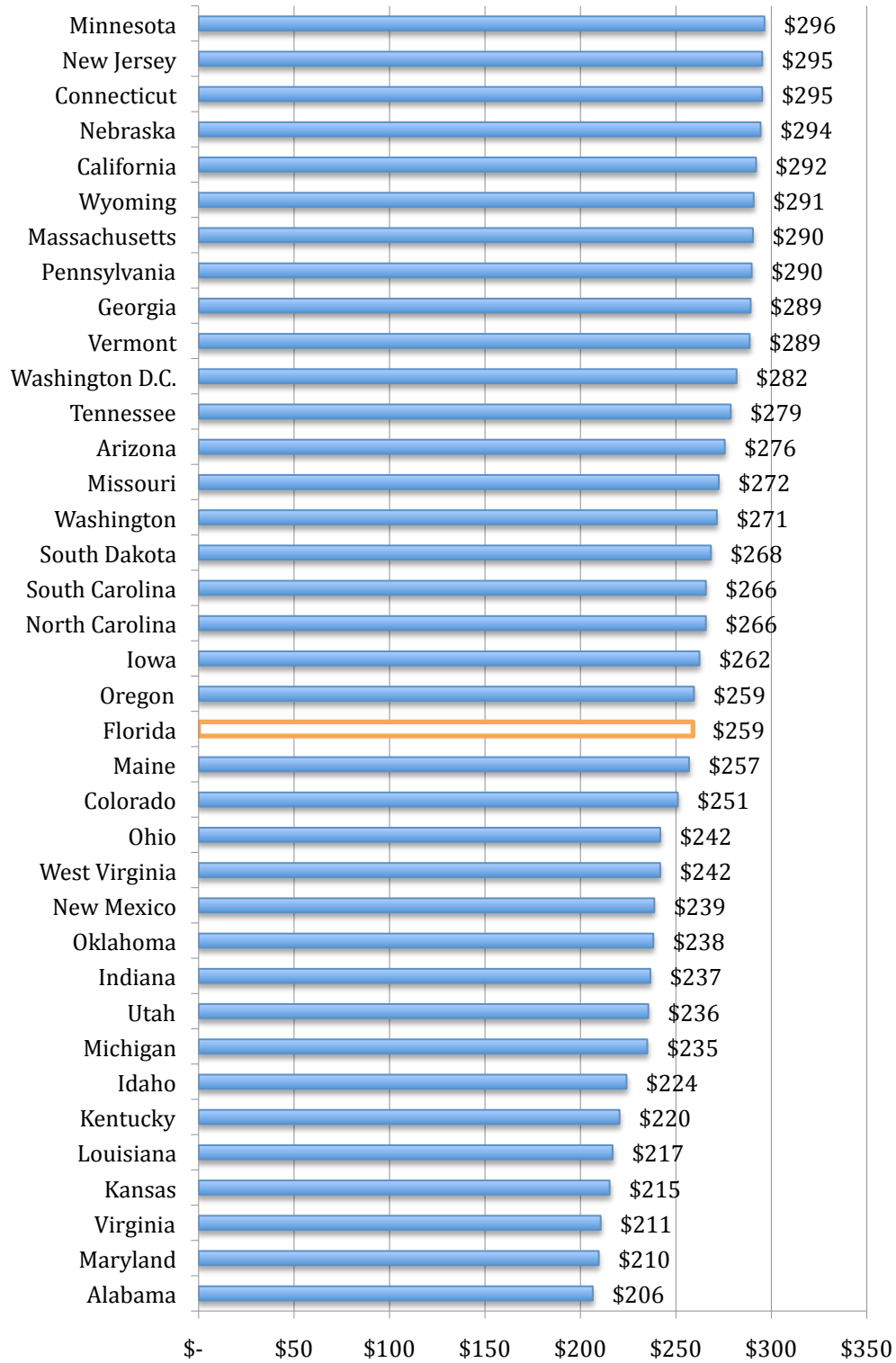
**Figure 3.3: CPI Adjusted Child Support Payments: IV-D  
Middle Income**



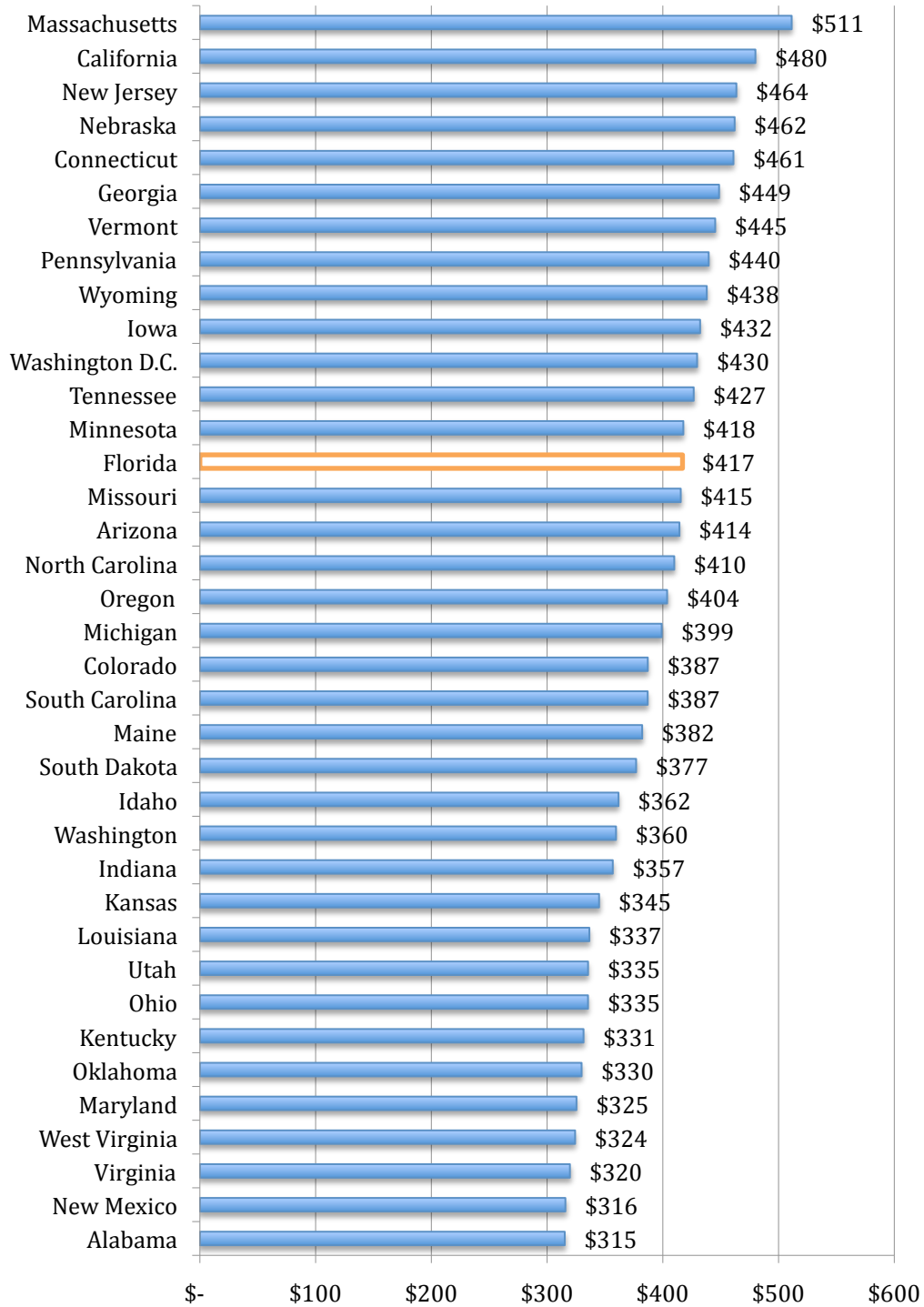
**Figure 3.4: CPI Adjusted Child Support Payments: IV-D High Income**



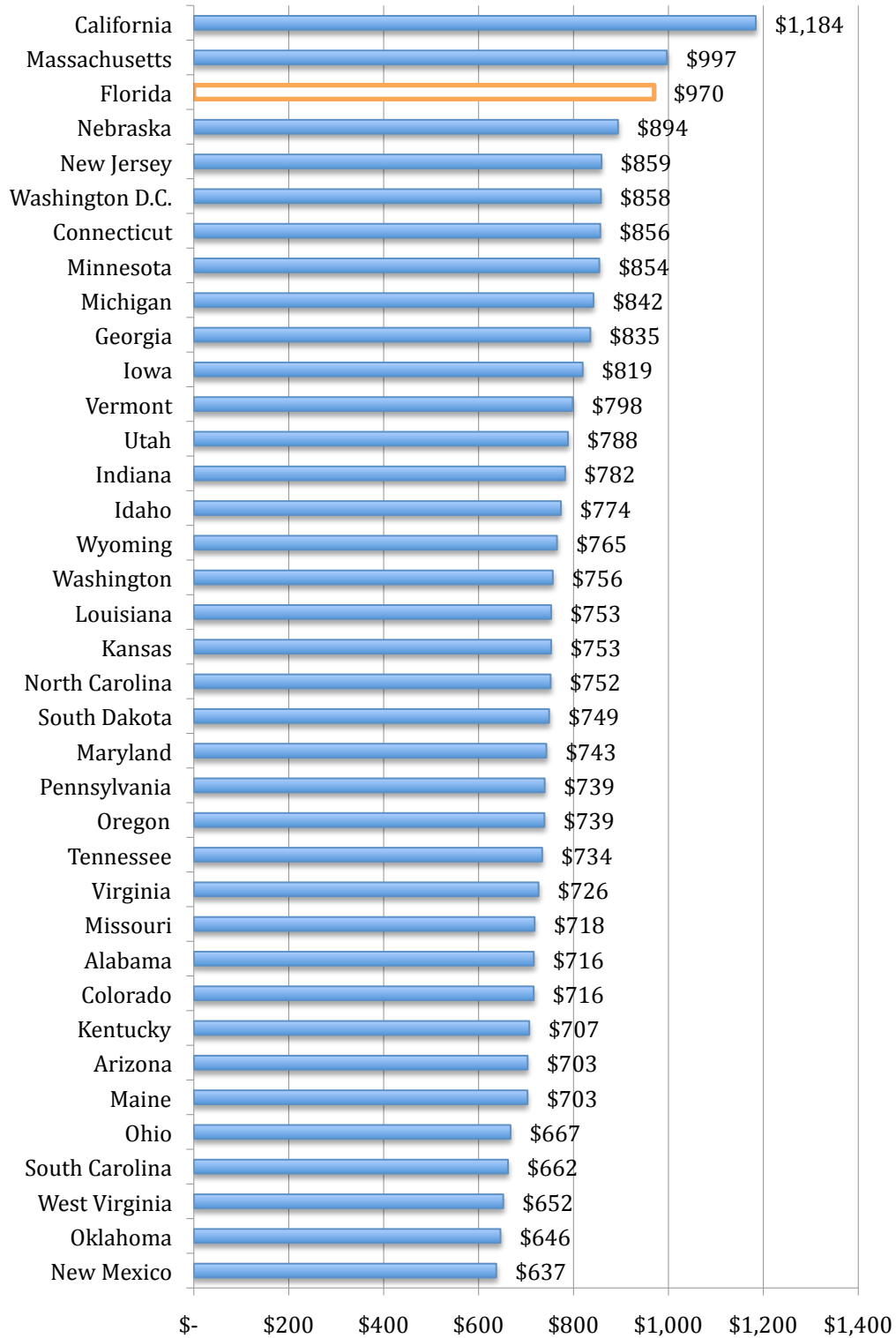
**Figure 3.5: CPI Adjusted Child Support Payments:  
Private Low Income**



**Figure 3.6: CPI Adjusted Child Support Payments:  
Private Middle Income**



**Figure 3.7: CPI Adjusted Child Support Payments:  
Private High Income**



### 3.2 Intrastate Geographic Cost of Living Differentials

Adjusting for geographic differences in cost of living (COL) would entail modifying the schedule of obligations as follows:

$$(1) \quad \text{COL Obligation}_i = \text{Scheduled Obligation}_i * (\text{Geographic Price Index}_j/100),$$

where COL Obligation<sub>i</sub> is the COL-adjusted child support obligation for income level i, Scheduled Obligation<sub>i</sub> is the unadjusted child support obligation for income level i, and Geographic Price Index<sub>j</sub> is the price level index for location j.

Though it may appear desirable to account for geographic differences in the cost of living, there are both theoretical and practical problems with making such an adjustment. The schedule of child support obligations already implicitly adjusts for geographic cost of living differences. The obligations in the schedule are determined by the parents' incomes. All else equal, individuals in a high cost area of the state have higher incomes than individuals in the same occupation in a low cost area. Therefore, the typical noncustodial parent living in a high cost area pays more in child support than a similar parent pays in a lower cost area.

Employers in a high cost area of the state must pay higher wages to compensate for the higher costs in order to attract workers. Therefore, wages, the primary component of income for most individuals, are higher in locations with a higher cost of living.<sup>11</sup> To demonstrate this point using Florida specific data, Figure 3.8 presents the average hourly wage in May 2006 for selected occupations in Miami, Gainesville, and Pensacola, three locations with different average price levels.<sup>12</sup> The 2006 price level index for Miami was 101.64; for Gainesville, it was 97.96; and for Pensacola, 92.11.<sup>13</sup> The average hourly wage for all workers in Miami was \$18.25; in Gainesville, \$17.57; and in Pensacola, \$15.90. The rank ordering of the three cities on the basis of wage rates is the same as the rank ordering on the basis of price levels. The same pattern is evident for specific occupations. The hourly wages for heavy truck drivers, licensed practical nurses, and secretaries (excluding medical and legal) are highest in Miami, second highest in Gainesville, and lowest in Pensacola.

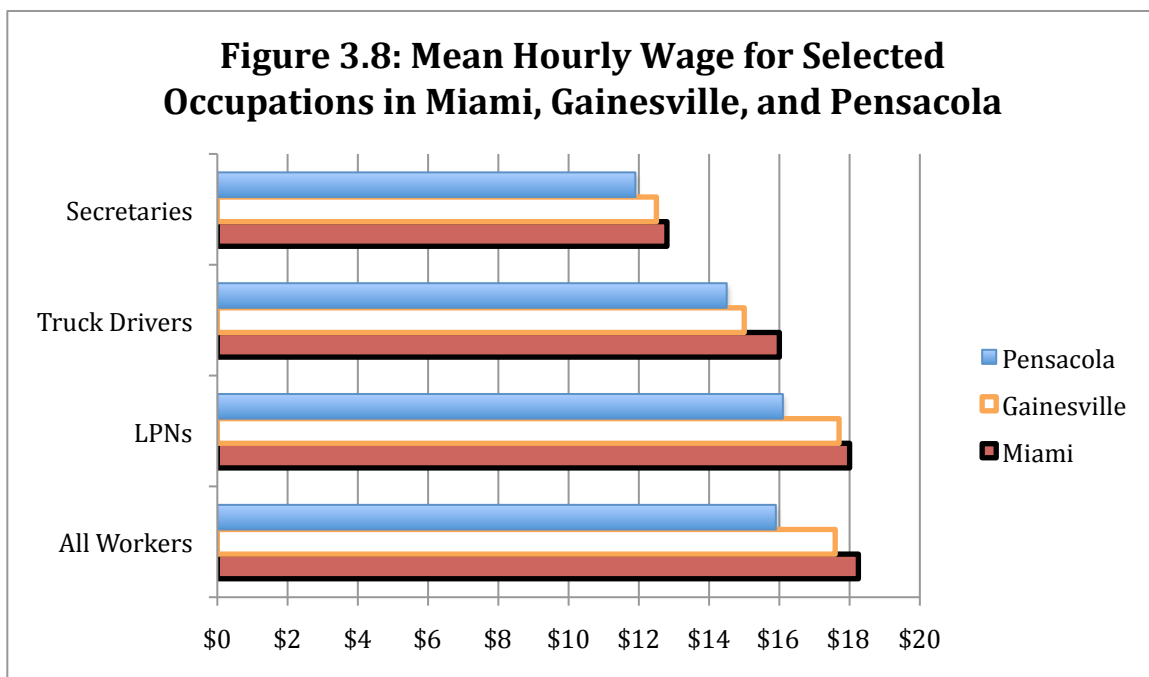
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<sup>11</sup> J. Michael Dumond, Barry T. Hirsch, and David A. Macpherson, "Wage Differentials across Labor Markets and Workers: Does Cost of Living Matter?" *Economic Inquiry* 37 (October 1999): 577-98.

<sup>12</sup> The wage data was obtained from the Bureau of Labor Statistics, at <http://www.bls.gov/oes/current/oesrcma.htm>

<sup>13</sup> The price level indexes are from Bureau of Economic and Business Research, University of Florida, *2006 Florida Price Level Index*. (Gainesville, FL: Bureau of Economic and Business Research, University of Florida, 2007). The index values are based on Alachua County data for Gainesville, Dade County data for Miami, and a 2006 population-weighted average of Escambia Count and Santa Rosa County data for Pensacola. It is important to note that the Florida Price Level Index is partially based on an index of relative wages.

**Figure 3.8: Mean Hourly Wage for Selected Occupations in Miami, Gainesville, and Pensacola**



The relationship between wages and geographic cost-of-living differentials is in fact recognized in the district cost differential adjustment in the Florida Education Finance Program (FEFP). The bulk of school district expenditures are for personnel—wages, salaries, and benefits. School districts in high-cost areas of the state pay higher wages in order to attract and retain instructional, administrative, and support staff. Because of the higher wages, these school districts face higher costs. The FEFP formula compensates for the higher cost, providing extra funds to underwrite the higher wages, salaries, and benefits that must be paid in these areas.

Because wages and incomes are higher in high cost-of-living areas and because child support obligations increase with income, a noncustodial parent living in a high cost area of the state on average has a higher income and a higher child support obligation than an otherwise similar parent living in a lower cost area. Including an explicit adjustment for intrastate geographic cost-of-living differentials would amount to “double counting”, resulting in overcompensation for the cost differentials.

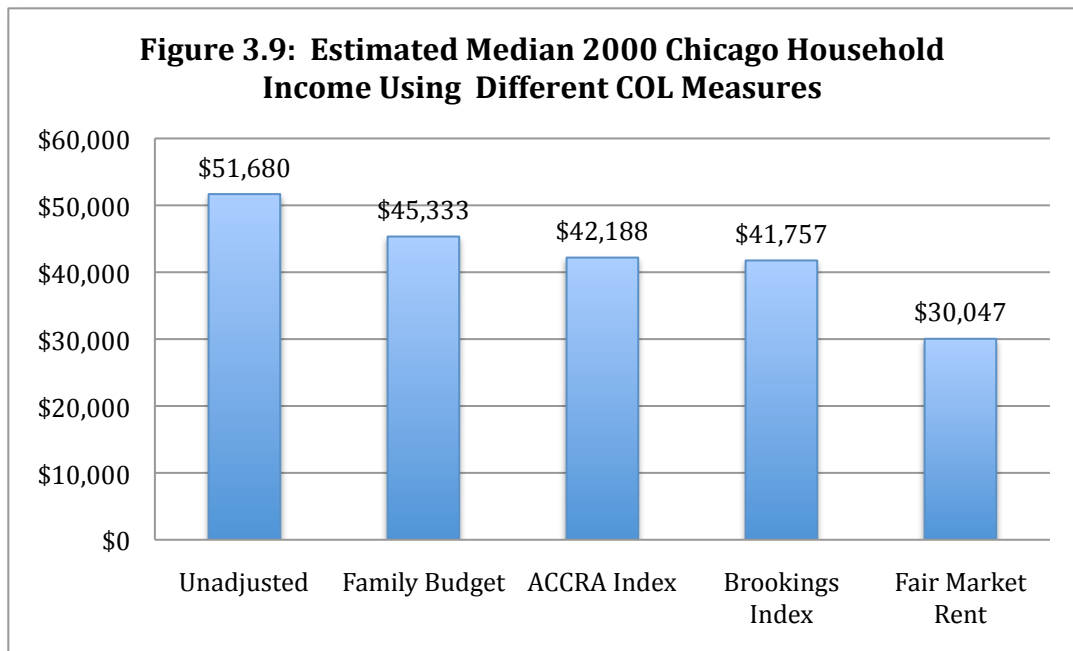
Although wages and incomes are higher in high cost areas, they do not fully adjust to the cost of living. DuMond, Hirsch, and Macpherson find that wages rise about 4 percent for each 10 percent increase in the cost of living. The failure of wages to fully adjust to cost-of-living differentials is a reflection of the wider variety of jobs, greater educational opportunities, access to public transportation, and better amenities such as restaurants and entertainment that are typically available in higher-cost areas. Therefore, wages do not need to completely adjust to the higher cost of living to attract workers to these areas. But because wages and incomes do not fully adjust, full adjustment of child support obligations would impose a higher burden on noncustodial parents living in high-cost areas than similar parents living in low-cost areas. Full adjustment would also ignore



the benefits to children from living in high-cost areas.

A practical reason for not attempting to adjust support obligations for geographic cost-of-living differentials is the wide variation in different measures of these differentials. Curran, Wolman, Hill, and Furdell<sup>14</sup> adjust the 2000 median household income in 15 metropolitan areas using four different measures of geographic cost-of-living—the Department of Housing and Urban Development’s (HUD) Fair Market Rents (FMR) measure, the Economic Policy Institute’s (EPI) Family Budgets Measure, the Brookings Institution’s Metropolitan Price Indices, and the American Chamber of Commerce Researchers Association (ACCRA)’s Cost of Living Indices. They find large variations in the estimated purchasing power of a household’s income depending on the particular adjustment used.

Figure 3.9, based on Curran, et al., shows the estimated adjusted median household income in Chicago for the year 2000 based on each of the four measures of cost of living. The Census Bureau’s unadjusted median household income was \$51,680. Using the EPI Family Budget, the estimated median household income in Chicago was reduced to \$45,333. Using the ACCRA index, it was \$42,188; using the Brookings Institution Index, \$41,757; and using the Fair Market Rent adjustment, \$30,047. The range in these estimates is \$21,633. Although Chicago has the widest range of estimated adjusted median income levels, the narrowest range in the sample of metropolitan areas was still \$5,637.



<sup>14</sup> Leah B. Curran, Harold Wolman, Edward W. Hill, and Kimberly Furdell. “Economic Wellbeing and Where We Live: Accounting for Geographical Cost-of-living Differences in the US”, *Urban Studies*, 43 (December 2006): 2443-2466.

There are no economic arguments for preferring one of these four different measures of cost of living to the others. If Florida were to adopt a geographic cost-of-living adjustment for its child support schedule, the most appropriate basis for such an adjustment would most likely be the BEBR Florida Price Level Index for two reasons. First, a cost of living adjustment is available for every county in Florida. The other measures of cost of living are only available for metropolitan areas in Florida. Second, the index is designed to reflect differences in personnel costs (wages, salaries, and benefits) across locations rather than the cost of goods and services. As a result, the index only partially adjusts for geographic differences in cost of living.

Even if a single acceptable measure of cost-of-living differentials were available, there would be problems implementing a geographic cost-of-living adjustment for low-income parents. Because the self-support reserve and the phase-in range of the schedule of support obligations are determined by the federal poverty income guideline, neither the reserve nor the phase-in range can be adjusted. It is also not feasible to increase the child support obligation of noncustodial parents in high-cost areas of the state if their income falls within the self-support reserve. These parents already have incomes below the poverty guideline and increasing the obligation pushes them further into poverty. On the other hand, it is quite feasible to reduce the obligation of similar parents in low cost-of-living areas. Such asymmetric adjustments in support obligations would be inequitable.

Furthermore, if the guidelines included a geographic cost-of-living adjustment, the child support obligation would change whenever the custodial parent relocated. Including a cost-of-living adjustment in the guidelines might in fact become a motivating factor in the relocation decision and could become another source of contention between the parents.

An explicit adjustment of child support obligations to compensate for intrastate geographic cost-of-living differentials is unwarranted. An income-based schedule of obligations implicitly adjusts because wages and incomes are partially linked to the cost of living. The balance of the adjustment is reflected in non-monetary benefits that accrue to residents of high-cost areas. Moreover, there is no commonly accepted basis for measuring geographic cost of living and different measures give widely varying results. Last, there are practical and technical problems with implementing such an adjustment, especially as it applies to low-income parents in high-cost areas.

**Appendix 3.1**  
**Inflation-Adjusted Schedule of Child Support Obligations**

<b>2007 INFLATION-ADJUSTED CHILD SUPPORT OBLIGATIONS WITH UPDATED SELF-SUPPORT RESERVE<sup>1</sup></b>						
<u>Net Monthly Income</u>	<u>Number of Children</u>					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
950	118	119	119	121	123	124
1000	163	164	165	168	170	171
1050	208	210	211	214	217	219
1100	246	256	257	261	264	266
1150	272	301	303	308	311	314
1200	285	347	349	354	358	361
1250	297	392	395	400	405	409
1300	308	437	441	447	452	456
1350	319	482	487	493	499	504
1400	330	511	533	540	546	551
1450	341	529	579	587	593	598
1500	352	546	625	633	640	647
1550	363	564	671	679	687	694
1600	375	582	714	726	734	741
1650	386	599	747	772	781	789
1700	397	616	771	819	828	836
1750	408	634	793	866	875	884
1800	418	650	814	912	922	932
1850	428	666	833	938	969	979
1900	438	681	852	962	1016	1026
1950	448	696	871	983	1062	1074
2000	458	712	891	1005	1092	1121
2050	468	728	910	1026	1118	1169
2100	478	743	929	1048	1142	1214
2150	488	759	950	1070	1166	1245
2200	498	774	969	1092	1190	1272
2250	508	789	988	1114	1213	1298
2300	518	805	1008	1136	1237	1323
2350	528	820	1027	1158	1261	1348
2400	538	836	1047	1180	1284	1374
2450	548	852	1067	1201	1307	1400
2500	558	867	1086	1223	1331	1425

<sup>1</sup> The shaded area is the range over which the calculated child support obligations are phased in.

2550		568	882	1105	1245	1355	1450
2600		578	898	1125	1267	1379	1476
2650		588	914	1144	1290	1403	1502
2700		598	930	1164	1313	1428	1528
2750		609	946	1184	1336	1453	1554
2800		619	962	1205	1359	1478	1581
2850		630	978	1225	1381	1503	1608
2900		641	994	1245	1403	1528	1635
2950		651	1010	1265	1426	1553	1661
3000		661	1026	1285	1449	1578	1688
3050		672	1042	1305	1472	1603	1714
3100		682	1058	1325	1495	1628	1740
3150		693	1075	1346	1518	1653	1767
3100		683	1060	1327	1497	1628	1740
3250		714	1108	1387	1563	1703	1821
3300		725	1124	1407	1586	1728	1847
3350		735	1140	1427	1609	1753	1874
3400		745	1156	1447	1632	1778	1901
3450		756	1172	1467	1655	1803	1927
3500		766	1188	1487	1678	1828	1954
3550		777	1204	1508	1701	1853	1981
3600		788	1220	1528	1723	1878	2008
3650		798	1237	1548	1745	1903	2034
3700		808	1253	1568	1768	1928	2060
3750		819	1269	1588	1791	1953	2087
3800		829	1285	1608	1814	1978	2113
3850		839	1301	1628	1837	2002	2140
3900		849	1317	1648	1859	2026	2166
3950		858	1332	1667	1880	2049	2190
4000		868	1347	1685	1900	2072	2215
4050		878	1361	1703	1920	2094	2240
4100		887	1376	1723	1941	2117	2264
4150		896	1391	1741	1962	2140	2289
4200		906	1406	1759	1983	2163	2313
4250		915	1421	1778	2004	2186	2337
4300		924	1436	1796	2025	2209	2362
4350		933	1451	1815	2046	2232	2387
4400		944	1466	1834	2067	2255	2411
4450		953	1481	1852	2087	2278	2435
4500		962	1495	1870	2108	2300	2459
4550		972	1509	1889	2129	2322	2484
4600		981	1524	1908	2150	2345	2508
4650		990	1539	1927	2171	2368	2533

4700		999	1554	1945	2192	2391	2558
4750		1009	1569	1964	2213	2414	2582
4800		1018	1584	1982	2234	2437	2606
4850		1028	1599	2000	2255	2460	2631
4900		1038	1614	2019	2276	2483	2655
4950		1047	1629	2037	2296	2506	2680
5000		1056	1644	2056	2316	2528	2704
5050		1065	1658	2075	2337	2551	2728
5100		1075	1673	2093	2358	2574	2752
5150		1084	1688	2111	2379	2597	2777
5200		1093	1703	2130	2400	2620	2802
5250		1103	1718	2148	2421	2643	2826
5300		1113	1732	2161	2441	2664	2849
5350		1121	1746	2173	2460	2684	2872
5400		1130	1759	2190	2479	2705	2894
5450		1138	1772	2206	2498	2726	2916
5500		1147	1785	2222	2517	2747	2938
5550		1156	1799	2239	2536	2768	2960
5600		1165	1812	2256	2555	2788	2982
5650		1174	1826	2273	2574	2809	3004
5700		1182	1840	2290	2593	2830	3026
5750		1191	1853	2306	2612	2851	3048
5800		1200	1866	2323	2631	2871	3070
5850		1209	1880	2340	2650	2891	3092
5900		1218	1893	2357	2669	2912	3114
5950		1226	1907	2374	2688	2933	3136
6000		1234	1921	2390	2707	2954	3158
6050		1243	1934	2406	2726	2974	3180
6100		1252	1947	2423	2745	2995	3202
6150		1261	1960	2440	2764	3016	3224
6200		1270	1974	2457	2783	3037	3246
6250		1278	1987	2474	2802	3058	3268
6300		1287	2001	2491	2821	3078	3290
6350		1296	2015	2507	2840	3098	3312
6400		1305	2028	2524	2859	3119	3334
6450		1314	2041	2541	2878	3140	3356
6500		1323	2055	2558	2897	3161	3378
6550		1331	2068	2575	2915	3181	3400
6600		1340	2082	2591	2934	3202	3423
6650		1349	2095	2607	2953	3223	3445
6700		1358	2109	2624	2972	3244	3467
6750		1367	2122	2641	2991	3264	3489
6800		1375	2136	2658	3010	3285	3511
6850		1383	2149	2675	3029	3306	3533
6900		1392	2162	2691	3048	3327	3555

6950		1401	2175	2708	3067	3348	3577
7000		1410	2189	2725	3086	3368	3599
7050		1419	2202	2742	3105	3389	3621
7100		1427	2215	2762	3122	3407	3642
7150		1434	2226	2782	3139	3425	3660
7200		1441	2235	2794	3153	3440	3676
7250		1447	2245	2807	3167	3455	3692
7300		1453	2255	2820	3181	3470	3708
7350		1460	2265	2832	3194	3485	3724
7400		1467	2274	2844	3208	3500	3740
7450		1473	2284	2856	3222	3515	3756
7500		1479	2294	2868	3236	3530	3772
7550		1486	2303	2880	3249	3545	3788
7600		1492	2312	2892	3262	3560	3804
7650		1498	2322	2904	3276	3575	3820
7700		1505	2332	2916	3289	3590	3836
7750		1511	2342	2928	3303	3605	3852
7800		1517	2351	2941	3317	3620	3868
7850		1523	2361	2953	3331	3635	3884
7900		1530	2370	2965	3344	3650	3900
7950		1537	2379	2977	3357	3665	3916
8000		1543	2389	2989	3371	3680	3932
8050		1550	2399	3001	3385	3695	3948
8100		1556	2409	3013	3399	3710	3964
8150		1562	2418	3025	3412	3725	3980
8200		1568	2428	3037	3426	3740	3996
8250		1575	2437	3050	3440	3755	4012
8300		1582	2446	3063	3454	3770	4028
8350		1588	2456	3075	3467	3785	4044
8400		1593	2465	3085	3479	3798	4058
8450		1598	2473	3096	3491	3810	4071
8500		1602	2481	3107	3502	3822	4084
8550		1607	2489	3117	3513	3834	4098
8600		1612	2497	3127	3524	3846	4112
8650		1617	2505	3137	3535	3859	4125
8700		1622	2514	3147	3546	3871	4139
8750		1627	2523	3157	3557	3883	4152
8800		1632	2531	3168	3568	3895	4165
8850		1637	2539	3178	3579	3907	4178
8900		1642	2547	3188	3590	3919	4192
8950		1647	2555	3198	3601	3931	4206
9000		1651	2563	3209	3612	3945	4219
9050		1655	2571	3220	3623	3957	4232
9100		1660	2579	3230	3634	3969	4246
9150		1665	2588	3240	3646	3981	4259

9200		1670	2596	3250	3657	3993	4272
9250		1675	2604	3261	3668	4005	4285
9300		1680	2612	3271	3679	4017	4299
9350		1685	2620	3281	3690	4030	4313
9400		1690	2628	3291	3701	4042	4326
9450		1695	2636	3301	3712	4054	4340
9500		1699	2644	3312	3723	4066	4353
9550		1704	2652	3323	3734	4078	4366
9600		1709	2660	3332	3745	4090	4379
9650		1714	2667	3340	3754	4101	4390
9700		1718	2673	3348	3763	4111	4400
9750		1722	2679	3356	3772	4120	4410
9800		1725	2685	3363	3780	4129	4419
9850		1729	2691	3371	3789	4138	4429
9900		1733	2697	3379	3798	4147	4439
9950		1737	2702	3386	3807	4157	4449
10000		1741	2708	3394	3815	4166	4459
10050		1745	2714	3401	3823	4175	4468
10100		1749	2720	3408	3832	4184	4477
10150		1753	2726	3416	3840	4193	4487
10200		1757	2732	3424	3849	4203	4497
10250		1761	2738	3432	3858	4213	4507
10300		1765	2744	3439	3866	4222	4517
10350		1769	2750	3447	3874	4231	4527
10400		1773	2756	3454	3883	4240	4536
10450		1777	2762	3461	3891	4249	4546
10500		1780	2768	3469	3900	4259	4556
10550		1783	2774	3477	3909	4268	4566
10600		1787	2780	3484	3918	4277	4576
10650		1791	2786	3492	3926	4286	4585
10700		1795	2792	3499	3934	4295	4594
10750		1799	2798	3506	3943	4304	4604
10800		1803	2804	3514	3951	4314	4614
10850		1807	2810	3522	3960	4324	4624
10900		1811	2816	3530	3969	4333	4634
10950		1815	2822	3537	3977	4342	4643
11000		1819	2828	3545	3986	4351	4653
11050		1823	2834	3553	3994	4360	4663
11100		1827	2840	3560	4002	4370	4673
11150		1831	2846	3567	4011	4379	4683
11200		1835	2852	3575	4020	4388	4693
11250		1838	2858	3582	4028	4397	4702
11300		1842	2864	3590	4037	4406	4711
11350		1846	2869	3597	4046	4416	4721
11400		1850	2874	3605	4055	4426	4731

11450		1854	2880	3613	4063	4435	4741
11500		1858	2886	3620	4071	4444	4751
11550		1862	2892	3627	4080	4453	4760
11600		1866	2898	3635	4088	4462	4770
11650		1870	2904	3643	4097	4471	4780
11700		1874	2910	3651	4106	4481	4790
11750		1878	2916	3658	4114	4490	4800
11800		1882	2922	3666	4122	4499	4809
11850		1886	2928	3673	4131	4508	4819
11900		1890	2934	3680	4139	4517	4829
11950		1893	2940	3688	4148	4527	4839
12000		1896	2946	3696	4157	4536	4849
12050		1900	2952	3703	4166	4545	4859
12100		1904	2958	3711	4174	4554	4868
12150		1908	2964	3718	4183	4563	4877
12200		1912	2970	3725	4191	4573	4887
12250		1916	2976	3733	4199	4583	4897
12300		1920	2982	3741	4208	4592	4907
12350		1924	2988	3749	4217	4601	4917
12400		1928	2994	3756	4225	4610	4926
12450		1932	3000	3764	4234	4619	4936
12500		1936	3006	3771	4242	4628	4946
12550		1940	3012	3778	4250	4638	4956
12600		1944	3018	3786	4259	4647	4966
12650		1948	3024	3794	4268	4656	4975
12700		1951	3030	3801	4276	4665	4984
12750		1955	3036	3809	4285	4674	4994
12800		1959	3042	3816	4294	4684	5004
12850		1963	3047	3824	4303	4694	5014
12900		1967	3053	3832	4311	4703	5024
12950		1971	3059	3839	4319	4712	5034
13000		1975	3065	3846	4328	4721	5043
13050		1979	3071	3854	4336	4730	5053
13100		1983	3077	3862	4345	4740	5063
13150		1987	3083	3870	4353	4749	5073
13200		1991	3089	3877	4361	4758	5083
13250		1995	3095	3885	4370	4767	5092
13300		1999	3101	3892	4379	4776	5101
13350		2003	3107	3899	4387	4785	5111
13400		2006	3113	3907	4396	4795	5121
13450		2010	3119	3915	4405	4805	5131
13500		2014	3125	3922	4414	4814	5141
13550		2018	3131	3930	4422	4823	5150
13600		2022	3137	3937	4431	4832	5160
13650		2026	3143	3944	4439	4841	5170



13700		2030	3149	3952	4447	4851	5180
13750		2034	3155	3960	4456	4860	5190
13800		2038	3161	3968	4465	4869	5200
13850		2042	3167	3975	4473	4878	5209
13900		2046	3173	3983	4482	4887	5218
13950		2049	3178	3989	4489	4895	5227
14000		2052	3183	3993	4495	4901	5235
14050		2055	3187	3998	4501	4907	5241
14100		2057	3191	4002	4506	4913	5248
14150		2060	3194	4006	4512	4919	5255
14200		2063	3198	4011	4518	4925	5261
14250		2065	3202	4016	4523	4931	5267
14300		2067	3206	4021	4528	4937	5273
14350		2070	3210	4026	4534	4943	5279
14400		2072	3213	4031	4539	4949	5286

## 4. Low-Income Parents

Policymakers have been particularly concerned with the treatment of low-income parents. Most income shares states modify their schedule of obligations to ensure that the payment of child support does not push the noncustodial parent into poverty. This is typically done by including a “self-support reserve” in the schedule and by phasing in the calculated child support obligations over a range of incomes above the self-support reserve. Florida’s child support guidelines follow this pattern.

An analysis of Florida’s guidelines shows that these provisions are not effective. They affect very few parents because certain features of the current guidelines unintentionally limit their applicability. Furthermore, the failure of these provisions to prevent poverty among parents paying child support may exacerbate the already low compliance rates among these parents. Analysis also shows that Florida’s child support schedule is regressive and provides a significant disincentive for low-income parents to earn additional income.

Among the features of Florida’s child support guidelines that contribute to the ineffectiveness of the self-support reserve and the phase-in are

- comparing the parents’ combined income to the single-person poverty guideline
- applying the self-support reserve and phase-in to the basic child support obligation only
- failing to index the self-support reserve to the poverty guideline.

Each of these issues is discussed in more detail below with a description of alternatives to the current treatment and recommendations for changes in Florida’s guidelines to mitigate these problems.

### ***4.1 Current Treatment of Low-Income Parents in Florida***

To ensure that low-income noncustodial parents retain sufficient income after payment of child support to maintain a minimum standard of living, Florida’s guidelines incorporate a self-support reserve based on the 1992 single-person poverty guideline.<sup>1</sup> If the combined income of the parents is less than \$650, the schedule of child support obligations does not apply. Instead, “the [noncustodial] parent should be ordered to pay a child support amount, determined on a case-by-case basis, to establish the principle of

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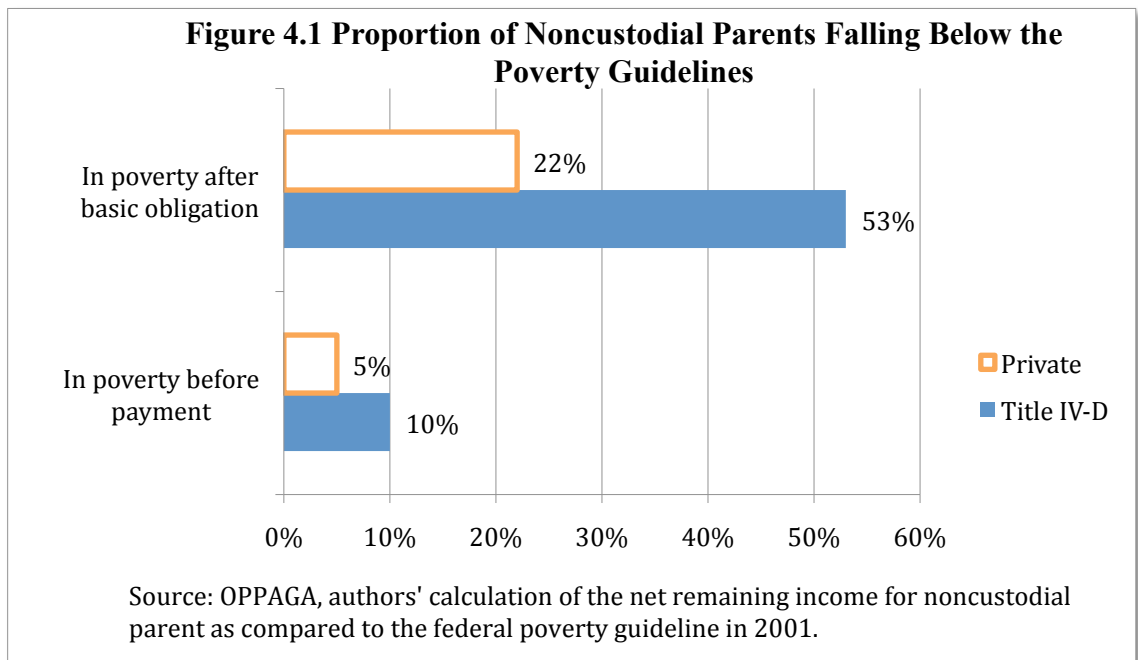
<sup>1</sup> The 1992 federal single-person poverty guideline was \$567.50.

payment and lay the basis for increased orders should the parent's income increase in the future.”<sup>2</sup>

If the combined income of the parents is at least \$650, the child support obligation calculated using the income shares methodology is phased in. Over the phase-in range, the basic child support obligation for one child equals 90 percent of the difference between the parents’ combined monthly net income and the 1992 single-person federal poverty guideline. The percentage increases with the number of children, reaching 95 percent for six children. The upper limit of the phase-in range is \$800 for one child, \$950 for two children, and extends to \$1500 for six children.

To illustrate, suppose a low-income noncustodial parent’s income increases by \$100. Instead of the parent’s child support obligation increasing by 100 percent (the full \$100), the obligation for one child increases by 90 percent, or \$90. Use of 90 percent instead of 100 percent is intended to encourage low-income parents to earn additional income.

This treatment of low-income parents is not working as intended. It does not effectively prevent child support payments from driving parents into poverty. As Figure 4.1 shows, only a small number of noncustodial parents are in poverty before paying child support. However, after subtracting the basic child support obligation from income, 53 percent of the noncustodial parents in the Title IV-D cases and 22 percent of the noncustodial parents in the private cases fall below the poverty guideline.



<sup>2</sup> Many income shares states specify a \$50 minimum order. In Florida, no minimum amount is specified; however, the schedule was constructed in a manner that suggests that a \$50 minimum order was contemplated. Adding \$50 to the 1992 poverty guideline yields \$617.50. The nearest \$50 multiple above that is \$650 and hence this is where Florida’s current schedule of basic child support obligations begins.

#### ***4.2 Use of Combined Income with the Single-Person Poverty Guideline***

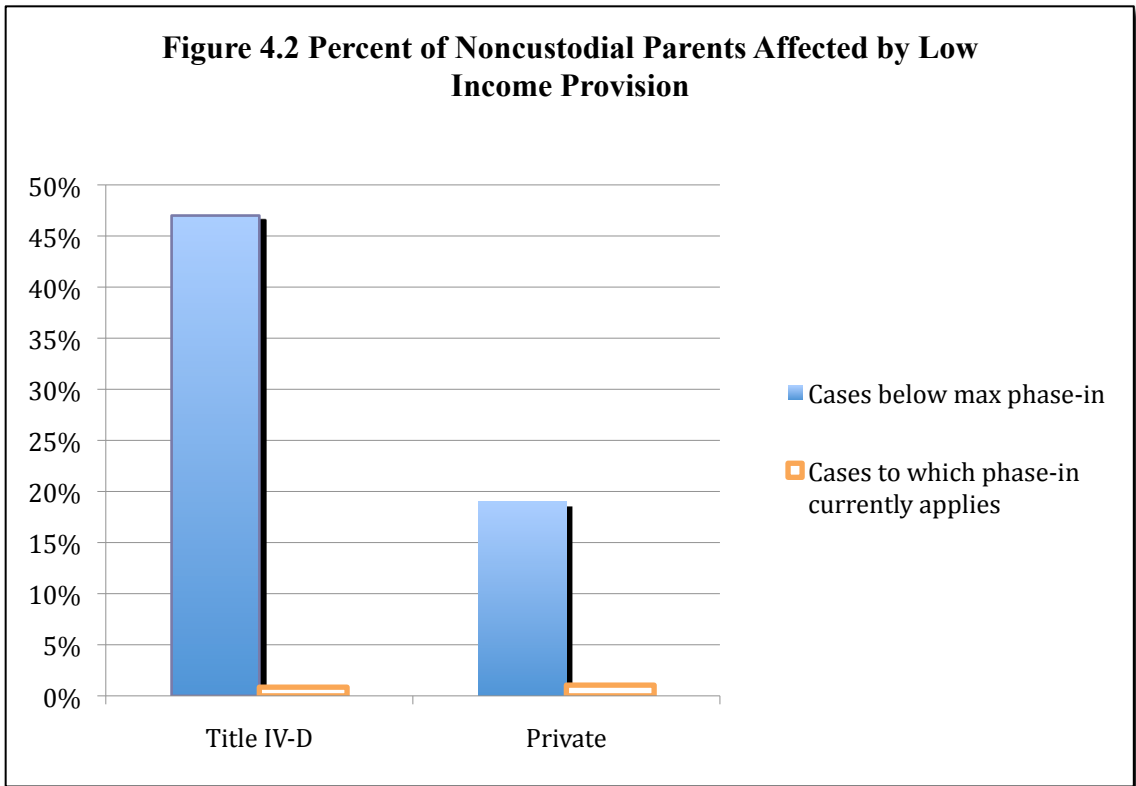
The use of combined income to determine the basic child support obligation is inconsistent with a self-support reserve and phase-in based on the *single-person* poverty guideline. The self-support reserve and phase-in are often rendered inoperable when combined income is used even though in fact the noncustodial parent's income is near, at, or below the poverty guideline. Two problems occur due to the use of combined income with a single-person poverty level:

1. The combined income will, in a vast majority of the cases be above the single person poverty guideline even when one or both parent's individual income is below the guideline. As a result, the low-income provisions apply to very few cases.
2. Even in the phase-in range, if the *custodial parent's* income increases, so too does the combined income, and when the combined income increases, the *noncustodial parent's* child support payment increases, pushing the noncustodial parent closer to or into poverty.

#### ***Low-Income Provisions Affect Few Cases***

Figure 4.2 shows the dramatic impact that use of combined income has in limiting the applicability of the low-income provisions. The court orders for the sample of Florida child support cases show that a significant number of low-income noncustodial parents have minimum wage incomes. A minimum wage income is below the maximum income of the phase-in range. Based only on the noncustodial parent's income, the self-support reserve and the phase-in range should apply to over 45 percent of the Title IV-D cases and to almost 20 percent of the private cases. Instead, the low-income provisions apply to only one or two percent of the cases.

**Figure 4.2 Percent of Noncustodial Parents Affected by Low Income Provision**



*Use of Combined Income Often Renders Low-Income Provisions Inoperable*

Suppose both parents have actual monthly net incomes of \$400. Individually, each parent’s income falls below the 1992 single-person poverty guideline of \$567.50. However, their combined income is above the phase-in range for parents with one child. The basic child support obligation is \$190. The noncustodial parent’s share is \$95 even though the parent is in poverty. Now, suppose the noncustodial parent has income of \$400 as above but the custodial parent has no income. Then, the combined income is below the self-support reserve and the determination of a child support obligation is left to the discretion of the court. The court-ordered support payment is likely to be much less than \$95. Even though the noncustodial parent’s income is the same in each case, the child support payment may be quite different.

Next, suppose the noncustodial parent’s income is \$650 and the custodial parent’s income is \$150. The noncustodial parent’s income is now above the poverty guideline but within the phase-in range. Once again, however, the combined income is above the phase-in range. Thus, the basic child support obligation is \$190 of which the noncustodial parent’s share is \$154.38. After payment of child support, the noncustodial parent retains income of \$495.62, less than the poverty guideline.

If the custodial parent had no income in this case, combined income would be within the phase-in range. The noncustodial parent’s child support obligation would be \$74, and the noncustodial parent would retain \$576 after payment of child support. The

self-support reserve with phase-in keeps the noncustodial parent just above the poverty guideline. In both situations, the noncustodial parent's income is the same but *the noncustodial parent's support obligation is larger if the custodial parent has income than if the custodial parent has no income.*

Increases in the *custodial* parent's income can increase the *noncustodial* parent's child support payment even when the noncustodial parent's income is unchanged. This anomaly arises only when combined income is within the phase-in range. Therefore, it affects only noncustodial parents with incomes close to or below the poverty guideline.<sup>3</sup> In the very cases to which the low-income provisions of the guidelines are intended to apply, they are rendered inoperative by the use of combined income together with the single-person poverty guideline.

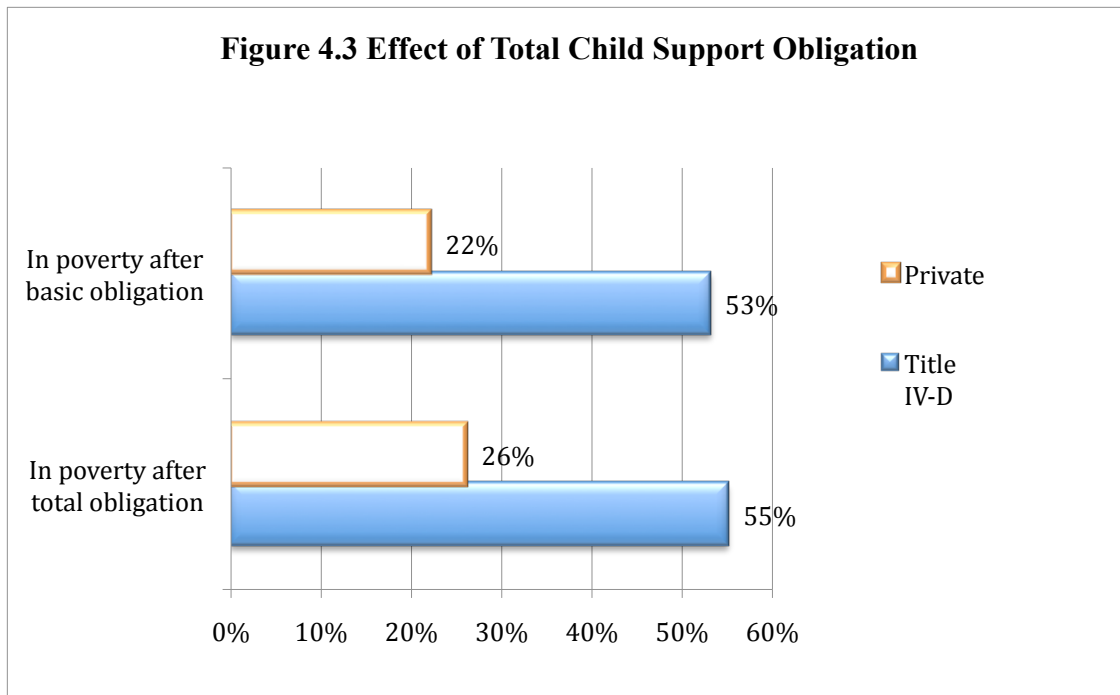
#### ***4.3 The Self-Support Reserve Applies Only to the Basic Child Support Obligation***

The self-support reserve and phase-in range apply only to the basic support obligation, not the total obligation. Therefore, after childcare and health insurance are added, the total child support payment might still be large enough to push the noncustodial parent into poverty despite the self-support reserve.

Suppose the noncustodial parent has monthly net income of \$650 and the custodial parent has no income. The self-support reserve limits the basic child support obligation for one child to \$74 so that the noncustodial parent retains enough income, \$576, to remain above the poverty guideline. The total child support payment, however, is the \$74 basic obligation plus the noncustodial parent's share of childcare and health insurance expenses. Once these expenses are added to the basic obligation, the noncustodial parent's retained income is below the poverty guideline. Figure 4.3 shows that the total number of cases affected by this problem is only 2-3% of the sample. For those cases, however, it can impose a substantial burden on the noncustodial parent.

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<sup>3</sup> For parents whose combined income is above the phase-in range, an increase in the custodial parent's income always decreases the noncustodial parent's child support payment.



#### ***4.4 Lack of Updating for Changes in the Poverty Guideline***

The single-person poverty guideline in 1992, when Florida’s current child support obligation schedule was adopted, was \$567.50 per month. In 2008, the guideline is \$866.67.<sup>4</sup> Failure to update the child support schedule or to index the schedule to reflect increases in the poverty guideline is yet another reason that the self-support reserve and phase-in are ineffective. As a result, Florida’s self-support reserve and most of the phase-in range are well below the current poverty guideline. Instead of preventing child support from pushing parents into poverty, the self-support reserve and the phase-in apply only to parents who are already in poverty.

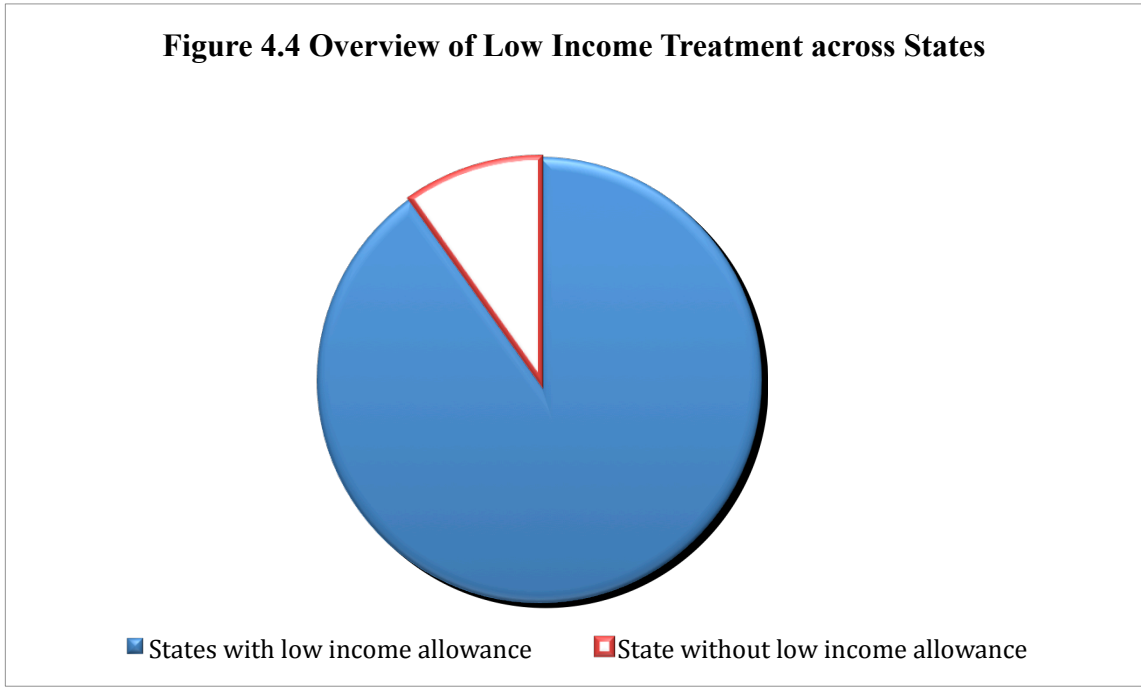
Even if the self-support reserve and phase-in range were updated to match the increased poverty guideline, however, it would still apply to very few cases unless it applied accompanied to the noncustodial parent’s income only. The minimum wage has also increased over the period from 1993 to 2008, so if income is imputed to both parents at minimum wage for full-time, year-round work, the combined income of the parents will still exceed the self-support reserve and phase-in for most cases.<sup>5</sup>

<sup>4</sup> *Federal Register*, Vol. 73, No. 15, January 23, 2008, pp. 3971-3972.

<sup>5</sup> \$6.79 per hour effective January 1, 2008, the minimum wage is \$6.79 per hour. Multiplied by 40 hours per week and assuming 4.33 weeks in a month, monthly gross income imputed to the noncustodial parent at minimum wage in 2008 is \$1,176.03.

#### 4.5 Overview of Low-income Treatment in Other States' Guidelines

As Figure 4.4 shows, most states have some form of self-support reserve or otherwise provide for a reduction of the child support obligation when the noncustodial parent's income is close to the poverty guideline.



#### *Updating the Self-support Reserve*

Many states have automatic updates of the self-support reserve. For example, Michigan currently updates its child support annually to take into account both increases in the federal poverty guideline and changes in the Consumer Price Index. Montana and Nevada also update their guidelines annually, while Minnesota updates biannually.<sup>6</sup> Other states update the self-support guidelines periodically when their schedules are updated.

#### *Use of Combined Income*

Some states such as Arizona apply the self-support reserve to the noncustodial parent's income alone rather than to the parents' combined income. North Carolina, Pennsylvania, South Carolina, and South Dakota apply both the self-support reserve and the phase-in to the noncustodial parent's income alone.

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<sup>6</sup> Jane C. Venohr and Tracy E. Griffith, *Report on the Michigan Child Support Formula*, Denver, CO: Policy Studies Incorporated, April 12, 2002.



North Carolina's schedule of child support obligations over the relevant income range is shown in Table 4.1. Outside the shaded area, the basic obligation is computed using the combined incomes of both parents. However, if the noncustodial parent's income alone falls within the shaded area, the basic child support obligation is computed using only the noncustodial parent's income and childcare and health insurance expenses are not added to the basic obligation. This approach prevents a child support obligation based on combined income from pushing a low-income noncustodial parent into poverty.

#### *Total Obligation Versus Basic Obligation*

In some states, (Arizona, New Jersey, Vermont, and West Virginia, for example), the self-support reserve is applied to the total child support payment after the addition of childcare and extraordinary medical expenses. New Jersey applies its self-support reserve in the child support worksheet, which is similar to Florida's worksheet, rather than in the schedule of basic support obligations. The worksheet includes an additional final step, not included in Florida's worksheet, in which both the noncustodial parent's income and the custodial parent's income are compared to 105 percent of the poverty guideline. If the noncustodial parent's income is less than 105 percent of the poverty guideline and the custodial parent's income is greater than 105 percent of the poverty guideline, the difference between the noncustodial parent's income and 105 percent of the poverty guideline becomes the child support order amount.

**Table 4.1**  
**North Carolina Schedule of Basic Support Obligations**

<b>Combined Gross Monthly Income</b>	<b>One Child</b>	<b>Two Children</b>	<b>Three Children</b>	<b>Four Children</b>	<b>Five Children</b>	<b>Six Children</b>
800	50	50	50	50	50	50
850	50	50	50	50	50	50
900	57	58	59	59	60	61
950	92	93	94	95	96	97
1000	126	127	129	130	132	133
1050	160	162	164	166	168	169
1100	195	197	199	201	203	206
1150	229	232	234	237	239	242
1200	264	266	269	272	275	278
1250	275	300	303	306	309	313
1300	284	332	336	339	343	347
1350	293	364	368	372	376	380
1400	303	397	401	406	410	414
1450	312	429	434	439	444	448
1500	321	453	467	472	477	482
1550	330	466	500	505	511	516
1600	339	478	533	538	544	550
1650	348	491	565	572	578	584
1700	357	504	584	605	611	618
1750	367	517	599	638	645	652
1800	376	530	614	671	678	685
1850	384	541	626	698	711	719
1900	392	552	639	712	744	752
1950	400	563	652	726	777	785
2000	408	574	664	741	810	819
2050	416	585	677	755	830	852
2100	425	596	689	769	845	886
2150	433	607	702	783	861	919

***4.6 Regressivity of the Child Support Schedule and Incentives to Pay Child Support***

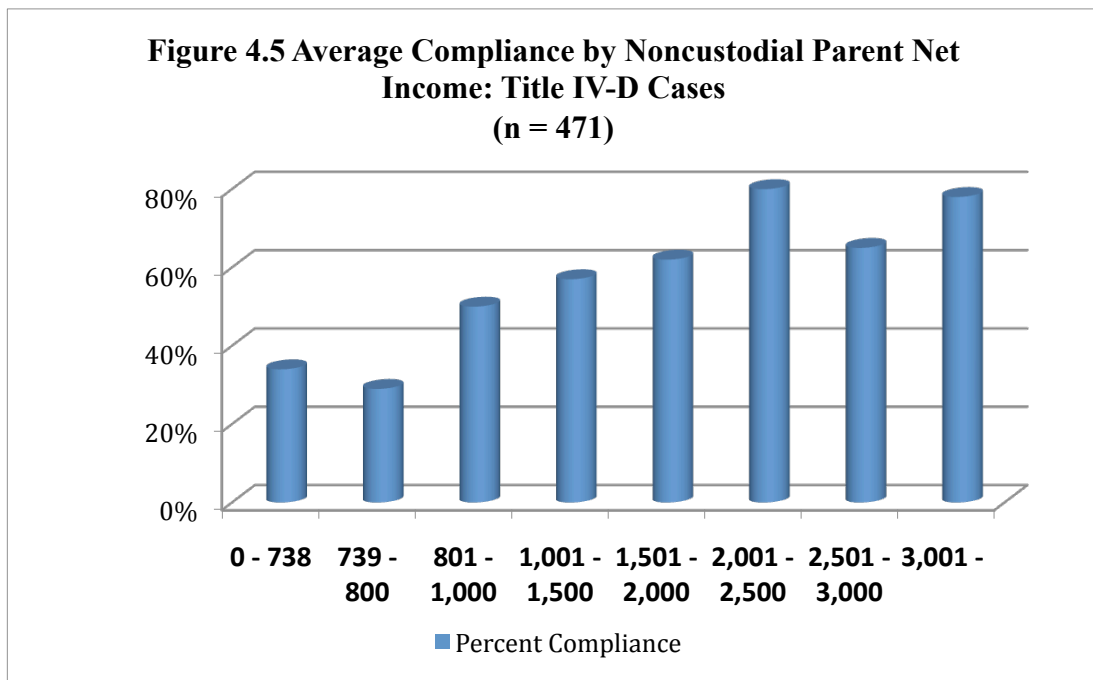
The current child support guidelines create disincentives for low-income noncustodial parents to comply with child support orders and to earn more income.

*Compliance among Noncustodial Parents with Low Income*

Figure 4.5 shows the average compliance in the sub-sample of Title IV-D cases for the six-month period June through December 2001. The two lowest income brackets pay only 34 percent and 29 percent of the amount ordered so that the actual payment to the custodial parent averages only one-third or less of the court-ordered amount.

Compliance among parents with incomes above \$800, on the other hand, ranges from 50 percent to 80 percent. As the figure shows, compliance tends to increase with income.

While correcting the problems with the low-income provisions of the child support guidelines would likely result in lower support obligations for low-income noncustodial parents, this will not necessarily result in lower actual child support payments. Reducing child support obligations so that payment of child support does not push a noncustodial parent into poverty may improve compliance. As a result, the custodial parent may actually receive larger and more consistent payments with lower obligations. Smaller obligations that are more consistently paid are better for both the custodial parent and the child than large obligations that go unpaid.



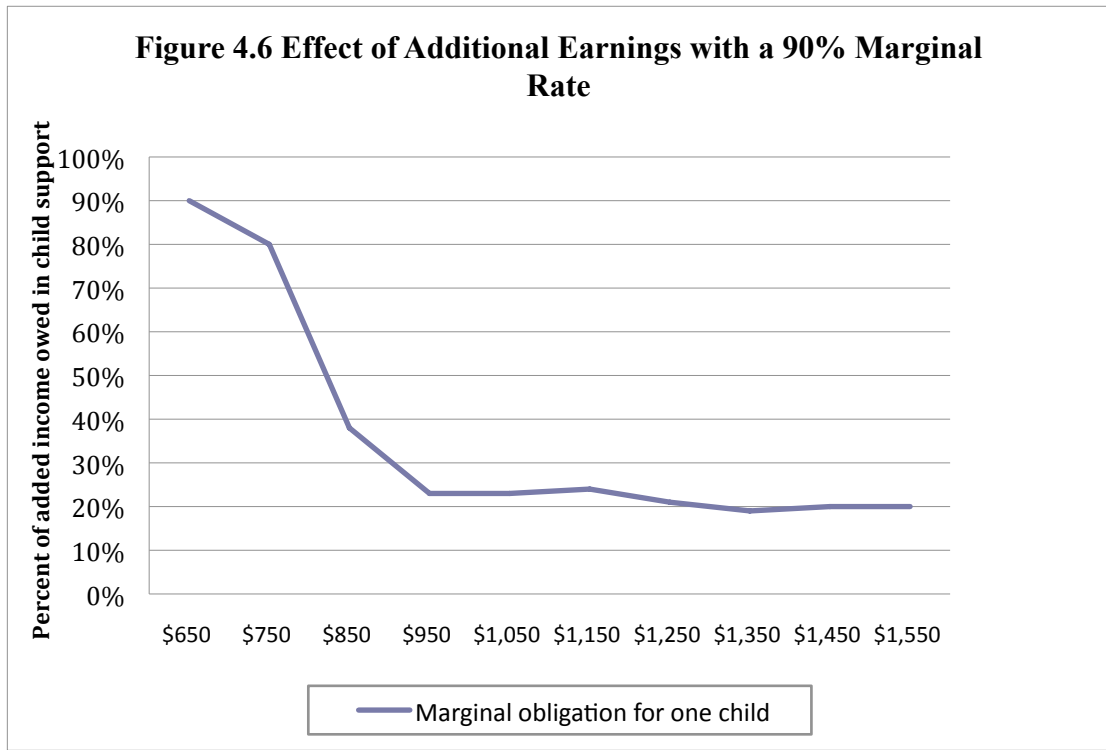
#### *Regressivity of the Schedule of Child Support Obligations*

In the current schedule, the child support obligation increases over the phase-in range until it equals the full child support obligation derived from the estimated expenditures on children. The *marginal rate* at which the obligation is phased in is the percentage increase in the basic child support obligation when income increases. Marginal rates in Florida's current schedule, and that of most income shares states, decline from a high of 90-95 percent, depending on the number of children, for parents with incomes just above the 1992 poverty guideline to a low of about five percent for the highest income parents. Figure 4.6 summarizes the marginal rates of child support for one child at selected incomes.

Suppose a noncustodial parent with one child has income of \$650. If the parent's monthly net income increases by \$100, the parent pays an additional \$90 in child support

and retains only \$10 of the additional income. But another parent with one child whose monthly net income is \$800 pays only an additional \$23 in child support and retains \$77 of the extra income. The child support schedule is regressive, imposing a higher marginal rate on a parent near the poverty guideline than it does on a parent with a higher income.

At minimum wage, a \$100 increase in income represents about 15 hours a month of additional work. If the low-income parent retains only \$10 of the \$100 additional income, that is equivalent to an hourly net wage of less than \$0.67. For a noncustodial parent with six children, the equivalent hourly net wage is only \$0.33. The justification claimed for the 90-95 percent rates rather than 100 percent is to avoid discouraging low-income parents from working and earning additional income. However, marginal rates this high are unlikely to provide significantly better work incentives than a rate of 100 percent.

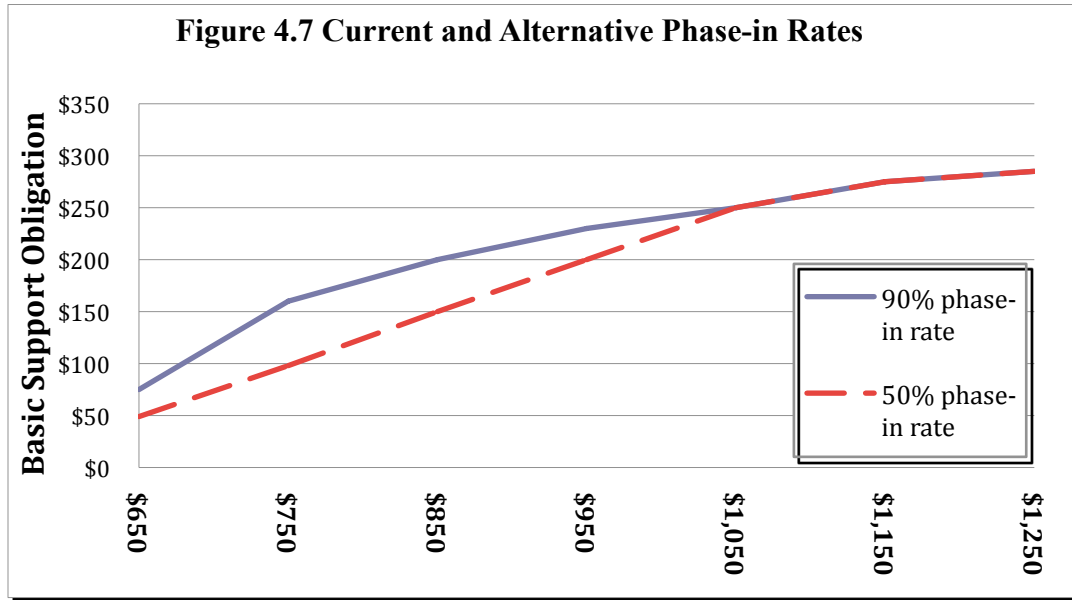


*Alternative Marginal Rates of Child Support*

Reducing the marginal rates over the phase-in range would increase the incentive to earn additional income. It would also reduce the regressivity of the child support schedule. South Dakota’s schedule, for example, increases basic child support by 50 percent of any increase in the noncustodial parent’s income over the phase-in range. Additional income is in effect shared equally between the noncustodial parent and the custodial parent’s household. Although it provides a smaller increase in child support to the custodial parent, it increases the likelihood that the noncustodial parent will earn

additional income. It is even possible that the improvement in incentives can result in a larger actual child support payment.

Figure 4.7 compares the basic child support obligation for one child in Florida's current schedule with an alternative schedule using a lower marginal rate over the phase-in range. The marginal rate in the current schedule is 90 percent and the phase-in range extends to \$800. The marginal rate in the alternative schedule in Figure 4.7 is 50 percent and the phase-in range extends to \$1050.



#### **4.7 Recommendations**

These recommendations are intended to mitigate the problems with the current low-income provision described above. Appendix 4.1 shows how the first three recommendations can be incorporated into Florida's child support worksheet.

##### *Recommendation on Updating the Schedule of Obligations*

- Adopt procedures for annual or biannual updating of the schedule of basic child support obligations to reflect changes in the federal single-person poverty guideline.

Discussion of the Recommendation: Over time, provisions designed to prevent child support from pushing parents into poverty lose their applicability and effectiveness if the schedule is not regularly updated. Regular updating does not change any of the underlying assumptions of Florida's child support guidelines. It is a technical adjustment only, designed to index the schedule to the federal poverty guideline and to adjust for the effects of inflation.

Expected Result of the Recommendation: By itself, updating the self-support reserve and the phase-in will not change the number of cases where the noncustodial parent is pushed into poverty by payment of the child support obligation. The combined imputed minimum wage income of \$2,352 at the Florida minimum wage for 2008 still exceeds \$866.67, the federal poverty guideline for a single person. It is also significantly higher than the maximum income of the phase-in range. Therefore, even if the low-income provisions in the child support schedule are indexed, the noncustodial parent's child support obligation may still be large enough to push the parent below the poverty guideline. This leads to the second recommendation.

#### *Recommendation on the Use of Combined Income*

- Apply the self-support reserve and the phase-in range to the noncustodial parent's income alone.

Discussion of the Recommendation: This eliminates the inconsistency in using combined income with the single-person poverty guideline. It also avoids a situation in which income earned by the custodial parent increases the noncustodial parent's child support payment, which could push the noncustodial parent into poverty.

Expected Result of the Recommendation: Applying the federal poverty guideline to the noncustodial parent's income would prevent pushing the noncustodial parent below the poverty guideline. For example, a couple with minimum wage combined income and one child would have a current child support obligation of \$236.50. This is sufficient to push the noncustodial parent slightly below the federal poverty guideline. With the modified worksheet in Appendix 4-1, the payment would be slightly less, \$208.26, so that the noncustodial parent would retain \$889.82, slightly above the 2008 poverty guideline. The custodial parent would also have a net income of \$1,306.34 including the \$208.26 child support payment. This places the custodial parent well above the federal poverty guideline of \$1,166.67 for a two-person household.

#### *Recommendation on Application of the Self-Support Reserve*

- Apply the self-support reserve to the total child support payment rather than to the basic support obligation only.

Discussion of Recommendation: If the objective is to prevent child support from pushing parents into poverty, it is the total support payment, not just the basic obligation, that matters. If this recommendation is implemented, it is not necessary to include a low-income provision in the schedule of basic obligations. The child support schedule would specify a child support obligation for each income from zero to a maximum. The self-support reserve and phase-in range would be included in the child support worksheet, as shown in Appendix 4-1, not in the schedule of basic obligations.

Expected result of the recommendation: Adding childcare and health insurance to the basic support obligation after application of the self-support reserve and phase-in pushes an additional 2-3 percent of noncustodial parents into poverty. Adoption of this recommendation would directly affect these parents, allowing them to retain sufficient income to remain out of poverty.

*Recommendations on Incentives to Pay Child Support*

- Reduce the marginal child support rate over the phase-in range from the current 90-95 percent to some lower percentage and consider making it independent of the number of children.
- Conduct a study to determine relationship between the noncustodial parent's income and compliance with the child support order.

Discussion of Recommendations: These recommendations apply whether the low-income provision is in the schedule of basic support obligations exclusive of the childcare and health insurance add-ons, as with the current self-support reserve and phase-in, or included in the worksheet inclusive of the add-ons. Reducing the marginal rate improves work incentives and reduces the regressivity of the schedule. If it encourages greater compliance and provides a greater incentive for the noncustodial parent to earn income, the actual child support payment received by the custodial parent may increase even though the noncustodial parent's child support obligation is lower. An analysis of the relationship between the child support obligation relative to the actual income of the noncustodial parent and the probability of compliance is needed to determine the effectiveness of this recommendation.

Expected Result of the Recommendation: The effect of changing the marginal rate is substantial. In the above example of two parents with imputed incomes at the current minimum wage, the noncustodial parent's current obligation is \$236.50. Using the modified worksheet in the appendix instead of incorporating a self-support reserve and phase-in range in the schedule of obligations, the noncustodial parent's obligation decreases to \$208.26. If the marginal rate were reduced to 50 percent, the obligation would decrease to \$115.71. The noncustodial parent would retain 50 percent of each additional dollar earned above the poverty guideline, compared to only 10 percent retained currently. Retaining 50 cents of each additional dollar earned is certainly a greater incentive to earn income than retaining only 10 cents. If the greater incentive is effective and the noncustodial parent earns more income, the probability of remaining current in child support payments is increased.

## Appendix 4.1 Modified Worksheet Including a Low-Income Provision

This appendix presents a modified version of Florida's current child support worksheet that updates the self-support reserve from \$650 to \$866.67 to reflect the 2008 single-person poverty guideline, includes a low-income adjustment in the noncustodial parent's child support payment based on this updated poverty guideline, and applies the adjustment to the total obligation, not just the basic support obligation.

CASE INFORMATION	
1	Mother's name:
2	Father's name:
3	Names of children addressed in this case:

MONTHLY INCOME				
		CP	NCP	Total
4	Total number of children in this case:			
5	Gross Income			
6	Allowable Deductions			
7	Net Income (L5-L6)	+	=	
8	%Share of Total (Each parent's net income divided by combined income)			100%

MONTHLY FINANCIAL NEED				
9	Basic Need (From Schedule of Basic Child Support Obligations)			
10	Childcare (75%)			
11	Insurance			
12	Total Financial Need (L9 +L10 +L11)			

NONCUSTODIAL PARENTAL OBLIGATION (Completed only for the NCP)				
13	Obligation (L8 x L12)			
14	Credit, Childcare			
15	Credit, Insurance			
16	Net Obligation (L13 – L14 – L15)			

LOW-INCOME NONCUSTODIAL PARENT ADJUSTMENT				
17	L7 - \$866.67 (current year's poverty guidelines)			
18	L17 x 90%			
19	Adjusted Net Obligation (enter the smaller of L16 or L18, but not less than zero)*			

\*If line 19 is zero, the noncustodial parent's child support payment is to be determined at the discretion of the court.



## 5. Imputation of Income

Most states impute income when the parent is unemployed or income is unknown. The reasons for imputation are to reduce or eliminate incentives for parents to (1) hide income, (2) seek employment in the underground economy, (3) avoid employment or seek part-time employment instead of full-time employment, and (4) fail to provide relevant information or appear in court.<sup>1</sup>

Income on a monthly basis shall be imputed to an unemployed or underemployed parent when such employment or underemployment is found to be voluntary on that parent's part, absent physical or mental incapacity or other circumstances over which the parent has no control. In the event of such voluntary unemployment or underemployment, the employment potential and probable earnings level of the parent shall be determined based upon his or her recent work history, occupational qualifications, and prevailing earnings level in the community. . . .<sup>2</sup>

### 5.1 Current Issues Concerning Imputation Of Income

When income is imputed to either or both parents, the combined income of the parents is most likely to be above the self-support reserve and possibly even above the phase-in range no matter what the actual incomes are.

The following example shows the effect of imputing income at minimum wage for full-time work to a noncustodial parent:

**Table 5.1**  
**Example of Imputed Income**

Actual Income	\$0
Monthly Income Imputed at Minimum Wage for Full-Time Work <sup>3</sup>	\$1177
Deductions <sup>4</sup>	-\$79
Monthly Net Income	\$1098
<i>Basic Support Obligation</i> <sup>5</sup>	\$236

<sup>1</sup> Paul Legler, "Low-Income Fathers and Child Support: Starting Off on the Right Track", Denver: Policy Studies, Inc., (2003), p. 23.

<sup>2</sup> Florida Child Support Guidelines, Statute 61.30

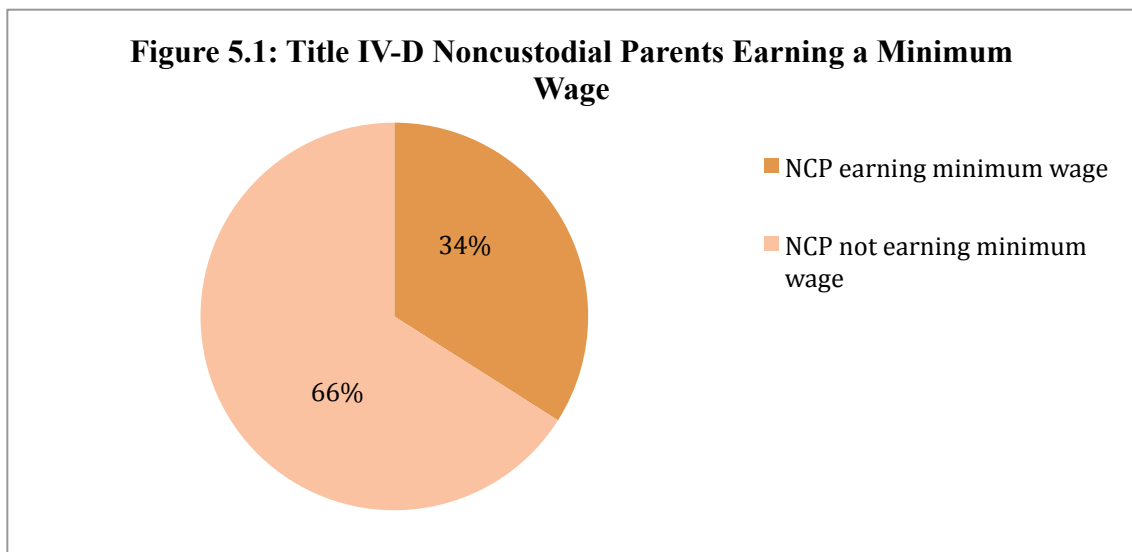
<sup>3</sup> \$6.79 per hour for a 40-hour per week, multiplied by 52 weeks and divided by 12 months.

<sup>4</sup> FICA allowance

<sup>5</sup> This assumes that the custodial parent has the same imputed income as the noncustodial parent.

The combined monthly net income of the parents, all of which is imputed, exceeds the self-support reserve and is near the maximum of the phase-in range. As a result, a noncustodial parent with no actual income would be assessed \$236 per month in child support for one child. Imputation of income can easily result in a child support obligation that exceeds the parent's actual monthly income. Although the example assumes actual income is zero, the problem can arise even if the parent has income from part-time or seasonal employment, which is common among low-income workers.

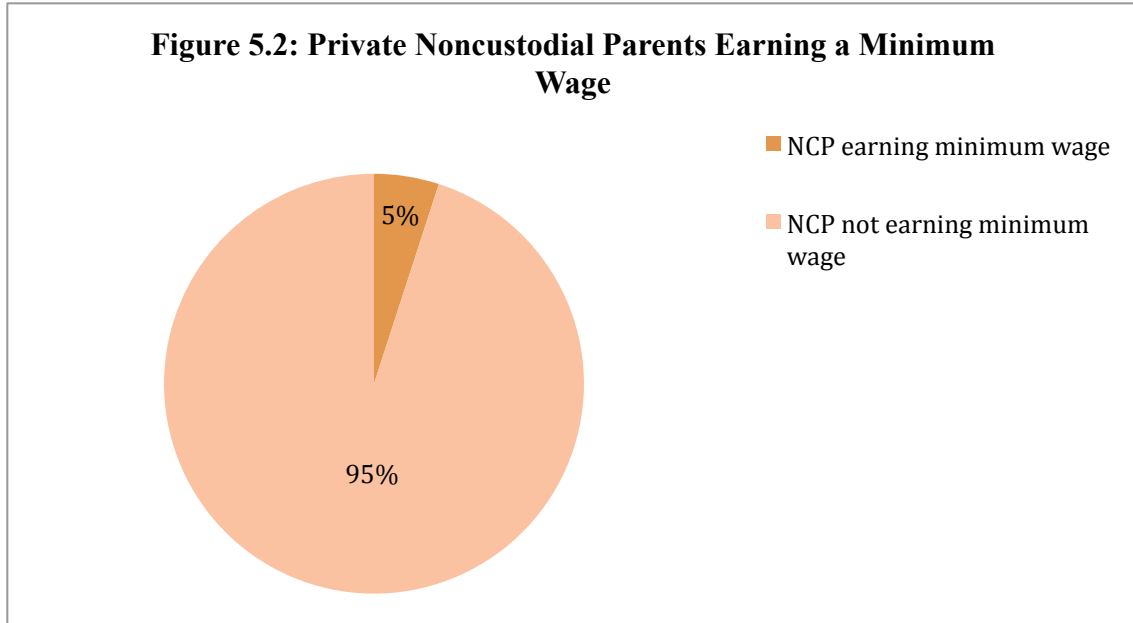
As Figures 5.1 and 5.2 show, only one percent of U.S. workers earn the minimum wage,<sup>6</sup> but 34 percent of the Title IV-D cases and five percent of the private cases in the sub-sample have full-time minimum wage incomes. This suggests that in many of these cases income has been imputed.<sup>7</sup>



<sup>6</sup> U.S. Census Bureau *Statistical Abstract of the United States*, (2002), Table 617 from: <http://www.census.gov/prod/2003pubs/02statab/labor.pdf>

<sup>7</sup> Even if it is necessary to impute the wage, then imputing at a minimum wage level is unlikely to reflect the true situation of the parent. In cases where there is a lack of information about the parent's actual long-run income or earning potential, one might infer the expected income based on the individual's characteristics. Appendix 5.1 presents a sample table that could be used to estimate an individual's expected income or earning potential.

**Figure 5.2: Private Noncustodial Parents Earning a Minimum Wage**



Compliance with child support orders is systematically lower in cases where income is imputed.<sup>8</sup> If imputing income reduces compliance, the custodial parent and the child might gain from a lower support order that is more closely related to actual income.

A central question for states is whether guidelines should be adjusted to lower the expectations for low-income noncustodial parents. This is a difficult and often hotly debated policy decision because the needs of children, often living below poverty, must be balanced with the ability of noncustodial parents—many of whom are poor themselves—to pay support. In setting guidelines, states are making a political decision that attempts to balance these different interests. There is no single, clear answer to this dilemma, but states reviewing their guidelines need to be sensitive to these issues and understand that it does little good to set child support awards that low-income noncustodial parents cannot pay. This only increases arrearages, creates resentment against the child support system, and puts the child support agency in the unproductive role of trying to collect money where none exists.<sup>9</sup>

The number of parents with minimum wage incomes in the sample of Florida child support cases is far out of proportion compared to national norms for all low-income parents. This strongly suggests that there are too many cases where income is imputed at minimum wage for full-time year-round work. Although it is clearly necessary to impute income in some cases, the practice should be used cautiously and

<sup>8</sup> Office of the Inspector General, *The Establishment of Child Support Orders for Low-Income Noncustodial Parents*. #OEI-05-99-00390. Washington, D.C.: U.S. Department of Health and Human Services (2000).

<sup>9</sup> Paul Legler, “Low-Income Fathers and Child Support: Starting Off on the Right Track”, Denver: Policy Studies, Inc., (2003), p. 13.

should take a more realistic view of an individual's actual expected earnings. Adopting minimum wage for full-time year-round work as the imputation default is certainly simple and easily understood, but it may also be counterproductive.

Although no state appears to have adopted policies or revised its guidelines to reduce reliance on imputation, concern has been expressed frequently over the issue. Where the reason for imputing income is the absence of information on actual income, Paul Legler recommends reserving orders or setting zero orders initially, with review of the case after 30, 60, or 90 days. He also proposes expanding the use of automated location sources for income information.<sup>10</sup> Where the reason is to mitigate any possible work disincentives that child support may create, the discretionary authority vested in the courts allows the court to tailor the child support award to the particular circumstances of the case.

## ***5.2 Recommendation***

- Reduce reliance on imputed income. Rely more on information on past actual incomes and limit imputation of incomes to those cases where one of the parties does not appear and no information is available from any other source.

Discussion of the Recommendation: Wherever possible, actual income should be used. Examining the past income stream provides a good estimate of the likely income potential for an individual. However, where the data are unavailable or the individual is not forthcoming about disclosing the data, then expected income levels for individuals with similar training and experience can be used to impute the individual's likely income.

Expected Result of the Recommendation: Limiting the use of imputed income would increase the number of low-income noncustodial parents who benefit from the self-support reserve and phase-in range. As a result, it would reduce the number of cases where the child support payment pushes a noncustodial parent into poverty. Ultimately, limiting the use of imputed incomes may increase compliance with child support orders among low-income noncustodial parents.

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<sup>10</sup> Legler, p. 25.

## Appendix 5.1 Expected Earnings by Gender, Race and Education

The following table shows expected annual earnings of individuals based on their gender, race, and education. For example, females without a high school diploma would be expected to earn less than the 2008 minimum wage monthly income in Florida of \$1,177 regardless of race. Expected income increases for both males and females as the education level increases. The table could be refined to allow for more characteristics, but gender, race and education capture most of the variation in wages.

<b>Expected Earnings in 2008</b>						
	<b>Male</b>			<b>Female</b>		
	Hispanic	African-American	Other	Hispanic	African-American	Other
Some High school	\$20,746	\$15,857	\$20,921	\$10,495	\$10,766	\$9,971
High School Degree	\$28,773	\$23,501	\$36,056	\$16,267	\$16,590	\$20,424
Some College	\$37,238	\$31,144	\$45,989	\$22,140	\$22,205	\$27,629
College Degree	\$60,853	\$56,000	\$69,304	\$31,342	\$49,551	\$37,322
Source: Florida Wage earnings for 2004-2006 for Florida residents aged 21-65, taken from the March CPS. These numbers are updated to 2008 using national production worker wages from June, 2005-2008 from Bureau of Labor Statistics.						

## 6. Visitation and Shared Parenting

Although the evidence is not very solid, there is a widespread belief that the probability that a noncustodial parent will comply with a child support order is greater if the parent has regular contact with the child and that the welfare of the child is enhanced if the child has regular contact with both parents. On the first point, “Data from a 1987-88 national survey indicate that among fathers who do not see their children at all, only 16.2 percent pay any child support, while among fathers who see their children more frequently than several times a year, 64.2 percent make these payments.”<sup>1</sup> Census Bureau surveys indicate that compliance in 1995 was 85 percent in joint custody cases, 79 percent where the noncustodial parent’s visitation rights were protected by a court order, and 56 percent where neither joint custody nor visitation was protected.<sup>2</sup>

Correlation, of course, does not prove causation. The evidence does not prove that the higher probability of compliance is a result of greater access to the child or that limiting access results in lower compliance.<sup>3</sup> There may be no causality at all between frequency of contact and payment of child support. Rather, the noncustodial parent’s willingness to have contact with the child and to pay child support may both be dependent on emotional attachment to the child or on a sense of moral obligation.

As to the second point, “Over the past few decades, a substantial body of social science evidence has suggested that children also benefit from present fathers and suffer when fathers are absent.”<sup>4</sup> The evidence is insufficiently strong to constitute proof and the results are not always consistent, but “. . . the large number of studies and their fairly high, although not unanimous, agreement about the direction if not the magnitude of effects suggests that they are reporting something valid about the importance of fathers.”<sup>5</sup> Other evidence suggests that at least some of the benefits children derive from the presence of fathers are also derived from frequent visitation with noncustodial fathers.<sup>6</sup>

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<sup>1</sup> William S. Commanor, “Child Support Payments: A Review of Current Policies.” William S. Commanor (ed.), *The Law and Economics of Child Support Payments* (Northampton, MA: Edward Elgar, 2004), 1-30 at 23.

<sup>2</sup> Bureau of the Census, “Child Support for Custodial Mothers and Fathers.” *Current Population Survey*, Consumer Income, Series P60, No. 187 (August 1995).

<sup>3</sup> Commanor (2004), 23-24.

<sup>4</sup> Geoffrey P. Miller, “Parental Bonding and the Design of Child Support Obligations.” William S. Commanor (ed.), *The Law and Economics of Child Support Payments* (Northampton, MA: Edward Elgar, 2004), 210-240 at 214.

<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*, 217.

Even though the evidence does not provide incontrovertible proof of the propositions, it is sufficient to conclude that child support guidelines should at least not discourage visitation or shared parenting. In addition, child support guidelines should:

- provide sufficient guidance to judges, hearing officers, and parents on how to handle alternative custody arrangements;
- ensure consistent treatment of families across the state; and
- minimize disputes and litigation over custody arrangements, including ensuring that the guidelines are not themselves a source of disputes and litigation.

### ***6.1 Current Treatment of Visitation and Shared Parenting in Florida***

The basic premise of the income shares model of child support is that the child of divorced or never-married parents is entitled to the same level of expenditures as would have been provided, on average, if the parents had lived together. In other words, in the income shares model, child support is intended to ensure that the custodial parent has sufficient resources to provide the child with the same amount of spending as would be available for a child in an otherwise similar intact family.

The claim is sometimes made that the income shares methodology anticipates “normal” visitation rights for the noncustodial parent,<sup>7</sup> but this claim is invalid. Because the underlying expenditure data are derived from two-parent, intact families, it must be true that no visitation is contemplated by the guideline amounts. As noted in the New Jersey Child Support Guidelines,

The awards in the support schedules represent spending on children by intact families. In an intact family, the children reside in one household and no visitation is needed. This is similar to child support actions in which one parent has sole physical custody of a child and there is no visitation or shared-parenting.<sup>8</sup>

A noncustodial parent who engages in visitation with the child incurs expenses on behalf of the child during the period of visitation. Some of these expenses (housing, for example) duplicate expenses incurred by the custodial parent. Failure to recognize these duplicate expenses and adjust the support payment accordingly understates both the total cost of the child and the cost to the noncustodial parent.

Other expenses are unduplicated but follow the child. When the child is resident with the custodial parent, the custodial parent incurs these expenses, but when the child is resident with the noncustodial parent, the noncustodial parent, not the custodial parent, incurs the expenses. Failure to recognize this shifting of costs between the parents and to

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<sup>7</sup> For example, Pennsylvania’s child support guidelines state “The support schedule contemplates that the obligor has regular contact, including vacation time with his or her children...”

<sup>8</sup> New Jersey Child Support Guidelines, Rule 5:6A, “Visitation and Shared Parenting.”

adjust the support payment accordingly understates the costs to the noncustodial parent and overstates the costs to the custodial parent.

The result is that child support obligations determined using the income shares methodology do not accurately reflect the costs of the child or the costs incurred by the two parents when there is visitation or shared parenting. For this reason, child support guidelines based on the income shares model may actively discourage noncustodial parents from exercising visitation, in violation of the guidelines principles enunciated above.

Because Florida's child support guidelines are based on the income shares model, they suffer from this problem. In an effort to mitigate the problem, however, Florida's guidelines allow the courts to treat extended visitation as grounds for a deviation from the guideline obligation amounts:

(11)(a) The court may adjust the minimum child support award, or either or both parents' share of the minimum child support award, based upon the following considerations:

The particular shared parental arrangement, such as where the child spends a significant amount of time, but less than 40 percent of the overnights, with the noncustodial parent, thereby reducing the financial expenditures incurred by the primary residential parent...<sup>9</sup>

The guidelines do not provide the court with any guidance as to the appropriate amount of the adjustment.

Another provision of the guidelines provides a formula for adjusting the child support award when visitation equals or exceeds 40 percent of the overnights during the year. A child support obligation is calculated for each parent as if that parent is the noncustodial parent and the other is the custodial parent. The respective obligations are multiplied by 1.5 to account for the additional, duplicated expenses of maintaining two homes for the child.<sup>10</sup> Each parent's obligation is then weighted by the amount of visitation time with the other parent. The difference between the resulting obligations, adjusted for each parent's share of childcare and health insurance expenses, is the amount paid by the parent with the higher obligation to the parent with the lower obligation.

This method is referred to as the *cross-credit* approach. Table 6.1 provides an illustration of this approach. The example assumes the parents have a combined net monthly income of \$3500. The custodial parent earns \$1400 (40 percent) and the noncustodial parent earns \$2100 (60 percent). The total child support obligation for two children is \$1149.

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<sup>9</sup> Florida Child Support Guidelines, Statute 61.30.

<sup>10</sup> The factor is essentially arbitrary and is not derived from any underlying economic data on the amount of such expenses. See also footnote 18 below.



**Table 6.1**  
**Using the Cross-Credit Approach to Calculate a Shared-Parenting**  
**Basic Support Obligation**

Custodial Parent		Noncustodial Parent
\$1400	Income	\$2100
40%	Percent of Total	60%
\$460	Share of Obligation	\$689
\$690	Expense-Adjusted Share of Obligation (Multiplier=1.5)	\$1034
60%	Parenting Time	40%
\$276	Net Obligation	\$620
	Child Support Payment	\$344

The result is that the noncustodial parent owes \$344 in child support to the custodial parent. Without an adjustment for shared parenting time, the noncustodial parent would owe \$689 in child support.

The 40 percent threshold in Florida’s guidelines gives rise to three problems. First, if noncustodial parents incur costs even at visitation levels less than 40 percent without receiving any credit for those costs, they are discouraged from exercising visitation at this level. In other words, if they are unable or unwilling to exercise visitation of at least 40 percent so that they qualify for a visitation credit, they may choose to exercise no visitation at all so that they incur no cost. This violates the principle above that child support guidelines should not discourage visitation and shared parenting.

Another basic principle is that the guidelines should provide guidance to judges, hearing officers, and parents. While Section (11)(a) authorizes courts to deviate from the guideline amounts to accommodate visitation arrangements that do not rise to the level of the 40 percent threshold, it offers no guidance on how they should do this, thus violating the guidance principle.

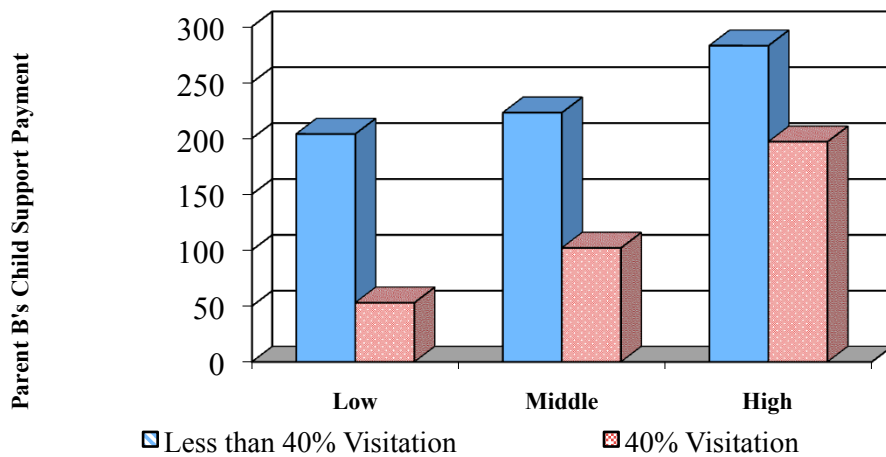
The third problem with Florida’s current treatment of visitation and shared parenting is that the threshold creates a “cliff effect”. The cliff effect may encourage disputes and litigation between the parents, violating yet another one of the principles of child support guidelines. Because of the threshold, small changes in parenting time around the threshold result in large changes in the child support payment. Thus, the financial impact of a small difference in parenting time is substantial.

Figure 6.1 illustrates the cliff effect using the typical Title IV-D Florida child support cases. Figure 6.2 illustrates the effect for the private cases. The typical middle income Title IV-D case has combined monthly net income of \$2245, noncustodial parent income of \$1212, and one child. The basic support obligation is \$484. If the child spends less than 40 percent of overnights (that is, anything from zero to 145) with the noncustodial parent, the noncustodial parent’s share of the basic obligation is \$261.

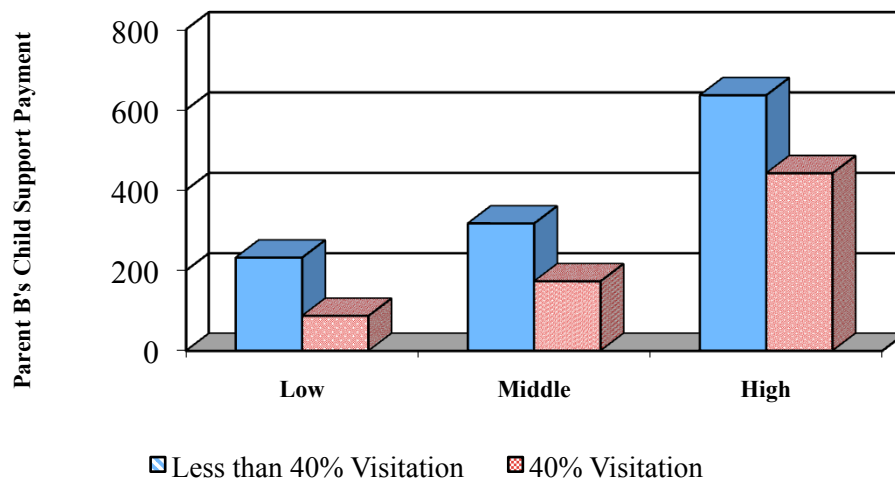
Beginning with the 146<sup>th</sup> overnight, the noncustodial parent’s share decreases to \$102 and continues to fall as the number of overnights increases. An increase of one overnight per year, from 145 to 146, *reduces the child support payment by 61 percent.*

The typical middle-income private case has combined monthly net income of \$3430, noncustodial parent income of \$1920, and one child. The basic support obligation is \$720. If the child spends less than 40 percent of overnights with the noncustodial parent, the noncustodial parent’s share of the support obligation is \$403. Beginning with the 146<sup>th</sup> overnight, the noncustodial parent’s share decreases to \$173. The increase of one overnight per year, from 145 to 146, *reduces the child support payment by over 57 percent.*

**Figure 6.1: Effect of 40% Threshold on Title IV-D Cases**



**Figure 6.2: Effect of 40% Threshold on Private Cases**



## 6.2 Current Treatment of Visitation and Shared Parenting in Other States

The income shares model does not allow for cost shifting between parents when the noncustodial parent exercises visitation, nor does it allow for the additional costs of shared parenting. Nevertheless, most states adjust child support payments in some way to accommodate these arrangements whether they use income shares or some other model. Some states provide an adjustment in the support payment for visitation or extended visitation. Other states provide an adjustment only for shared parenting.

### Visitation

As Table 6.2 shows, twenty-four states include in their guidelines explicit provisions for some level of visitation.<sup>11</sup> Eight of these states, including Florida, authorize courts to deviate from the guidelines amount to accommodate visitation, but offer the courts no guidance as to how to determine the adjustment. For example, Colorado's guidelines state:

Courts may deviate from the guidelines and schedule of basic child support obligations where its application would be inequitable, unjust, or inappropriate ... These reasons may include ... extraordinary costs associated with parenting time...<sup>12</sup>

**Table 6.2**  
**Visitation Provisions in State Child Support Guidelines**

Visitation Provision	Number of States	States
No Adjustment or No Separate Provision	27	Connecticut, Delaware*, D.C.*, Georgia, Hawaii, Illinois, Iowa, Kentucky, Louisiana*, Maine, Maryland*, Mississippi, Montana*, Nevada, New Hampshire, North Carolina*, Ohio, Oregon, Pennsylvania, South Carolina*, Tennessee*, Texas, Utah*, Vermont*, Virginia*, West Virginia*, Wisconsin*
Court Discretion without Formula or Guidance	8	Alabama, Colorado, Florida, Massachusetts, New Mexico, New York, Oklahoma, Washington
Court Discretion with Guidance	8	Alaska, Arkansas, Idaho, Kansas, Nebraska, New Jersey, South Dakota, Wyoming
Formula, Table, or Treated Like Shared Parenting	7	Arizona, Indiana, Michigan, Minnesota, Missouri, North Dakota, Rhode Island
Continuous Visitation	1	California

\*States with a threshold for shared parenting but no other provision for extended visitation

In eight states, even though the decision to deviate is at the discretion of the court, the guidelines provide some indication as to the appropriate amount of deviation or

<sup>11</sup> Additional detail on the categorization of states in Table 6.2 is contained in Appendix 6.1.

<sup>12</sup> Colorado. *14-10-115: Child Support Guidelines*, January 1, 2008. 14.10.115-8(e)

they provide a table or formula to determine the amount. All of these states limit the adjustment to instances of “extended visitation”, although as Table 6.3 shows, the definitions of extended visitation and the method and amount of adjustment differ widely.

**Table 6.3**  
**Treatment of Extended Visitation in State Child Support Guidelines**

State	Threshold	Reduction
Alaska	More than 27 consecutive days	Up to 75%
Arkansas	More than 14 consecutive days	Up to 50%
Idaho	14 or more days*	50%
Kansas	14 or more days	Up to 50%
Nebraska	28 days or more in a 90-day period**	Up to 80%
New Jersey	5 or more consecutive nights***	100% for period of residential time with NCP
South Dakota	10 or more days in a month	Between 38% and 66%
Wyoming	15 or more consecutive days	50%

\* Applies only if the child spends fewer than 25 percent of total overnights with the noncustodial parent.

\*\* Up to the discretion of the court when the time with the child substantially exceeds alternating weekends and holidays and 28 days or more in any 90-day period.

\*\*\*Applies only if child spends fewer than 28 percent of total overnights with the noncustodial parent.

The remaining states treat visitation in the same way as shared parenting, although some, such as North Dakota and Rhode Island, limit the adjustment to instances of “extended visitation”, not normal or customary visitation. An example of a state that does not differentiate between visitation and shared parenting is Arizona, which will be described in more detail below.

### *Shared Parenting*

Shared parenting is usually defined, as in Florida, where each parent has physical custody exceeding some threshold amount of time. In some states the thresholds are defined on the basis of the number of overnights the child spends with each parent. In other states, the thresholds are expressed as a percent of total parenting time. Table 6.4 shows each state’s threshold.

**Table 6.4**  
**Shared Parenting Thresholds in State Child Support Guidelines**

State	Threshold (%)	State	Threshold (%)
Alaska	30	New Mexico	35
Colorado	25	North Carolina	34
Delaware	30	North Dakota	45
D.C.	35	Oklahoma	33
Florida	40	Oregon	25
Hawaii	39	Pennsylvania	40
Indiana	14	South Carolina	30
Idaho	25	South Dakota	33
Iowa	35	Tennessee	25
Kansas	35	Utah	30
Maryland	35	Vermont	30
Minnesota	10	Virginia	25
Missouri	10	West Virginia	35
Nebraska	31	Wyoming	40

\*For states where the threshold is defined on the basis of the number of overnights with each parent, the threshold has been converted to percentages to facilitate comparison.

The thresholds vary widely, from a low of 10 percent to a high of 45 percent with an average of 31 percent. To put the thresholds in context, one overnight per week or alternating weekends is equivalent to 14.3 percent, two overnights per week or every weekend is 28.6 percent, and three overnights per week is 42.9 percent.

Table 6.5 summarizes the provisions for joint or shared custody. Five states have no separate provision for a shared parenting time adjustment.<sup>13</sup> New York and Ohio have no provision for either visitation or shared parenting. Eleven states allow an adjustment for shared parenting at the discretion of the court without any guidance as to the determination of an appropriate adjustment. Typical of these is Alabama:

"Shared physical custody" refers to that situation where the physical placement is shared by the parents in such a manner as to assure the child frequent and continuing contact and time with both parents. Because of the infinite possibilities that exist in terms of time spent with each parent and other considerations associated with such custody, a determination of support is to be made on a case-by-case basis and is left to the sound discretion of the trial court, to be based on findings made at or after trial or upon a fair written agreement of the parties.<sup>14</sup>

<sup>13</sup> Additional detail on the categorization of states in Table 6.5 is contained in Appendix 1.

<sup>14</sup> Alabama. Alabama Supreme Court, *Rule 32 Child Support Guidelines*. 1993.

**Table 6.5**  
**Shared Parenting Provisions in State Child Support Guidelines**

Shared Parenting Provision	Number of States	States
No separate provision	5	Arkansas, Kentucky, Maine, New York, Ohio
Court Discretion-No Formula	11	Alabama, Connecticut, Georgia, Illinois, Louisiana, Massachusetts, Mississippi, Nevada, New Hampshire, Texas, Washington
Table, Formula, or Worksheet Formula	12	Arizona, Indiana, Iowa, Kansas, Minnesota, Missouri, New Jersey, North Dakota, Pennsylvania, Rhode Island, Tennessee, Utah
Cross-Credit	22	Alaska, Colorado, DC, Delaware, Florida, Hawaii, Idaho, Maryland, Michigan*, Montana, Nebraska, New Mexico, North Carolina, Oklahoma, Oregon, South Carolina, South Dakota, Vermont, Virginia, West Virginia, Wisconsin, Wyoming
Continuous Visitation	1	California

\*Uses a formula that is essentially a cross-credit.

Twelve states provide either a table or a formula for determining the appropriate adjustment. The tables consist of a range of parenting time percentages along with a percentage reduction in the child support payment for each range. Adjustment tables range from simple as in Kansas to complex as in Missouri. Kansas provides a credit of 5 percent for shared parenting between 35 and 39 percent; 10 percent for parenting time between 40 and 44 percent; and 15 percent for parenting time between 45 and 49 percent. Missouri's table has 18 different levels with the adjustment credits ranging from 6 percent to 34 percent.

Some formulas require calculations outside the worksheet. North Dakota's formula, used for both shared parenting and extended visitation, determines the obligation in the following steps:<sup>15</sup>

1. Divide the basic support obligation by the number of children,
2. For each child, multiply the number of that child's visitation nights by .32 and subtract the resulting amount from 365,
3. Divide the amount in step 2 by 365,
4. Multiply the amount from step 1 by the amount from step 3,
5. Total all amounts from step 4.

Other states include a formula within the worksheet to compute a credit against the child support obligation for each parent or, as in Pennsylvania, they use a separate worksheet for shared parenting.

The remaining twenty-two states, like Florida, calculate the child support payment using the cross-credit approach as illustrated above in Table 6.1.<sup>16</sup>

<sup>15</sup> North Dakota Child Support Guidelines. Chapter 75-02-04.1-08.2.

<sup>16</sup> A few states use the cross-credit approach when parenting time is equal (that is, exactly 50 percent), but either have no provision for any other level of shared parenting time (Maine) or have a different provision for other levels of shared parenting time (Louisiana).

The approaches to shared parenting in two states, Arizona and California, are notable for their efforts to accommodate visitation and shared parenting without creating the problems found in the visitation and shared parenting provisions of other states' guidelines.

Arizona: Arizona provides a credit that increases over the full range of visitation.<sup>17</sup> The credit begins at 1.2 percent of the basic support obligation for 4-20 parenting time days and extends up to 48.6 percent for 173-182 parenting time days. A parenting time day is defined as 12 consecutive hours or an overnight. Among states that provide a table for adjusting the support obligation, Arizona is unique in having essentially no parenting time threshold that must be reached before the adjustment is allowed.

One notable feature of Arizona's approach is the absence of any distinction among visitation, extended visitation, and shared parenting.<sup>18</sup> A second notable feature is the absence of a significant threshold (four days of parenting time in a year does not constitute a significant threshold). A third notable feature is the effort to minimize cliff effects by providing a credit that increases gradually by small amounts in thirteen steps.

California: California is unique because all child support payments in California are determined from a single formula that includes a shared parenting adjustment. The formula is:

$$CS = K (HN - (H\%) (TN)).$$

The terms in the formula are:

- CS = child support amount
- K = proportion of both parents' income to be allocated for child support
- HN = high earner's net monthly disposable income
- H% = approximate percentage of time that the high earner has or will have primary physical responsibility for the children compared to the other parent.
- TN = total net monthly disposable income of both parties.

The noncustodial parent's child support payment decreases as the percentage of time the child spends with the noncustodial parent increases. When more than one child is involved, the child support amount is increased by a multiplicative factor that ranges from 1.6 for two children to 2.86 for ten children.<sup>19</sup>

As with Arizona's approach, California's formula applies to all child support cases without attempting to differentiate among visitation, extended visitation, or shared

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<sup>17</sup> Visitation less than 1% (0-3 days) does not qualify for a credit. However, any visitation in excess of 3 days qualifies for a credit.

<sup>18</sup> Arizona makes separate provision for those cases where both time and costs are equally shared between the two parents.

<sup>19</sup> California Child Support Guidelines, California Family Code 4055.

parenting. It goes beyond Arizona's approach by completely eliminating all thresholds and providing for a smooth, continuous adjustment with no cliff effects.

### **6.3 Recommendations**

#### *Primary Recommendation*

- Replace Florida's current shared parenting provision with a modified provision described below that eliminates the threshold, extends the shared parenting adjustment to all levels of visitation and shared parenting, and includes a variable multiplier for duplicated expenses.

Discussion of Primary Recommendation: Florida's current treatment of visitation and shared parenting suffers from three problems. First, the guidelines discourage noncustodial parents from having substantive contact with their children unless they are able and willing to exercise visitation rights for at least 40 percent of the time or unless the court order deviates from the guideline amount to compensate for the additional costs of visitation. Second, even if a court is willing to deviate, the guidelines provide no guidance to judges, hearing officers, or parents about the appropriate amount of the deviation. Finally, the 40 percent threshold creates a cliff effect that encourages disputes and litigation over visitation and shared parenting arrangements.

The solution is to eliminate the 40 percent threshold and provide a credit against the child support payment for all levels of visitation or shared parenting. An appropriate credit recognizes the duplicate expenses of maintaining two separate living accommodations and the cost shifting that occurs when the child spends time with the noncustodial parent. A credit for these expenses should encourage greater visitation and use of shared-parenting arrangements. At the very least, it reduces the likelihood that the additional financial burden will deter parents from adopting such arrangements. A credit that increases gradually with the level of visitation also reduces the financial consequences of small changes in visitation and creates more opportunity for compromise, reducing disputes and litigation between the parents.

These advantages can be accomplished with a modified version of Florida's current formula for shared parenting.<sup>20</sup> The modification blends Florida's current approach with the notable features of the approaches used in Arizona and California. It differs from Florida's current treatment in three small but important ways. First, like Arizona's adjustment schedule, it applies to all child support cases and includes all levels of visitation and shared parenting. Second, it eliminates the 40 percent threshold and, like California's basic support obligation formula, provides for a smooth, continuous adjustment in the child support payment, thereby avoiding cliff effects. Finally, it makes

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<sup>20</sup> Appendix 6.2 expresses the current shared parenting provision and the modified version as formulas for ease of comparison. Appendix 6.3 shows the simplicity in application of the modified version by incorporating it into the current guidelines worksheet.



the compensation for duplicated expenses depend on the amount of shared parenting time.

The modification is illustrated in Table 6.6. The basic information is identical to the example of the existing shared parenting provision in Table 6.1.

**Table 6.6**  
**Using the Cross-Credit Approach with a Variable Multiplier to**  
**Calculate a Shared-Parenting Basic Support Obligation**

Custodial Parent		Noncustodial Parent
\$1400	Income	\$2100
40%	Percent of Total	60%
\$460	Share of Obligation	\$689
\$643	Expense-Adjusted Share of Obligation (Multiplier=1.4)	\$965
60%	Parenting Time	40%
\$257	Net Obligations Shares	\$579
\$0	Child Support Payment	\$322

Without an adjustment for shared parenting time, the noncustodial parent would owe \$689 in child support. With the adjustment using a variable multiplier, the noncustodial parent owes \$322 in child support.

The variable duplicate expense multiplier equals one plus the smaller percentage of parenting time. If both parents have the child for 50 percent of the time, the multiplier is 1.5 as in the current treatment. However, if one parent has the child for more time than the other parent, the multiplier is lower.

A fixed multiplier of 1.5 is tantamount to assuming that duplicated expenses are lumpy and not dependent on the amount of parenting time as long as it is at least 40 percent. A more reasonable assumption is that the amount of duplicated expenses depends on the extent of shared parenting.<sup>21</sup> Duplicated expenses are likely to reach a maximum when both parents have the child for the same percentage of time and decrease as the amount of time becomes less equal.

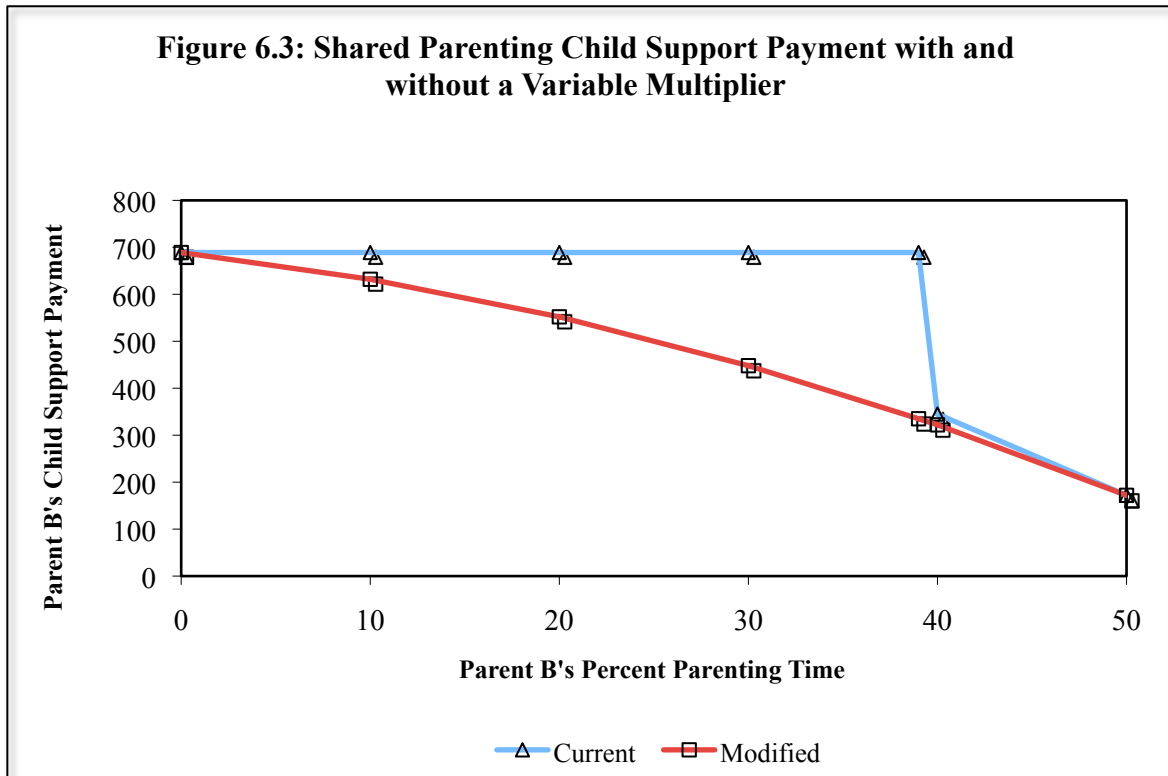
For example, a child who spends two nights per week (28%) with the noncustodial parent may satisfactorily use a spare bedroom, but even that child will need separate toys, games, books, and perhaps even a separate computer and some additional clothes. But a child who spends two nights per week and an additional eight weeks during

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<sup>21</sup> Empirical evidence on the actual amount of duplicated expenses does not exist. Some states, such as New Jersey, have developed quite detailed categories of expenses in shared parenting cases and assigned percentages to each category, some of which are included in a shared parenting adjustment and some not. However, the categorizations and the percentages are essentially arbitrary, and in some instances they are determined on an *ad hoc* basis in the political process. See David M. Betson, *Shared Parenting, Visitation and Child Support*, Work Product of Indiana Judicial Council Review of Support Guidelines (2003), pages 8-9 and page 22.

the year (39%) may be provided their own bedroom in addition to the other items. This relationship is captured by a variable duplicate expense multiplier that increases as shared parenting time becomes more equal and decreases as shared parenting time becomes less equal.

Figure 6.3 shows how the child support payment changes as parenting time varies using Florida's current shared parenting formula and using the modified version.



Even if this modified version of Florida's current approach to shared parenting is not adopted, the three features of the modified version discussed below could easily be incorporated into the current provisions for visitation and shared parenting.

### *Alternate Recommendation 1*

- Reduce the threshold at which a shared parenting adjustment to the basic support obligation is made to a maximum of 20 percent.

Discussion of Alternate Recommendation 1: Among the states that set a threshold for a shared parenting adjustment to the basic support obligation, only two (North Dakota and Pennsylvania) have thresholds as high or higher than Florida's 40 percent. As noted above, Arizona's threshold is three percent, and other states have thresholds as low as 10 percent. Even a parent who has a child every weekend for the entire weekend would not qualify for Florida's shared parenting adjustment. A 20 percent threshold requires only that the child spend an average of more than one night per week with the noncustodial parent. To accommodate parents with children who spend an average of one night per week (or, what is the same thing, alternate weekends), the threshold must be even lower, no higher than 14 percent.

These lower thresholds still create cliff effects and hold the potential for encouraging disputes and litigation between the parents. However, fewer parents will be affected at the lower thresholds. Because more parents are likely willing and able to exercise visitation at levels of 20 or 25 or 30 percent if the financial burden of doing so is lessened, reducing the threshold also encourages more parents to adopt visitation and shared parenting arrangements.

### *Alternate Recommendation 2*

- Replace the fixed duplicate expense multiplier in the shared parenting adjustment with a variable multiplier.

Discussion of Alternative Recommendation 2: A variable multiplier could be included in Florida's current shared parenting provision even if the 40 percent threshold were retained. Compared with a variable multiplier, a fixed multiplier of 1.5 likely overstates the extent of duplicated costs except when parenting time is exactly equal. With a threshold as high as 40%, however, the range of a variable multiplier is only between 1.4 and 1.5, and the difference between the fixed and variable multipliers is relatively small. If the threshold is reduced or eliminated, the range of the variable multiplier is greater and the potential relative overstatement of costs by the fixed multiplier is larger. A variable multiplier is likely to better reflect the true duplicated costs even with a threshold as high as 40 percent, but the superiority of the variable multiplier is even greater when the threshold is lowered.

### *Alternative Recommendation 3*

- Adopt a smaller adjustment formula without the duplicate expense multiplier for visitation levels below the threshold.

Discussion of Alternate Recommendation 3: Even if the threshold is reduced sufficiently so that duplicated expenses are no longer important, there are still costs incurred by noncustodial parents whose visitation is less than the threshold. Duplicated expenses may be negligible if the child resides with the noncustodial parent only occasionally, or even regularly but no more than, perhaps, one night per week (14.3%). However, there is still some cost-shifting between the parents. For example, a noncustodial parent who does no more than provide after-school care, three hours each school day (9% share of parenting time), incurs expenses for food, entertainment, and transportation. These unduplicated expenses can be accommodated by applying the shared parenting formula below the threshold but without the duplicated expense multiplier.

Extending the shared parenting formula to visitation levels below the threshold provides guidance for judges, hearing officers, and parents in dealing with all cases of visitation and shared parenting. Greater certainty about adjustment of the basic support obligation for visitation and shared parenting should encourage more parents to adopt these arrangements and more judges and hearing officers to approve them. For cases to which the application of the formula is inappropriate, courts still retain discretion to adjust the guidelines amount as seems most appropriate to accommodate visitation or shared parenting in a particular case.

## **Appendix 6.1**

### **Definitions of Categories of States' Visitation and Shared Parenting Provisions**

#### ***Visitation***

##### *No Adjustment or No Separate Provision*

- State may define normal visitation but not discuss actions to be taken in the event it is exceeded (Connecticut)
- Makes no distinction between “extended visitation” and “shared parenting” (Georgia)
- Discusses “visitation” only in terms of shared parenting or equal custody (Hawaii, Maine, Oregon)
- May be considered a basis for discretionary adjustment but not specifically enumerated as a reason for deviation (Illinois, Iowa, Kentucky, Mississippi, Nevada, New Hampshire, New York, Pennsylvania, and Texas)
- Explicitly disallows an adjustment if parenting time is below the shared parenting time threshold

##### *Court Discretion without Formula or Guidance*

- Explicitly allows reduction or abatement according to the court’s discretion, but provides no guidelines for the court to follow

##### *Court Discretion with Guidance*

- Allows reduction or abatement according to the court’s discretion and provides a definition of the amount of time considered to be “extended visitation” and a suggested or maximum amount of reduction

##### *Formula, Table, or Treated Like Shared Parenting*

- Applies a shared parenting time table, a separate formula, or a formula included in the worksheet to any level of parenting time with no distinction between visitation and shared parenting
- Distinguishes between extended visitation and shared parenting, but applies a shared parenting time table or formula to any visitation that exceeds a threshold

#### ***Shared Parenting***

##### *No Separate Provision*

- Allows an adjustment for extended visitation but not explicitly for shared parenting
- Allows an adjustment for split or equal custody but not shared parenting
- Includes no separate provision for visitation or shared parenting

### *Court Discretion-No Formula*

- Allows a deviation for shared parenting, but provides no guidance as to the amount

### *Formula, Table, or Worksheet Formula*

- Provides a table that shows a reduction in or credit against the child support obligation for different levels of parenting time
- Provides a formula to compute a reduction in or credit against the child support obligation based on the amount of shared parenting time
- Within the worksheet, computes a reduction in or credit against the child support obligation based on the amount of shared parenting time.

### *Cross Credit*

- Within the worksheet or in a separate shared parenting worksheet, computes a separate support obligation for each parent, provides a credit against each parent's obligation for that parent's share of parenting time, and offsets the two obligations to determine a net child support payment
- Uses a shared parenting formula that is equivalent to a cross-credit computation within the worksheet (Michigan)

## **Appendix 6.2 Current and Proposed Shared Parenting Formulas**

The current provision in Florida's guidelines for shared parenting is equivalent to the following formula:

$$\text{Child Support Payment} = (\text{Basic Support Obligation}) * 1.5 * [(\text{Parent B's Share of Parenting Time}) - (\text{Parent B's Share of Combined Income})].$$

If the result is positive, Parent B pays child support to Parent A. If the result is negative, Parent A pays child support to Parent B. Substituting the data from the example in Table 6.1 above,

$$\$1149 * 1.5 * (0.60 - 0.40) = \$344.$$

In this example, the noncustodial parent pays \$344 monthly in child support to the custodial parent.

The proposed modification is equivalent to the following formula:

$$\text{Child Support Payment} = (\text{Basic Support Obligation}) * (1 + \text{Smaller Share of Parenting Time}) * [(\text{Parent B's Share of Parenting Time}) - (\text{Parent B's Share of Combined Income})].$$

Again, if the result is positive, Parent A pays child support to Parent B. If the result is negative, Parent B pays child support to Parent A. Substituting the data from the example in Table 6.2 above,

$$\$1149 * 1.4 * (0.60 - 0.40) = \$322.$$

With the modified formula, the noncustodial parent pays \$322 monthly to the custodial parent.

When the modified version of Florida's current shared parenting provision was first presented, an objection was raised that it resulted in negative child support payments. The child support payment generated by the formula can indeed be negative, but that is also true of the formula that underlies the current provision. The actual worksheet calculation of the adjustment, as shown in Appendix 6.3, does not produce a negative support payment.

More importantly, a negative payment generated by the formula simply means the direction of payment is reversed from the "normal" direction. A negative payment means nothing more than Parent A pays Parent B rather than Parent B paying Parent A. In this respect, the modified version and the current provision are identical.

### Appendix 6.3 Proposed Florida Child Support Guidelines Worksheet Incorporating a Shared Parenting Adjustment

This appendix shows the simplicity of the recommended modified version of the current shared parenting provision. With the addition of a few lines in the worksheet, any degree of visitation or shared parenting can be accommodated in the calculation of the child support obligation.

CASE INFORMATION	
1	Mother's name:
2	Father's name:
3	Names of children addressed in this case:
4	Total number of children in this case:

MONTHLY INCOME				
		<u>CP</u>	<u>NCP</u>	<u>Total</u>
5	Gross Income			
6	Allowable Deductions			
7	Net Income (L5-L6)	+	=	
8	%Share of Total (Each parent's net income divided by combined income)			100%
9	Basic Need (From Schedule of Basic Child Support Obligations)			

PARENTAL OBLIGATION				
10	Percent of Overnights with Child			100%
11	Duplicate Expense Factor (If L10 is equal to or less than 50%, equals 1+L10. If L10 is greater than 50%, equals 2-L10.)			
12	Expense-Adjusted Basic Need (L9 x 11)			
13	Parent's Share of Expense-Adjusted Basic Need (L8 x L12)			
14	Shared Parenting Credit (L10 x L12)			
15	Basic Obligation (L13 – L14. If negative, enter zero.)			

NET OBLIGATION				
16	Childcare (75% of actual monthly amount)			
17	Insurance			
18	Total (L16 + L17)			
19	Parent's Share (L8 x L18. Use only when L15 is greater than zero))			
20	Total Obligation (L15 + L19)			
21	Credit, Childcare			
22	Credit, Insurance			
23	Net Obligation			



## 7. The Treatment of Tax Benefits in Child Support Guidelines

In addition to the basic support obligation, the current child support guidelines in most income shares states allocate actual childcare expenditures between the two parents in proportion to their respective shares of the combined income. However, Florida's guidelines reduce the amount owed to the custodial parent by the noncustodial parent by 25 percent. The rationale for this reduction appears to be the childcare tax credit in the U.S. Individual Income Tax. The 25 percent tax credit for childcare expenses, however, is only available to half of the households in the Florida sample of child support cases. Moreover, for higher income households, the tax saving from the credit is only 20 percent of childcare expenses.

Allowance for the childcare tax credit is the only acknowledgement in the child support guidelines of the tax consequences of having a child in the household. Nevertheless, the tax benefits of having a child living in the household are substantial. In the low-income cases, the tax benefits are as high as 72 percent of the estimated cost of a child. By only recognizing the childcare credit, the current guidelines treat the tax benefits inconsistently.<sup>1</sup>

### *7.1 Tax Benefits of Children*

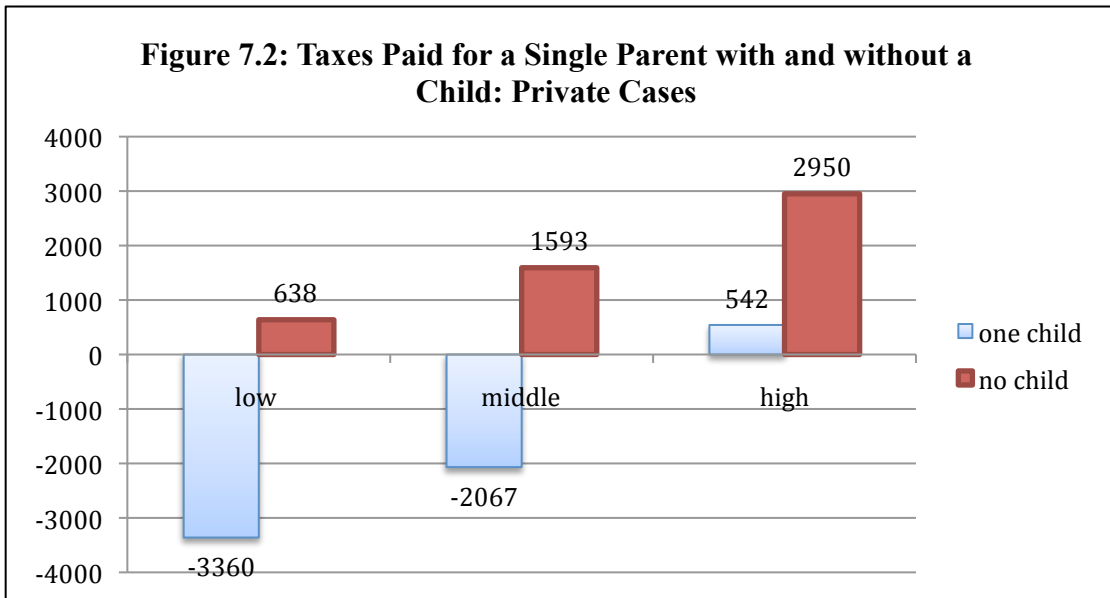
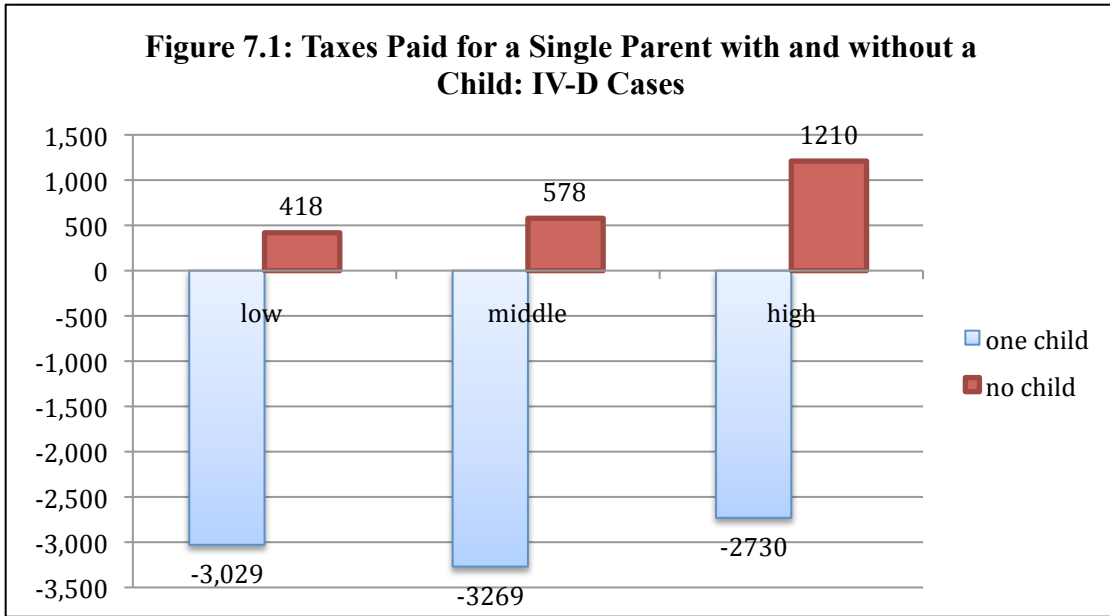
The tax benefits of having a child are not limited to the childcare tax credit. The presence of children also has other tax effects. In some cases the government actually pays the custodial parent for having a child. For instance, by filing as a head of household, the custodial parent pays a lower tax rate and claims a higher standard deduction than a single taxpayer. The presence of children generates a tax saving relative to what custodial parents would pay as single taxpayers without dependents. In addition, low-income parents may be eligible for the Earned Income Tax Credit (EITC), which is a refundable credit that increases with the number of children.<sup>2</sup> The current guidelines ignore these tax issues, but to more accurately reflect a family's true expenditures on children, these tax benefits should be offset against the calculated costs.

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<sup>1</sup> The basic child support obligation reflects average expenditures on a child by a two-parent intact family in a specific income range and does not take into account any tax benefits. It is the gross cost of the child, not the cost to the parents net of any tax benefits.

<sup>2</sup> The presence of a child in the household also makes the household eligible for certain additional state and federal subsidies, such as the Women, Infant, and Children's (WIC) program. The value of these subsidies has not been included in the analysis, but it is conjectured to be substantial especially for low-income cases.

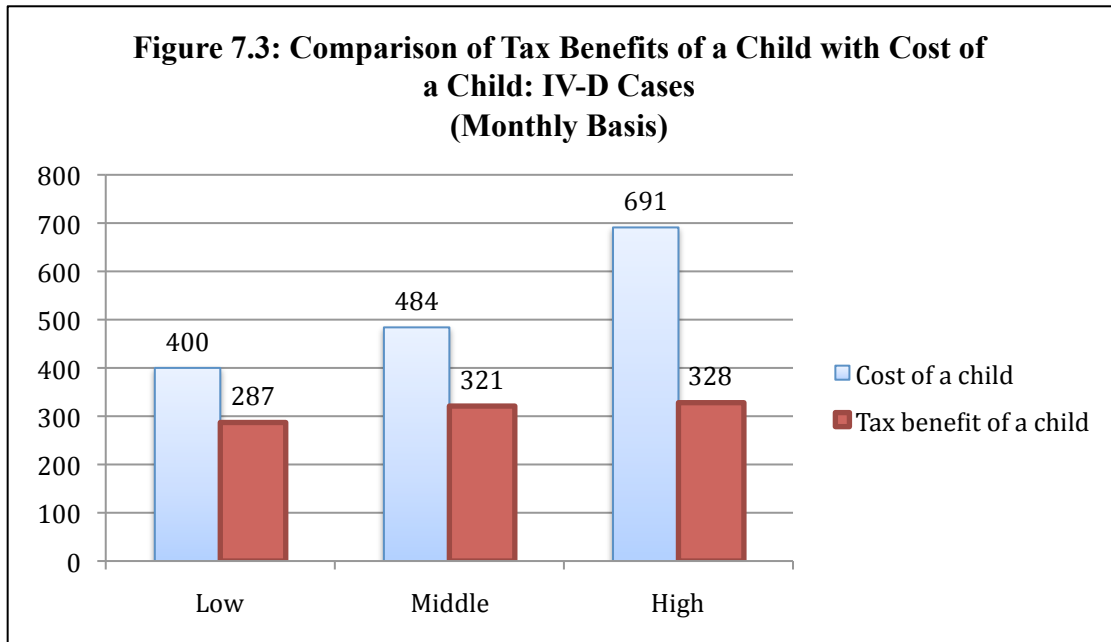
Figures 7.1 and 7.2 illustrate the amount of the tax credits (or direct payments in the case of the EITC) that the custodial parent in each of the typical cases receives by filing as a head of household with a dependent instead of as a single taxpayer with no dependents.<sup>3</sup> As the figures show, the tax benefits are substantial. For example, a single person without a child but with monthly income of \$1210 (the income of the Title IV-D middle-income custodial parent) would pay \$578 annually in tax. The same person with custody of one child would receive \$3,269 from the IRS.



<sup>3</sup> The tax benefit or government payment for all six typical cases is computed based on 2007 tax law using the standard deduction. In the high-income private case, this may be less appropriate as families at this income level are more likely to itemize deductions. Nevertheless, the standard deduction is used for simplicity.

An alternative perspective on the tax benefits of a child is shown in figures 7.3 and 7.4.<sup>4</sup> Figure 7.3 shows that, for the Title IV-D cases, the cost of a child is substantially subsidized by the Federal government.<sup>5</sup> In fact, the tax-subsidy in the low-income Title IV-D case equals almost 72 percent of the estimated expenditures on the child.<sup>6</sup> Even in the high-income Title IV-D case, the custodial parent receives tax benefits equal to almost 50 percent of the estimated cost of a child.

The three typical private cases are presented in Figure 7.4. The low and middle-income cases are similar to the Title IV-D cases, with tax benefits ranging from 43% of the cost of a child to 69%. The tax benefit in the high-income private case is a much smaller share of the cost of a child because some of the benefits of children are phased out at higher income levels.<sup>7</sup>

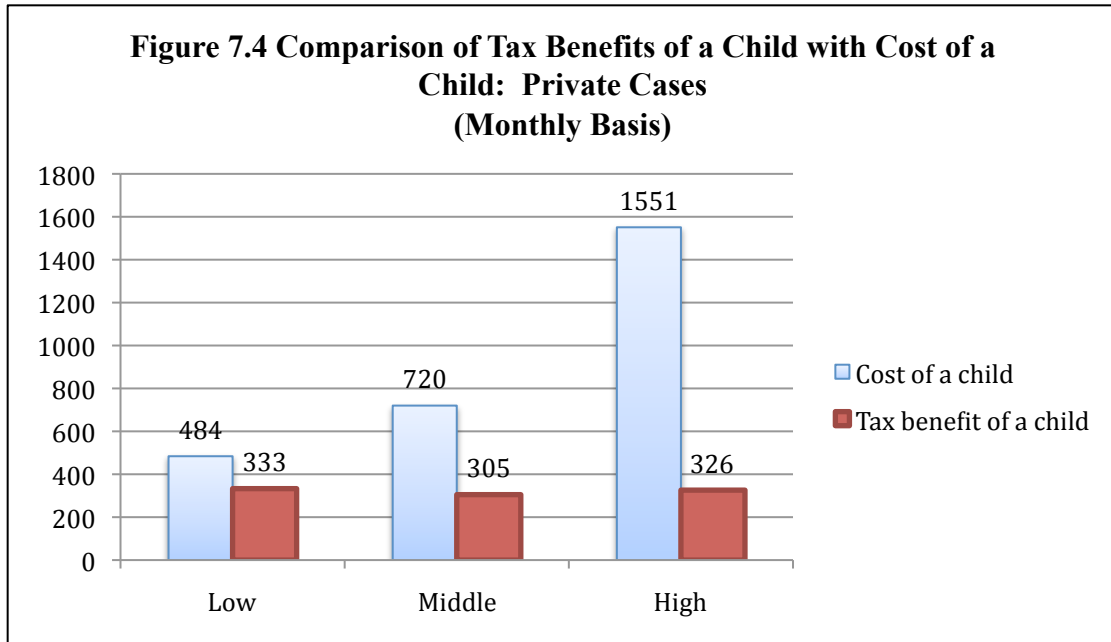


<sup>4</sup> The monthly tax benefit is derived by calculating the annual value of tax benefits and dividing by 12.

<sup>5</sup> Subsidizing the cost of raising children is not unusual in industrialized countries. In Sweden, for example, the government sends a monthly check to parents to compensate them for the additional cost of having children. Effectively, the U.S. system works the same way, except the “payment” is made through the tax system.

<sup>6</sup> The estimated cost is based on the existing 1993 guidelines. Because the updated cost estimates in Chapter 2 are lower, the tax benefit is an even higher percentage of updated costs of raising children.

<sup>7</sup> Recall that the high-income case involves two children and thus the \$326 in tax benefits is the total saving to the household, not per child.



The tax benefits of children increase with the number of children but at a decreasing rate. The head of household filing status designation and the standard deduction reduce the tax rate but neither depends on the number of children. On the other hand, the EITC increases as the number of children increases.

Rogers and Bieniewicz (2000) incorporate an adjustment for the entire range of tax benefits of a child into their cost shares model of child support.<sup>8</sup> The same approach could be used to incorporate all the tax benefits into the income shares model without unduly complicating the child support worksheet. Appendix 7.1 provides an example of a worksheet that incorporates these tax benefits.

## 7.2 Childcare Payments

Despite the ease with which child support guidelines worksheets could include all tax benefits associated with having a child, the only tax provision included in Florida's child support guidelines is the childcare tax credit. Childcare expenses are an important component of child support. Thirteen percent of the households in the sample of Florida cases reported childcare payments that are higher than the basic child support obligation. Another 21 percent have childcare expenses that are more than 50 percent of the basic obligation.

<sup>8</sup> See R. M. Rogers and D. J. Bieniewicz "Child Cost Economics and Litigation Issues: An Introduction to Applying Cost Shares Child Support Guidelines," Southern Economic Association Annual Meetings, November, 2000.

Figure 7.5 shows that it is common for states to have some form of adjustment to actual childcare expenses in recognition of the federal tax credit.<sup>9</sup> However, the exact amount and method of such an adjustment varies across states. Florida’s approach is to reduce the amount owed for childcare by the noncustodial parent by 25 percent.

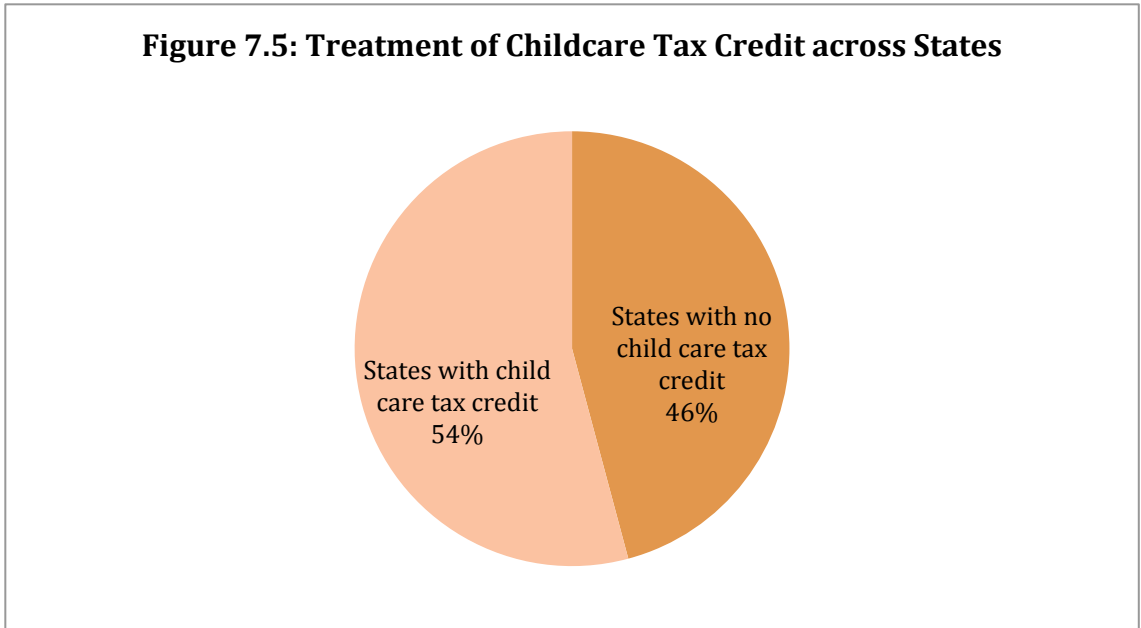


Table 7.1 shows the estimated tax savings from a \$2,000 annual childcare expenditure for one child for each of the six typical Florida child support cases.<sup>10</sup> In three of the six cases, the tax benefit to the custodial parent is zero because low-income custodial parents have too little income to pay taxes.<sup>11</sup> Only the high-income Title IV-D case and the middle- and high-income private cases obtain any tax benefits from childcare payments. The savings are 23.9 percent to 31 percent, depending on the income of the custodial parent.<sup>12</sup> This is approximately equal to Florida’s current 25 percent reduction in the noncustodial parent’s required payment.

**Table 7.1  
Percentage of Childcare Costs Saved through Additional Tax  
Deductions**

Income Level	IV-D	Private
Low	0.0%	0%
Middle	0.0%	31.0%
High	23.9%	26.0%

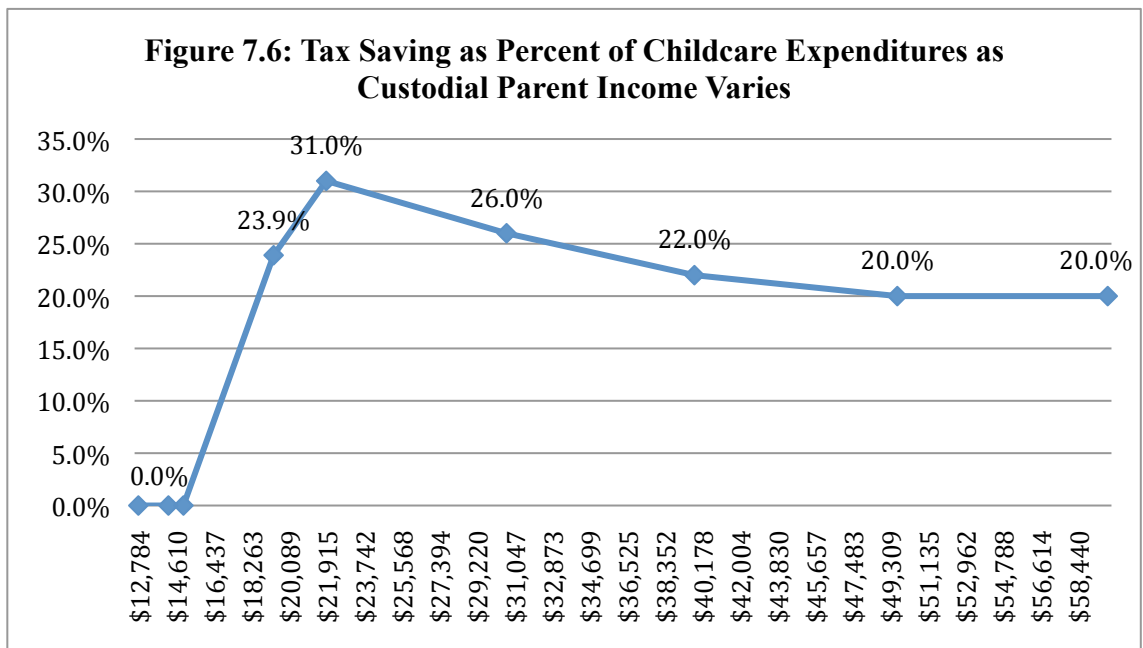
<sup>9</sup> The allowance for the childcare tax credit is included in the original income shares model in Williams (1987).

<sup>10</sup> The size of the childcare payment is essentially irrelevant.

<sup>11</sup> The calculations are based on 2007 tax law.

<sup>12</sup> Although the tax savings in the table for the private high-income case are calculated with one child, the savings with two children, as in the typical Florida case, are the same.

Figure 7.6 shows the percentage tax saving for the six typical cases and for three additional hypothetical cases where the custodial parent's income is \$40,000, \$50,000 and \$60,000, respectively. From these nine points, a continuous scale is extrapolated to provide an estimate of the tax savings for the whole range of custodial parent incomes up to \$58,000. The tax savings at low incomes are zero, increase rapidly to over 30% between about \$15,000 and \$20,000, and then gradually decrease to 20% at incomes of \$50,000 and higher.<sup>13</sup> As Figure 7.6 shows, Florida's current 25 percent reduction reflects the actual tax savings for only a small range of incomes.



### 7.3 Recommendations

- Reduce or eliminate the 25% reduction in the noncustodial parent's share of childcare expenses

Discussion of the Recommendation: Only half of the custodial parents in the sample of cases have any tax savings from childcare payments. Because of the small amount of tax owed and the presence of a separate child tax credit, few custodial parents are able to take advantage of the full 25 percent childcare tax credit, and even at higher incomes, the tax benefits are closer to 20 percent rather than 25 percent.

<sup>13</sup> Figure 7.6 is based on only the nine actual data points. The remaining points on the curve, including the turning points, are interpolated from the nine actual data points. More analysis would be required to determine the exact location of the turning points.

- Incorporate the full range of tax benefits to having a child in the calculation of child support payments

Discussion of the Recommendation: The tax benefits to the custodial parent from having a child in the household are substantial. Although they reduce the actual cost of children below the levels in the child support guidelines, the calculation of child support obligations does not reflect this. The current guidelines reflect the full cost, not the net cost after the tax benefits. To properly account for the tax benefits, they should be added directly into the bottom half of the worksheet as an adjustment to the child support obligation.

## Appendix 7.1 Proposed Florida Child Support Guidelines Worksheet Incorporating an Adjustment for the Tax Benefits of a Child

This appendix shows how the tax benefits of a child can be incorporated into a child support guidelines worksheet. The tax benefits are first offset against the estimated cost of the child. The remaining cost of the child is then divided between the parents, and the noncustodial parent's share of the total obligation is transferred to the custodial parent as happens now. The income tax credit must be incorporated as an offset to the cost of children, not as an increase to the custodial parent's income. Adding the tax credit to the custodial parent's income would increase the combined income of the parents and therefore would reduce the likelihood that the noncustodial parent qualifies for any low-income adjustment.

Number of Minor Children	1	<u>Custodial parent</u>	<u>Noncustodial parent</u>
<b>Gross Income (monthly)</b>	1210		1421
<b>Total</b>	<b>\$1210</b>		<b>\$1421</b>
<b>Deductions (monthly)</b>			
Income Tax (single)	84		100
Social Security	93		109
Medicare			
Court Ordered Support			
Health Insurance (Exclude children's)			
Mandatory Retirement			
Mandatory Union Dues			
<b>Total</b>	<b>\$177</b>		<b>\$209</b>
<b>Net Income</b>	<b>\$1033</b>		<b>\$1212</b>
Combined Available Income		<b>\$2245</b>	
Parent's Share of Support	<b>46%</b>		<b>54%</b>
Minimum Support Needed		<b>484</b>	
<b>INCOME TAX CREDIT FOR CHILD</b>		<b>(321)</b>	
Childcare * 75%			
Health Insurance (children's)			
<b>Total Support Needed</b>		<b>\$163.00</b>	
Support per parent	<b>\$75</b>		<b>\$88</b>
Health Insurance adjustment			
<b>Final Support per parent</b>	<b>\$75</b>		<b>\$88</b>



## **Appendix 7.2**

### **The Moral Hazard Problem in the Present Treatment of Childcare Costs**

The current treatment of childcare expenses provides incentives for custodial parents to make inefficient decisions concerning childcare in three ways. First, the custodial parent is encouraged to substitute market day-care and after-school programs for non-market alternative providers such as grandparents, neighbors, and siblings. The custodial parent chooses the type and amount of childcare, but the noncustodial parent pays a share of the cost of whatever arrangement is chosen.

Second, because the amount of childcare expenses to be included in the child support payment is finalized at the time the support order is entered, the custodial parent has an incentive to project large future childcare expenses but then to minimize actual expenditures on childcare after the order is entered. This may increase disagreements between parents and increase the number and frequency of modifications.

Finally, because childcare is included in the initial child support order, parents must renegotiate and seek modifications when the children reach school age, and again when the children reach an age where they can reasonably stay at home on their own after school.

The actual size of the inefficient use of childcare services and the cost of modifications that the present system encourages is unknown. Further study and analysis would be required to determine the magnitude of the effects of these incentives.

An alternative to the current approach includes in the child support order the average childcare expenditures of single parents for children in different age groups rather than actual expenditures. In this approach, the allowance for childcare costs for all parents equals the expenditures of a typical single parent.<sup>1</sup> This change in the guidelines would encourage the custodial parent to economize on these costs and would help discourage unnecessary modifications to the child support order.

A concern with the average cost approach is that the expenses change with the age of the child. However, the average childcare expense allowance for purposes of child support can be set differently for children in different age groups. For example, children could be grouped into pre-school, school age until ten, and school age children ten and over. The childcare expense allowance could be established at the time the initial support order is entered, but the allowance would be dynamic, changing as the child moves from one age group to another. Use of an average expense allowance means there is no longer

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<sup>1</sup> Even though the basic obligation is derived from child expenditures in two-parent intact families, the childcare expense allowance should be based on expenditures of single parents. An intact family is likely to have smaller childcare expenses than a single parent. For two-parent intact families, childcare expenses are only about 3-6% of the total estimated expenditures on children depending on the income level. Further study is needed to estimate average expenditures on childcare by single parents.

any incentive to project inflated childcare costs, and as the child matures the payment automatically adjusts, eliminating the need to seek modifications.