DEPARTMENT OF HUMAN SERVICES

Legislative Report

Minnesota Child Support Task Force

Activities and Recommendations

Child Support Division

February 15, 2018

For more information contact:

Minnesota Department of Human Services
Child Support Division
P.O. Box 64946
St. Paul, MN 55164-0946
651-431-4400

This information is available in alternative formats to individuals with disabilities by calling 651-431-4400.

TTY users can call through Minnesota Relay at (800) 627-3529.

For Speech-to-Speech, call (877) 627-3848.

For other information on disability rights and protections, contact the agency's ADA coordinator.

Minnesota Statutes, Chapter 3.197, requires the disclosure of the cost to prepare this report. The estimated cost of preparing this report is $5,549.85.

Printed with a minimum of 10 percent post-consumer material. Please recycle.

Table of Contents

I. Executive Summary

The Child Support Task Force (task force) was created by the Minnesota Legislature in 2016 following recommendations of a previous Child Support Work Group (work group). The task force was created to advise the commissioner of the Minnesota Department of Human Services on matters relevant to maintaining effective and efficient child support guidelines that will best serve Minnesota children. See Appendix A for the authorizing legislation in Minn. Stat., section 518A.79.

As of Jan. 1, 2018, the task force met a total of 17 times (including one meeting dedicated entirely to public comment) since its inception in September 2016. Recognizing the profound impact child support has on Minnesota families, the task force solicited and accepted public comment from hundreds of parents, grandparents, child support professionals, and others in the community.

In addition to detailed child support presentations, task force members have reviewed guidelines models, economic models and data, information on guidelines in other states, other issues relevant to updating child support guidelines, and other issues identified in the authorizing legislation. The task force is focused on determining the best way to reflect the current economic climate in updating guidelines so they result in "right-sized orders."

This report identifies all issues considered, describes task force deliberations, and, ultimately, provides and explains Child Support Task Force decisions and recommendations. Decisions of the task force thus far are related to one issue identified in the authorizing legislation: Updating Minn. Stat., section 518A.35, subd. 2, the guideline for basic support. Decisions so far include the adoption of:

- An income shares guidelines model
- The USDA economic model, with adjustments
- The economic information contained in the most recent Consumer Price Index
- No additional state cost of living adjustment because costs in Minnesota are near the national average
- Continuing to keep highly variable child rearing expenses such as health insurance and child care as separate support obligations not included in basic child support
- The parenting expense adjustment as currently enacted in Minn. Stat. section 518A.36, effective Aug. 1, 2018.

In addition, the task force recommends legislation to clarify that the new parenting expense adjustment effective Aug. 1, 2018, may be utilized by all parties whose proposed modification meets the 20 percent and $75 requirement in Minn. Stat. section 518A.39, even if the change in an obligation is due exclusively to the law change, and their circumstances have not otherwise changed.

II. Introduction

This report was prepared and submitted by the commissioner of the Minnesota Department of Human Services, with advice from the Child Support Task Force pursuant to Minn. Stat., section 518A.79. Summaries of task force activities, identified issues, methods, and recommendations are included.

History and Context

In 2015, the Legislature created the Child Support Work Group (work group), Laws of Minnesota 2015, chapter 71, section 121, to address the parenting expense adjustment in Minn. Stat., section 518A.36 and make recommendations on the composition of a permanent Child Support Task Force. Under the direction of the department, the work group met six times in 2015. In January 2016, the work group issued the Child Support Work Group Final Report. See Appendix G for the work group's report.

The work group made recommendations regarding the composition and role of the task force, and included additional recommendations regarding issues which should be prioritized by the task force.

III. Legislation and Organization

In response to the report of the work group, the legislature passed Minn. Stat., section 518.79, establishing the current task force. The task force is subject to the open meeting law. The task force will expire on June 30, 2019, unless extended by the legislature. Complete legislation is included in Appendix A.

Purpose

The purpose of the task force is to advise the commissioner of the Minnesota Department of Human Services on matters relevant to maintaining effective and efficient child support guidelines that will best serve Minnesota children and take into account the changing dynamics of families.

Membership

The task force must consist of:

- Two members of the Minnesota House of Representatives, one appointed by the speaker of the house and one appointed by the minority leader
- Two members of the Minnesota Senate, one appointed by the majority leader and one appointed by the minority leader
- One representative from the Minnesota County Attorneys Association

- One staff member from the department's Child Support Division
- One representative from a tribe with an approved Title IV-D program appointed by resolution of the Minnesota Indian Affairs Council
- One representative from the Minnesota Family Support Recovery Council
- One child support magistrate, family court referee, or one district court judge or retired judge with experience in child support matters, appointed by the chief justice of the Supreme Court
- Four parents, at least two of whom represent diverse cultural and social communities, appointed by the commissioner with equal representation between custodial and noncustodial parents
- One representative from the Minnesota Legal Services Coalition and
- One representative from the Family Law Section of the Minnesota Bar Association.

See Appendix B for a list of the task force membership.

Organization

Per the enacting legislation, the commissioner's designee convened the first meeting of the task force. The department administers the task force through the Child Support Division. It is required to annually elect a chair and meet three times per year, at a minimum.

Diversity and Inclusion

Work group members raised concerns regarding diversity and inclusion in work group composition, and recommended steps be taken to ensure diversity on the task force. Accordingly, the work group recommended the task force include tribal representation and at least two parents representing diverse cultural backgrounds, and that task force members consult annually with the Cultural and Ethnic Communities Leadership Council (CECLC). Jimmy Loyd, chair of the task force, attended a CECLC meeting on Sept. 15, 2017, along with three other task force members and Sonya Smith, task force administrator, to discuss the work of the task force.

Duties

General duties of the task force include, but are not limited to:

- Serving in an advisory capacity to the commissioner of human services
- Reviewing the effects of implementing the parenting expense adjustment enacted by the 2016 legislature
- At least every four years, preparing for and advising the commissioner on the development of the quadrennial review report

- Collecting and studying information and data relating to child support awards and
- Conducting a comprehensive review of child support guidelines, economic conditions, and other matters relevant to maintaining effective and efficient child support guidelines.

In addition, the Legislature adopted the following priority issues the task force must review, address, and make recommendations on:

- The self-support reserve for custodial and noncustodial parents
- Simultaneous child support orders
- Obligors subject to child support orders in multiple counties
- Parents with multiple families
- Non-nuclear families, such as grandparents, relatives, and foster parents who are caretakers of children
- Standards to apply for modifications and
- Updating Minn. Stat., section 518A.35, subd. 2, the guideline for basic support.

Report and Recommendations

The task force must report biennially to the Legislature, beginning Feb. 15, 2018. The report must summarize activities of the task force, identify issues and methods taken to address the issues, and recommend legislative action, if needed.

Structure and Administration

As required by statute, the department convened the first task force meeting on Sept. 28, 2016. The meeting was held at the State Office Building, where most meetings continue to be held. The department engaged Management Analysis and Development (MAD), Office of Management and Budget (OMB), to facilitate meetings. The bulk of the meetings thus far have been facilitated by Charlie Peterson, senior management consultant. Stacy Sjogren, senior management consultant, has also served as facilitator for meetings. The department has hired two task force administrators: the first was Elizabeth Rusinak-Mowers, who served from October 2016 through March 2017, and Sonya Smith, who currently serves, as of May 2017.

With rare exception, meetings are conducted monthly on the last Wednesday of the month. To better accommodate public comment, four meetings have been held at other locations around the state.

The task force elected Jimmy Loyd, a noncustodial parent member, as its chair and Tammie Campbell, former custodial parent member, as vice chair in September 2016. Loyd and Campbell participated in guiding meeting agendas, and at times addressed members of the public or the press. Because the term for chair is annual, new chairs were elected in November 2017. Currently, Jimmy Loyd and custodial

parent Rahya Iliff serve as co-chairs.

Beginning Jan. 1, 2018, the task force is subject to Minn. Stat., chapter 13E, the open meeting law. Though not required by law at the outset, administration of task force meetings has been conducted in the spirit of the open meeting law. Task force meetings are open to the public, and a public comment period is offered at every meeting. Materials including agendas, minutes, presentations, consultative reports, etc., are available on the public task force website.[1]

By agreement of task force members, decision making is conducted by consensus with the possibility for super majority vote, if consensus is not possible.

The department, with consultation from the task force, contracted with two economists to inform the work of the task force in early 2017. Two reports were commissioned from Drs. Jane Venohr and William Comanor to offer differing perspectives on broad issues regarding child support guidelines and the cost of raising a child. Later, Dr. Venohr was retained following a Request For Proposal (RFP) process to provide continuing guidance and consultation on more detailed issues. Because of the complexity of issues and variety of thoughts, the task force also consulted with economists R. Mark Rogers and Don Bieniewicz.

In addition to consultation with economists, the task force and the department have prioritized public comment. Public comment is received in multiple formats to allow the public to engage in a way that is most convenient for them. Public comment opportunities included public comment periods at regular meetings, four extended public comment forums held in the metro area and greater Minnesota, email submission of comments to the department, and an online survey offered one day before, the day of, and one day after each public comment forum.

[1] Link to public task force website: https://mn.gov/dhs/general-public/about-dhs/advisory-councils-task-forces/child-support-task-force.jsp

IV. Summary of Task Force Meetings

Introduction

There have been 17 task force meetings as of Jan. 1, 2018, including one meeting dedicated solely to public comment. See Appendix C for a list of meetings.

Beginning Sept. 28, 2016, the meetings can be generally divided into three phases: General education and administrative work, initial engagement with economists, and engagement with Dr. Vehnor and discussion regarding costs of raising children. The most recent phase overlapped with a period of public comment and increased outreach to the public.

September 2016 through January 2017

At the first meeting on Sept. 28, 2016, the task force membership conducted initial administrative business. Members decided meetings would be scheduled for the entire day, but adjusted as necessary and expressed a preference for morning meetings. A monthly meeting schedule was established for the last Wednesday of each month. Loyd was elected chair and Campbell was elected vice chair. The group agreed on ground rules as well as a consensus decision-making structure with a super majority vote, if necessary.

During the first months, the task force members discussed recording of meetings, both by the department and private parties. After research and discussion, members and department staff announced that public recordings would be permissible in the interest of transparency.

Also at the first meeting, the task force began prioritization of its statutory charge. Updating the guidelines table at Minn. Stat., section 518A.35, subd. 2, was identified as the first substantive issue to be addressed. The group began discussions about what types of professional consultation would be required.

Funding for an economist was provided with the authorizing legislation for the task force. However, completing the Request for Proposal process was expected to take months, and members wanted to hear from more than one economist. Therefore, over the course of a few meetings, the group discussed the possibility of engaging two economists, each of whom would write a report informing the task force about different methods for determining costs of raising children while the RFP process was underway for a longer-term contract with an economist. At the Nov. 30, 2016, meeting, the task force created the 2017 meeting schedule, and decided to continue meeting during the 2017 legislative session[2].

The task force set the goal to have presentations by the two economists in February and March 2017.

[2] Rep. Peggy Scott recommends all future meetings of the Child Support Task Force be scheduled so legislators on the task force can attend.

The department made arrangements for those meetings to be video recorded for those task force members unable to attend due to the legislative session or other reasons.

The September 2016 through January 2017 meetings offered intensive education about child support. Presentations were made by department staff, task force members, and county staff, such as:

- History of child support
- Economic basis for estimating costs of raising a child
- Calculating support in Minnesota
- Known problem areas in the guidelines
- Overview of the Title IV-D program
- Introduction of the seven priority issues for the task force
- Self-support reserve and related issues

February through June 2017

Upon request of the task force, the department contracted with two economists to prepare reports summarizing and comparing commonly used methods for determining base child support in the U.S. as well as the method advocated by R. Mark Rogers and William Comanor. The two economists were Dr. Jane Venohr, Center for Policy Research, and Dr. William Comanor, University of California Santa Barbara and Los Angeles.

Each economist wrote a report and traveled to Minnesota to present their findings. Dr. Comanor presented in February 2017, and Dr. Venohr in March 2017. Both were full-day presentations with discussion and questions from task force members as well as other attendees including members of the public.

The material presented by the economists focused primarily (but not exclusively) on methods used to estimate the costs of raising a child. Both addressed the USDA, Betson-Rothbarth, and Rogers/Comanor methodologies, however, the economists offered differing perspectives on each.

In the months following the presentations, but before a longer-term contract with an economist was in place, the task force reviewed materials, prioritized areas of focus, identified policy decisions needed to be made, discussed policy, and prepared to work with an economist. Planning for the required public comment meeting also occurred at this time. The task force determined outreach to areas other than St. Paul would achieve the best public participation. Therefore, a meeting devoted to public comment was planned at NorthPoint Health and Wellness Center Inc. in Minneapolis, and an additional three meetings held in Brainerd, North Mankato and Coon Rapids.

July through December 2017

Following a request for proposal process, the department contracted with Dr. Venohr to assist the task force by studying data related to Minnesota's child support awards, conducting a review of its guidelines, and making recommendations regarding priority issues identified in statute, among other things. Most meetings during this period included a short presentation by Dr. Venohr of her most recent work product, and an extensive question and answer period from task force members. During this time, the task force consulted with Dr. Venohr and discussed the following topics:

- How housing costs should be reflected in child support
- Use of data from intact families as the basis for estimating costs of raising a child
- Methods to estimate the costs of raising a child
- Alternatives to income shares model of calculating support
- "Multipliers" for multiple children (i.e., how to estimate costs associated with each additional child)
- Role of the self-support reserve
- Tax assumptions in the child support table.

In September, October and November 2017, four meetings were held to collect public comment. In September, a meeting was held at NorthPoint Health and Wellness Center, Inc. in Minneapolis exclusively to collect public comment. Also in September, task force members traveled to Brainerd where they conducted a regular monthly meeting followed by two hours of public comment. Similar meetings with extended public comment periods were held in North Mankato and Coon Rapids in October and November. An online survey was made available one day before, the day of the meeting, and one day after each meeting for the public. Hundreds of members of the public offered comments in person or online between September and November.

V. Work of the Task Force

Current Child Support Guidelines: Background

Federal law mandates states have child support guidelines courts must use to set child support amounts. Minnesota's first guidelines were established in 1983. Those guidelines set child support by assessing a percentage of the obligor's net income. By 2005, demographic changes and a changing view of families led to a desire for new guidelines, which reflect the financial role of both parents in raising a child. Legislation passed in 2005 and 2006 established the current guidelines, which are an income shares model.

A child support order consists of the following types of ongoing support, but sometimes it is reserved or set at $0:

- Basic child support is an amount paid for the following, including but not limited to housing, food, clothing, transportation and education.
- Medical support is the provision of health care coverage for the child, a monthly amount paid to the other parent who is providing health care coverage for the child, a contribution towards public coverage and/or share of unreimbursed and uninsured medical expenses incurred by the child. The method to collect unreimbursed and uninsured medical expenses is set forth in Minn. Stat., section 518A.41, subd. 17.
- Child care support is an amount for the care of a child while a parent works or attends school.

Each type of support is calculated differently. When added together they become the total child support obligation. The income of both parents is used to calculate child support. Gross income is used, with adjustments for nonjoint children in the home and other court-ordered support obligations. A court may impute potential income for child support purposes even if a parent does not have actual income if the parent has earning potential. Basic support is calculated in two steps:

1) **Percentage of combined income -** Each parent is assigned a percentage of combined income, which is used to calculate support amounts. For example, if parent A earns $3,000 per month, and parent B earns $2,000, their combined income is $5,000 per month, with parent A's income representing 60 percent of the combined income and parent B's income representing 40 percent. These percentage shares are used in calculating each type of child support, not just basic support.

2) **Combined guidelines basic support -** The combined incomes of the parties, together with the number of joint children, are used to find a basic support amount that is based on both parent's incomes. This amount is found in a statutory table. The combined support amount increases with income and number of children.

To calculate an initial base support amount, the obligor's percentage of combined income is multiplied by the combined basic support from the guidelines table. Medical and child care support is determined by multiplying each parent's percentage of combined income by family's actual costs. Child care includes an adjustment to account for tax benefits received by the parent who pays for child care.

Both the basic support amount and the total child support obligation are subject to certain adjustments. The basic support amount may be reduced by a parenting expense adjustment, meant to reflect the presumption that during parenting time, a parent incurs costs for their child. Following work group recommendations and subsequent legislation, the parenting expense adjustment is changing Aug. 1, 2018. The new method will provide an adjustment for every parenting time overnight (or, in some cases, every few overnights) as opposed to the current method, which gives a 12 percent reduction for all obligors with between 10 percent and 45 percent of parenting time, or a greater reduction for 45.1 percent to 50 percent time.

After support is calculated, Minnesota uses a self-support reserve to determine if an obligor has the ability to pay the entire amount of their portion of child support. The self-support reserve is 120 percent of the federal poverty guidelines amount and represents that obligors need to have some income available to support themselves. If an obligor's child support obligation plus the self-support reserve exceeds their income, the child support obligation is reduced.

Focus of Task Force

The authorizing legislation, Minn. Stat., section 518A.79, is clear regarding issues that must be addressed by the task force. The Legislature requires that the task force perform five general duties, and further identifies seven specific issues in the child support guidelines as priority areas to be addressed. The five duties are:

1. Serving in an advisory capacity to the department's commissioner
2. Reviewing the effects of implementing the parenting expense adjustment enacted by the 2016 legislature
3. Preparing for and advising the commissioner on the development of the quadrennial review report, at least every four years
4. Collecting and studying information and data relating to child support awards and
5. Conducting a comprehensive review of child support guidelines, economic conditions, and other matters relevant to maintaining effective and efficient child support guidelines.

Because goals two and three by necessity must be performed in future years, and goals one, four, and five are general goals, which could be achieved while working towards addressing more specific concerns, the task force turned to the list of seven priority areas described in statute. The seven priority areas are:

1. The self-support reserve for custodial and noncustodial parents
2. Simultaneous child support orders
3. Obligors who are subject to child support orders in multiple counties
4. Parents with multiple families
5. Non-nuclear families, such as grandparents, relatives, and foster parents who are caretakers of children
6. Standards to apply for modifications and
7. Updating Minn. Stat., section 518A.35, subd. 2, and the guideline for basic support.

Task force members decided first to focus efforts on item seven, updating Minn. Stat., section 518A.35, subd. 2. This is the guideline table used to determine a family's combined basic support amount. Because this table anchors the Minnesota child support guidelines, the group determined that this significant work should be done first, to create the backdrop for future analysis and recommendations on

the other six areas. Though the seven areas have significant overlap and the task force has integrated education and discussion in all areas, the primary focus of its work has been on the guidelines table in Minn. Stat., section 518A.35.

The Guidelines Table and Costs of Raising Children

The guidelines table, at Minn. Stat., section 518A.35, subd. 2, became effective on Jan. 1, 2007, with the introduction of income shares. The income shares model is premised on the principle that both parents share financial responsibility for children, and that children are entitled to the same level of expenditure they would have received if they lived with both parents as an intact family. Accordingly, numbers in the table are intended to represent costs of raising children for both parties.

Minnesota's table is based on estimates of the U.S. Department of Agriculture (USDA) on the costs of raising a child, with certain adjustments for costs in Minnesota. Because, at some income levels, the USDA estimates were not in line with upper and lower bounds of credible estimates, additional adjustments were made. The guidelines were based on survey data from 1990-1992 which were updated to reflect 2001 price levels. This means that Minnesota's table uses data that is 25 years old.

To update the table, it is necessary to choose an economic model to estimate the costs of raising children. The task force, after consulting with various economists, considered the USDA method, the Betson-Rothbarth method (currently used by all other states using the income shares model), and the Comanor method as an alternative to the two other approaches currently in use.

All three methods use data from the Consumer Expenditure Survey (CES), a comprehensive survey of family spending collected by the U.S. Census Bureau for the federal Bureau of Labor Statistics. These numbers may be updated using the Consumer Price Index. All three methods also assume the cost of raising children is positively correlated with income. A summary of each model and the task force's considerations are below.

USDA Model

The USDA annually releases a report estimating the costs of raising children. In this model, expenditures are divided into seven categories: housing, food, transportation, clothing, health care, child care and education, and miscellaneous. A different approach is used in each category to estimate a child's portion of the household's expense in that category, then the USDA sums the categories for a final estimate.

Child care, education, and children's clothing are measured separately on the survey, so can be directly attributable to children. Other expenses are collected only at the household level so varying methods are used to allocate part of the household costs to children. A child's housing cost is based on the cost of an extra bedroom (this is a recent change from a per capita approach). Data from other USDA research is used to determine food expenses. Data from the U.S. Departments of Health and Human Services, and Transportation inform allocation of medical and transportation expenses, respectively. Finally, a per

capita method is used to divide miscellaneous expenses.

Comanor

Like the USDA model, the Comanor method divides household expenditures into categories, then adds the categories to come to a final estimate of expenditures for children. Similarly, those expenses which the survey identifies specifically as child expenses are directly attributable to the child in this method.

For all other categories, the Comanor method compares expenditures of households with and without children, holding income constant. The difference between the two represents the cost attributable to the child. For example, Dr. Comanor reports that except in low income, married households, households with and without children spend the same amount on transportation. Therefore, in most cases Dr. Comanor would assign $0 transportation cost to the child. The result is that the estimates of raising a child in the Comanor method are very low compared to other estimates. See Appendix D.

Betson-Rothbarth

The Betson-Rothbarth method, used by the majority of states and all other states using an income-shares model, measures costs of raising children by comparing the standard of living of households with and without children.

Rather than holding income constant in comparing families, the Betson-Rothbarth method holds constant a standard of living between households with and without children. Standard of living is measured using one of a number of proxies, but usually adult goods. The difference in income between households with and without children but with the same standard of living determines the cost of raising a child.

Other Identified Issues

Guided by Dr. Venohr's July 2017 report, the task force began to explore other areas which would require decisions to update the child support table. See Appendix F. The following issues and assumptions were identified as requiring a decision to update the table:

- **Guidelines model -** The task force considered whether continued use of the income shares model was still appropriate for Minnesota. In its analysis, it looked to other states to compare methods and how methods affected obligation amounts. States currently use one of three methods: Income shares (currently used in Minnesota and 38 other states), percentage of obligor income (Minnesota's previous method, still used in nine states), or the Melson Formula (used only in Delaware, Montana and Hawaii). Additionally, the task force considered the possibility of creating a new model, possibly based on a cost shares approach.

- **Adjustment for state cost of living** - The underlying data used to determine the costs of raising a child are pulled from either national or regional data. However, costs in one state may differ from regional or national costs, which are generalized in the data. Using data from Minnesota only is likely to be insufficient due to the small sample size. Furthermore, there is 97.6 percent price parity between Minnesota and the rest of the U.S., making Minnesota very close to the national average.
- **Tax assumptions -** Certain tax assumptions are built into the USDA estimates of child rearing costs. Families who complete the survey underlying all studies of child rearing costs report their gross income and spending. Because the data comes from real American families subject to taxation, taxes are built into the data. However, the data comes from married households. The task force may choose to make other assumptions for child support purposes. For example, they may choose to assume that the recipient of child support claims head of household status, and that the obligor claims as a single filer. It is also possible to choose to express these assumptions either in the table itself, or as a specific line item in the child support calculation.
- **Price levels -** Data available from the Consumer Expenditure Survey is processed on a delay. The USDA report each year uses data which is already a number of years old. This is updated with the Consumer Price Index (CPI) to estimate what the numbers would be if current to this year.
- **Adjustments for more than three children -** The data available for larger families is sparse. Therefore, the task force will need to carefully consider how to account for three or more children in the child support table.
- **Exclude highly variable child-rearing expenses -** The child support guidelines and table assume that general data can be used to make assumptions about individual families. However, certain expenses vary widely among families, and generalized data is not helpful to setting support. In Minnesota, child support guidelines already identify child care and health care expenses as highly variable. These expenses are currently kept separate from basic support and set based on the specific expenses of each family.
- **Low-income adjustment and minimum order -** Minnesota currently addresses low income obligors through a self-support reserve and a minimum order. The self-support reserve for custodial and noncustodial parents is also noted as a specific priority issue in legislation, so must be specifically addressed in the future.
- **Adjustments at high incomes** - With higher income, less data is available. Above $8,500 income per month, costs must be extrapolated. The task force must make decisions about how to estimate costs at these higher income levels, and must also determine where Minnesota's table will stop. Currently, Minnesota's guidelines stop at a combined parental income of $15,000 per month. Other states' guidelines typically stop at higher parental income levels.

In addition to the issues identified by Dr. Venohr, task force members have repeatedly challenged the assumption that child support should be based on cost estimates experienced by intact families. Dr.

Comanor offered a critique of this assumption. In an effort to further examine alternative viewpoints, the task force invited Dr. R. Mark Rogers to a meeting. In September 2017, Dr. Rogers briefly presented regarding the possibility of a second household adjustment. See Appendix I for Dr. Rogers' report.

Though too early to work on the statutory goal of reviewing effects of the new parenting expense adjustment, effective Aug. 1, 2018, the task force evaluated the modification opportunities for cases which may see changes under that law and made a recommendation included in section VI of this report.

VI. Decisions

The majority of the task force's time and attention has been devoted to the issue of updating the basic support guidelines as set forth in Minn. Stat., section 518A.35, subd. 2. As previously discussed, Dr .Venohr identified 11 factors that would need to be discussed to develop an updated set of basic support guidelines.

The Guidelines Model

The task force evaluated the following options for the basic support guidelines model: The income shares model, percentage of obligor income model, Melson formula, cost shares model, or the development of a new/hybrid model. Many meetings were devoted to discussing the advantages and disadvantages unique to each model, and on Sept. 27, 2017, the task force voted unanimously to continue using the income shares model. The consensus of the task force was that the income shares model is the most equitable as it takes into consideration the incomes of both parents when calculating basic support obligations. Other compelling considerations were maintaining the status quo so the parenting expense adjustment effective Aug. 1, 2018, could continue to be used along with the disadvantages of additional major investments of time and money needed to switch models, as well as to determine a new parenting expense adjustment.

The Economic Basis

The task force deliberated on which economic basis to use in updating the basic support guidelines. It was presented with a variety of economic models relating to the measurement of child-rearing expenditures including data from the USDA, which forms the majority of the economic basis of the current guidelines, as well as the Betson-Rothbarth and Comanor methodologies. On Oct. 25, 2017, nine of the 12 task force members in attendance voted to continue to use the USDA measurement of child-rearing expenditures. The remaining three members voted to use Dr. Comanor's method. It was the consensus of the task force that though the USDA would form the basis of the guidelines, this would be a starting point only and adjustments would be made.

Price Levels

On Oct. 25, 2017, the task force voted to use data from the 2017 Consumer Price Index, as it is the most recent data available and will most accurately reflect the current costs of child-rearing.

Adjustment for State Cost of Living and the Exclusion of Highly Variable Child-Rearing Expenses

The task force voted on Apr. 26, 2017, that because the cost of living in Minnesota is very close to the national average, no adjustment was needed. At the same meeting, it also decided that highly variable child-rearing expenses such as medical and child care expenses would continue to be kept separate from the basic support table.

Adjustments for Time Sharing

The task force voted to use the new parenting expense adjustment that will be effective on Aug. 1, 2018, set forth in Minn. Stat., section 518A.36. Related to this decision, it also decided that it would be beneficial for Minn. Stat., section 518A.39, which governs the standard for modification of child support orders, to be amended.

Subdivision 2(j) of Minn. Stat. § 518A.39 provides that "except as expressly provided, an enactment, amendment, or repeal of law does not constitute a substantial change in the circumstances for purposes of modifying a child support order." The task force recommends the language in statute be modified so it is clear that individuals whose support obligations may decrease or increase due to implementation of the new parenting expense adjustment are not barred by subdivision 2(j). See section VI for discussion of this issue.

Adjustments for Two or More Children

At the Dec. 20, 2018, meeting, the task force voted to adopt multipliers for two or more children as presented in Dr. Venohr's July report and subsequent addendums. The multipliers chosen by the task force represent smaller increases in support for each child than the multiplier used by the USDA.

Remaining Decisions

Four of the 11 decisions identified by Dr. Venohr remain to be made by the task force. Factors impacting the basic support obligations that the task force must decide at future meetings are the tax assumptions, how to account for families who spend more than their after-tax income, low income adjustments and minimum orders, and adjustments for high incomes. Once these decisions are made the task force can make meaningful recommendations relative to the guidelines.

VII. Report Recommendations

The task force noted there were a number of comments from the public regarding the new parenting expense adjustment that will go into effect on Aug. 1, 2018. Many commenters anticipating the law change expressed confusion as to whether they would be eligible to file for a child support modification under the new law. Task force members were concerned about the apparent confusion surrounding the issue of whether individuals would be able to seek modification of their child support orders based on the upcoming change in law because of the language in Minn. Stat., section 518A.39, which states that "except as expressly provided, an enactment, amendment, or repeal of law does not constitute a substantial change in the circumstances for purposes of modifying a child support order."

Task force members expressed a desire for a change in the wording of this statute because it was not clear which cases might qualify for modification under the guidelines. Members were concerned that unless a statutory change is made, individuals whose orders would qualify for modification would be discouraged from filing a motion to modify.

The task force recommends that any case which would see a change of 20 percent and $75 under the new law should enjoy the statutory presumption for a change. This viewpoint is already supported in case law under *Rose v. Rose*, 765 NW 2d 142. [Minn. Ct. App. 2009] The full text of the opinion is attached as Appendix J. The task force recommends the appropriate statute be clarified so it is clear to parents that they may utilize the statutory presumption if they meet the 20 percent and $75 requirement, even if the change in obligation is due exclusively to the law change and their circumstances have not otherwise changed.

VIII. Appendices

Appendix A: Minn. Stat. § 518A.79

Appendix B: Task Force Membership

Appendix C: Task Force Member Meeting Schedule

Appendix D: Dr. Comanor's Report, February 2017

Appendix E: Dr. Venohr's Report, March 2017

Appendix F: Dr. Venohr's Report, July 2017

Appendix G: Child Support Work Group Report, January 2017

Appendix H: Task Force Public Comment Questionnaire

Appendix I: Dr. Rogers' Report, September 2017

Appendix J: Rose v. Rose

Appendix A

Minn. Stat. § 518A.79

518A.79 CHILD SUPPORT TASK FORCE.

Subdivision 1.Establishment; purpose.

There is established the Child Support Task Force for the Department of Human Services. The purpose of the task force is to advise the commissioner of human services on matters relevant to maintaining effective and efficient child support guidelines that will best serve the children of Minnesota and take into account the changing dynamics of families.

Subd. 2.**Members.**

(a) The task force must consist of:
(1) two members of the house of representatives, one appointed by the speaker of the house and one appointed by the minority leader;
(2) two members of the senate, one appointed by the majority leader and one appointed by the minority leader;
(3) one representative from the Minnesota County Attorneys Association;
(4) one staff member from the Department of Human Services Child Support Division;
(5) one representative from a tribe with an approved IV-D program appointed by resolution of the Minnesota Indian Affairs Council;
(6) one representative from the Minnesota Family Support Recovery Council;
(7) one child support magistrate, family court referee, or one district court judge or retired judge with experience in child support matters, appointed by the chief justice of the Supreme Court;
(8) four parents, at least two of whom represent diverse cultural and social communities, appointed by the commissioner with equal representation between custodial and noncustodial parents;
(9) one representative from the Minnesota Legal Services Coalition; and
(10) one representative from the Family Law Section of the Minnesota Bar Association.
(b) Section 15.059 governs the Child Support Task Force.
(c) Members of the task force shall be compensated as provided in section 15.059, subdivision 3.
Subd. 3.**Organization.**

(a) The commissioner or the commissioner's designee shall convene the first meeting of the task force.
(b) The members of the task force shall annually elect a chair and other officers as the members deem necessary.
(c) The task force shall meet at least three times per year, with one meeting devoted to collecting input from the public.
Subd. 3a.**Open meetings.**

Except as otherwise provided in this section, the task force is subject to chapter 13D. A meeting of the task force occurs when a quorum is present and the members receive information, discuss, or take action on any matter relating to the duties of the task force. The task force may conduct meetings as provided in section 13D.015 or 13D.02. The task force may conduct meetings at any location in the state that is appropriate for the purposes of the task force as long as the location is open and accessible to the public. For legislative members of the task force, enforcement of this subdivision is governed by section 3.055, subdivision 2. For nonlegislative members of the task force, enforcement of this subdivision is governed by section 13D.06, subdivisions 1 and 2.

Subd. 4.**Staff.**

The commissioner shall provide support staff, office space, and administrative services for the task force.

Subd. 5.**Duties of the task force.**

(a) General duties of the task force include, but are not limited to:
(1) serving in an advisory capacity to the commissioner of human services;
(2) reviewing the effects of implementing the parenting expense adjustment enacted by the 2016 legislature;
(3) at least every four years, preparing for and advising the commissioner on the development of the quadrennial review report;
(4) collecting and studying information and data relating to child support awards; and
(5) conducting a comprehensive review of child support guidelines, economic conditions, and other matters relevant to maintaining effective and efficient child support guidelines.
(b) The task force must review, address, and make recommendations on the following priority issues:
(1) the self-support reserve for custodial and noncustodial parents;
(2) simultaneous child support orders;
(3) obligors who are subject to child support orders in multiple counties;
(4) parents with multiple families;
(5) non-nuclear families, such as grandparents, relatives, and foster parents who are caretakers of children;
(6) standards to apply for modifications; and
(7) updating section 518A.35, subdivision 2, the guideline for basic support.

Subd. 6.**Consultation.**

The chair of the task force must consult with the Cultural and Ethnic Communities Leadership Council at least annually on the issues under consideration by the task force.

Subd. 7.**Report and recommendations.**

Beginning February 15, 2018, and biennially thereafter, if the task force is extended by the legislature, the commissioner shall prepare and submit to the chairs and ranking minority members of the committees of the house of representatives and the senate with jurisdiction over child support matters a report that summarizes the activities of the task force, issues identified by the task force, methods taken to address the issues, and recommendations for legislative action, if needed.

§

Subd. 8.**Expiration.**

The task force expires June 30, 2019, unless extended by the legislature.

Appendix B

Task Force Membership

TASK FORCE MEMBERS

Four members representing parents:

- Rahya Iliff effective October 25, 2017 (replacing former member Tammie Campbell)
- Jimmy Loyd
- Jason Smith
- Mia Wilson effective October 25, 2017 (replacing former member Laura Vang)

One member representing the Minnesota Department of Human Services:

- Jeff Jorgenson, director Child Support Division
- Julie Erickson, supervisor Child Support Division - alternate

Two members representing the Minnesota County Attorney's Association:

- Melissa Rossow, assistant Ramsey County attorney
- Kathleen Heaney, Sherburne County attorney - alternate

One member representing the Minnesota Family Support Recovery Council:

- Lisa Kontz, assistant Dakota County attorney

One member representing Minnesota Court Administration:

- Jodie Metcalf, child support magistrate

One member representing the Minnesota Legal Services Coalition:

- Melinda Hugdahl
- Anna Andow, attorney, Mid-Minnesota Legal Aid - alternate

One member representing Minnesota Native American Tribal Child Support Programs:

- Rachel Sablan, director Mille Lacs Band of Ojibwe Child Support Program

One member representing the Minnesota State Bar Association, Family Law Section:

- Pamela Waggoner, attorney
- Karen Kugler, attorney - alternate

Two members from the Minnesota House of Representatives

- Representative Peggy Scott
- Representative Laurie Pryor

Two members from the Minnesota Senate:

- Senator Mary Kiffmeyer
- Senator Melissa Wiklund

Appendix C

Task Force Member Meeting Schedule

Appendix C

Child Support Task Force Meeting Schedule

September 28, 2016

October 26, 2016

November 30, 2016

December 21, 2016

January 25, 2017

February 22, 2017

March 29, 2017

April 26, 2017

May 31, 2017

June 28, 2017

July 26, 2017

August 30, 2017

*September 19, 2017

**September 27, 2017

**October 25, 2017

**November 29, 2017

December 20, 2017

*Extra public comment meeting

**Two hour public comment period at end of regular meeting

Appendix D

Dr. Comanor's Report, February 2017

Report to the Minnesota Child Support Task Force

William S. Comanor

University of California, Santa Barbara and Los Angeles

1. Executive Summary
2. Presentation Slides
3. Tables
4. Report
5. Research Paper

Report to the Minnesota Child Support Task Force

Executive Summary

The child cost estimates which underlie Child Support guidelines in Minnesota and other states are not founded on the expenditures actually made in households with children but rather rest largely on imputed amounts. If these imputed amounts were minimal, and estimated child costs were predominantly based on actual outlays, then the inclusion of certain imputed amounts could be defended. However, our research suggests otherwise. We find instead that imputed values substantially exceed out-of-pocket expenditures.

The problem here is not the data which is employed but rather the economic models used to determine estimated cost figures. The underlying models used to derive imputed costs rest on an array of arbitrary assumptions. As a result, the resulting child cost figures depend more on the models used than the underlying data. In contrast, my colleagues and I have suggested an alternate path: our approach is to compare expenditure patterns, holding income levels fixed, as between households with and without children. In effect, the differences observed are the expenditure levels directly resulting from the presence of children in the household.

Although this straight-forward approach has been has been acknowledged as feasible, it is rejected by those who use imputed values. Their position is that there are economic costs not captured in actual expenditures, so these must be added to the mix. While as a theoretical matter, I might agree; but here as elsewhere, much depends on the details. The means employed to derive imputed costs require a number of strong and

arbitrary assumptions, which together inflate child cost figures so that imputed costs exceed actual expenditures. As a result, the findings obtained are more the result of the assumptions used to estimate imputed costs than the actual volume of expenditures made for children. In the slides which follow, these arbitrary assumptions are noted and their effects described.

When award amounts exceed actual costs, incentives are created which in effect lead the custody of children to become a financial asset. In such circumstances, the contesting parties recognize that monetary benefits resulting from enhanced custody positions. In response, they make greater efforts to secure increased custodial time, whatever the interests of the child. It becomes, to an extent, a business proposition.

Even when actual custody is not an issue, the creation of this financial asset engenders resentment by the support obligor since it is his or her payments that fund this asset. And this resentment can poison relationships between parents. As a result, nonpayment rates are increased, greater enforcement actions are taken to enforce payment, and children are affected by greater parental conflict. Overall, an effective child support system rests on the willingness of obligor parents to make their assessed payments, which is an outcome enhanced when payment amounts reflect the actual monetary costs of raising children.

PRESENTATION TO MINNESOTA CHILD SUPPORT TASK FORCE

William S. Comanor
University of California
Santa Barbara and Los Angeles

February 22, 2017

Qualifications

- Professor of Economics, University of California, Santa Barbara.
- Professor, Fielding School of Public Health, University of California, Los Angeles.
- Ph.D. in Economics, Harvard University, Cambridge, MA
- Formerly, Chief Economist, U.S. Federal Trade Commission, Washington.
- Publications include:
  - "The Impact of Income and Family Structure on Delinquency," (with Llad Phillips), *Journal of Applied Economics*, November 2002.
  - *The Law and Economics of Child Support Payments*, editor, Elgar Publishing, 2004.
  - "The Monetary Cost of Raising Children," (with Mark Sarro and R. Mark Rogers) *Research in Law and Economics*, Vol. 27, 2015.

Objectives (1)

- Entirely academic, no conflicting goals.
  - no consulting contracts sought; my teaching schedule is full time.
  - my prior consulting assignments have not dealt with child support issues.
- I attended an economic conference in 2003 and learned that the child rearing cost figures, which underlay child support awards, did not rest on actual expenditures.
  - were imputed and not actual values.
- This fact is acknowledged in the 2014 Minnesota Child Support Guidelines Review:

  > “the [existing] studies do not measure actual direct spending on a child.” (p. 10).

Objectives (2)

- I questioned why indirect means were employed, and whether direct means were possible.
  - the conference was held in 2003 and our research paper on this subject was finally published in 2015.
- My purpose here is to present our findings and discuss why they differ from the indirect means currently employed.
- Federal regulations state: “The Child Support system is not meant to serve a punitive purpose. Rather the system is an economic one, designed ... [so that each parent] should share equitably in the economic burdens of child rearing.”
  - my purpose is to explore how these economic burdens should be defined.

Direct Child Rearing Costs (1)

- Direct costs are easily measured where specific expenditures are made for children.
  - examples of Children's Clothing; and Child Care and Education.
- But what about expenditure categories like Housing, Food and Transportation, which are consumed by all members of the household?
  - the question is raised as to how much of these household expenditures should be allocated to the children.
  - households make expenditures on those items both with and without children.
  - termed "household collective goods."

Direct Child Rearing Costs (2)

- The answer to the previous question is actually straight-forward: one can compare expenditures between two identical households: one with children and another without children.
  - if the household with a child spends more, these additional expenditures represent the amount attributable to the child.
  - these outlays reflect the marginal or additional expenditures by households with children.

- Two problems: 1) how to find identical households; and 2) why wasn't this direct approach taken originally?

Direct Child Rearing Costs Understate Full Economic Costs (1)

- The answer to the second question is that direct outlays omit the "opportunity costs" of raising a child.
  - economic costs include opportunity costs, even in the absence of direct expenditures.
- Most important opportunity cost is the time spent by parents in raising their children.
  - this cost is ignored, not because it is unimportant, but because the amounts are ambiguous.
- For some parents, the time spent raising children detracts from their preferred leisure time activities, which represents a cost – but for others, it is welfare enhancing and they would willingly pay for it.
- No way to distinguish between these alternatives.

Direct Child Rearing Costs Understate Full Economic Costs (2)

- The second opportunity cost is best described through an example.
- Consider the hypothetical example of a couple living in a two-bedroom apartment, with the second bedroom used as a den.
  - now a child arrives and the den is transformed into a nursery.
- In this example, there are no additional monetary or out-of-pocket housing costs, but there is an opportunity cost in that the den is no longer available.
  - the loss in the use of the den is an opportunity cost but not a monetary cost.
  - however, these opportunity costs are not so easily measured.

Direct Child Rearing Costs Understate Full Economic Costs (3)

- This hypothetical example may not be so fanciful. See the following statement by a journalist reporting on a USDA report.

  "The biggest expense on the [USDA] list is housing, which I think is kind of silly in my case because my husband and I would probably live in the same size house regardless of whether we had a son or not... My son isn't really adding to our housing costs."*

* Miranda Marquit, "Kids & Money: How Much Does It Cost to Raise Your Child?" www.bargaineering.com, October 4, 2011.

Measurement of Relevant Opportunity Costs (1)

- There are two economic models used to estimate these opportunity costs: the USDA model and the Income Equivalence models.
  - both are designed to include the opportunity costs of the den foregone.
  - both methods estimate imputed costs in circumstances where there are no actual expenditures resulting from the child's presence.

- Consider first the USDA model.
  - pre-2009: child housing averages were estimated as the per-capita rental cost for the entire unit.
  - since 2009, these costs are defined as the additional rental cost for a unit with an additional bedroom: a three-bedroom unit rather than the hypothetical two-bedroom unit.

Measurement of Relevant Opportunity Costs (2)

- The USDA shift in 2009 acknowledges that costs reflect incremental (marginal) amounts.

- To obtain their imputed cost estimates, the USDA requires strong, arbitrary assumptions.
  - A recent California report observes that “the USDA approach is direct ... however, with simplicity comes a reliance on assumptions that are certain to be wrong.”*

* Review of Statewide Uniform Child Support Guideline 2010: A Report to the California Legislature, Administrative Office of the Courts, Center for Families, Children & the Courts, June 2011, p. 165. Dr. Jane Venohr served as project manager for this report.

USDA Findings: Housing Costs

- "The average cost of an additional bedroom was used to estimate housing expenses on a child."*
  - this approach of course relies on an arbitrary assumption.
- For low income, married households with one child, estimated incremental costs (2006-2009) are $1,014 per year while the 2009 USDA estimate is $3,696.
- The 2009 USDA Report acknowledges that direct housing costs can be measured:

  > "One method to estimate housing expenses on a child is to track families over time and see how their housing expenses change as a result of children being added to the household, ... as they move to larger residences to accommodate children. Child-related housing costs could therefore be calculated by utilizing these additional costs."*

- Our direct cost estimates use statistical methods to find households in similar economic circumstances which are both childless and with children.

* "Expenditures on Children by Families," 2009, USDA, p. 8.

USDA Findings: Food Costs

- "USDA food plans are used to calculate the shares of total household food expenses spent on children. ... The USDA food plans are based on household food use ... and also reflect the cost of a nutritious diet. ... [these plans] were applied to estimated household food expenditures to determine food expenses on children."*

- A child's food costs are estimated from USDA food plan percentages applied to estimated total household food expenditures.
  - determined as a proportion of hypothetical food expenditures rather than as additional expenditures for a household with children.

- For low income, married households with one child, estimated incremental costs (2006-2009) are $471 per year rather than the 2009 USDA estimate of $2,064.

* "Expenditures on Children by Families," 2009, USDA, p. 7.

USDA Findings: Transportation Costs

- "Family related transportation expenses ... were allocated by using a per-capita method."* "Family related activities ... accounted for 59% of total transportation."**
- The report states that a per-capita "method is preferable over a marginal cost method that measures child rearing expenditures as the difference in expenses between equivalent couples with and without children."**
  - why?
- For low income, married households with one child, estimated incremental costs (2006-2009) are $376 per year rather than the 2009 USDA estimate of $1,464.

* "Expenditures on Children by Families," 2009, USDA, p. iii.
** "Expenditures on Children by Families," 2009, USDA, p. 7.

USDA Findings: Child Care and Education

- “About half of all households reported no expenditures.”* Presumably, mainly households without children.

- “This update [2009] included only those families with this expense. For families without child care/ education expenses, ... total expenditures on a child should be adjusted to account for this.”*

- For low income, married households with one child, estimated incremental costs (2006-2009) are $1,229 per year rather than the 2009 USDA estimate of $1,512.

* “Expenditures on Children by Families,” 2009, USDA, p. 6.

Imputed Costs: Low Income Married Households

	Incremental Costs	USDA Costs	Imputed Costs
One Child			
Housing	$1,015	$3,696	$2,681
Food	473	2,064	1,591
Transportation	377	1,464	1,087
Children's Clothing	325	768	443
Child Care and Education	1,229	1,512	283
	$3,419	$9,504	$6,085
Two Children			
Housing	$1,483	$5,916	$4,433
Food	670	3,312	2,642
Transportation	284	2,340	2,056
Children's Clothing	407	1,224	817
Child Care and Education	1,448	2,412	964
	$4,292	$15,204	$10,912
Three Children			
Housing	$1,368	$6,924	$5,556
Food	1,008	3,864	2,856
Transportation	505	2,736	2,231
Children's Clothing	479	1,428	949
Child Care and Education	1,387	2,820	1,433
	$4,747	$17,772	$13,025

Imputed Costs: Medium Income Married Households

	Incremental Costs	USDA Costs	Imputed Costs
One Child			
Housing	$1,133	$4,860	$3,727
Food	394	2,496	2,102
Transportation	352	1,980	1,628
Children's Clothing	340	924	584
Child Care and Education	2,521	2,616	95
	$4,740	$12,876	$8,136
Two Children			
Housing	$1,853	$7,776	$5,923
Food	870	3,996	3,126
Transportation	496	3,180	2,684
Children's Clothing	436	1,476	1,040
Child Care and Education	2,806	4,188	1,382
	$6,461	$20,616	$14,155
Three Children			
Housing	$2,163	$9,108	$6,945
Food	1,411	4,680	3,269
Transportation	352	3,720	3,368
Children's Clothing	540	1,728	1,188
Child Care and Education	2,917	4,908	1,991
	$7,383	$24,144	$16,761

Imputed Costs: High Income Married Households

	Incremental Costs	USDA Costs	Imputed Costs
One Child			
Housing	$2,661	$8,784	$6,123
Food	720	3,168	2,448
Transportation	1,608	2,904	1,296
Children's Clothing	455	1,308	853
Child Care and Education	5,524	5,640	116
	$10,968	$21,804	$10,836
Two Children			
Housing	$4,111	$14,064	$9,953
Food	1,341	5,064	3,723
Transportation	922	4,644	3,722
Children's Clothing	624	2,088	1,464
Child Care and Education	6,531	9,024	2,493
	$13,529	$34,884	$21,355
Three Children			
Housing	$4,494	$16,452	$11,958
Food	1,994	5,928	3,934
Transportation	1,196	5,436	4,240
Children's Clothing	750	2,436	1,686
Child Care and Education	7,214	10,560	3,346
	$15,648	$40,812	$25,164

Notes to Cost Tables

Low income married households:

CSR* (2006-2009) paper: under $55,859 with average income of $36,726

USDA** 2009 Report: under $56,670 with average income of $36,250

Middle income married households:

CSR* (2006-2009) paper: between $55,864 and $101,113 with average income of $76,307

USDA** 2009 Report: between $56,670 and $98,120 with average income of $76,250

High income married households:

CSR* (2006-2009) paper: above $101,120 with average income of $168,221

USDA** 2009 Report: above $98,120 with average income of $171,710

* Comanor, W.S., Sarro, M. and Rogers, R.M., "The Monetary Cost of Raising Children," *Research in Law and Economics*, Vol. 27, pp. 209-251. Health care costs are not included in the CSR results. Since these costs are largely paid by others, no adequate results were obtained.

** "Expenditures on Children by Families," 2009, USDA

Implications of Different Cost Estimates

- There are striking differences between USDA cost figures and estimated incremental costs. Imputed costs account for the largest share of USDA figures.
- Largest area of imputed costs is Housing. Imputed costs of additional bedrooms substantially exceed incremental household expenditures from adding a child or children to the household.
  - reported USDA figures are greatly influenced by the arbitrary assumption that child housing costs should be measured by the cost of additional bedrooms.
- Second largest source of imputed costs is food costs, except for high income households with three children.
- USDA estimates rest on arbitrary presumptions on how household expenditures are made, rather than on an examination of how these expenditures are actually made.

Income Equivalence Models (1)

- The second set of economic models used to estimate imputed costs are Income Equivalence models in both their Engel and Rothbarth forms.

- Income equivalence models are not category specific.
  - Engel models: total compensation required to reduce food expenditure percentage to levels reached in comparable, childless households.
  - Rothbarth models: total compensation required to increase adult clothing expenditures to levels reached in comparable, childless households.

- Applied to the den-nursery example, both forms estimate the dollar amount that must be paid hypothetically to a household with children to compensate the adults for their loss when their den is transformed into a nursery.
  - these compensation amounts may exceed the household's overall budget; they are not constrained to lie within the existing budget.

Income Equivalence Models (2)

- To explain, the California report states:

  "Had the parents been childless ... they would have been better off because the consumption of all other goods (i.e., those consumed by both adults and children) would not be 'shared' with the child."*

  – from this presumption, child costs are determined by the amounts needed to bring parents up to their prior standards, before they shared their common goods with their children.

- The fundamental premise of Income Equivalence models is that parents are worse off because they share their common goods (housing, food, transportation) with their children.

- Income equivalence models rely on the presumption that parents do not gain "utility" from the presence of their children.

* Review of Statewide Uniform Child Support Guideline 2010: A Report to the California Legislature, Administrative Office of the Courts, Center for Families, Children & the Courts, June 2011, p. 185.

Income Equivalence Models (3)

- Second critical premise is that the required compensation is founded on prior (childless) levels of adult clothing, which the same report acknowledges constitutes generally less than 5% of household spending.*
  - acknowledges that some might question whether this is a reliable basis for determining living standards.*
- Final assumption is that adult preferences in the presence of children are unchanged from those present before children arrived.
  - this assumption is disputed by much of the economic literature.

* Review of Statewide Uniform Child Support Guideline 2010: A Report to the California Legislature, Administrative Office of the Courts, Center for Families, Children & the Courts, June 2011, p. 166.

Imputed Costs: Rothbarth Model

	Incremental Costs	Rothbarth Estimates	Imputed Costs
Low Income Married Households			
One child	$3,421	$6,504	$3,083
Two children	4,291	10,008	5,717
Three children	4,745	12,216	7,471
Medium Income Married Households			
One child	$4,749	$10,740	$5,991
Two children	6,633	16,368	9,735
Three children	7,475	19,764	12,289
High Income Married Households			
One child	$11,138	$16,872	$5,734
Two children	13,706	25,620	11,914
Three children	15,957	30,828	14,871

The Choice Between Direct Costs and Economic Costs (including imputed costs)

- There are two relevant questions regarding this opportunity cost.
  - (a) whether, and (b) how to measure this opportunity cost.
- There is first the policy question of whether Child Support payments "should" cover imputed, opportunity costs, which are not out-of-pocket (or monetary) costs.
  - this is a "policy" issue rather than an "economic" question.
- Second, there is the measurement question: how to estimate these imputed costs.
  - this measurement can only be done by making strong and arbitrary assumptions.
  - the results depend as much on the assumptions as on the data employed.

Minnesota Child Support Guidelines

Base Case: 100% income to NCP; 100% Time to CP

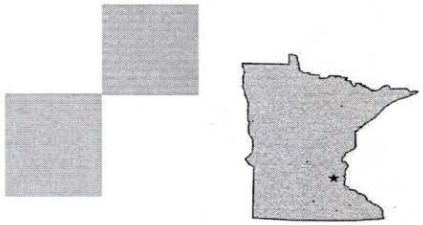
Income	No. of Children		
A. Support Guidelines	**1**	**2**	**3**
$36,726	$7,236	$11,700	$13,464
$76,307	10,992	17,376	19,968
$168,221	21,336	31,476	36,780
B. Incremental Costs*			
$36,726	$3,421	$4,291	$4,745
$76,307	4,749	6,663	7,475
$168,221	11,138	13,706	15,957
C. USDA Estimates**			
$36,726	$10,402	$16,643	$19,473
$76,307	14,479	23,167	27,105
$168,221	24,715	39,543	46,266

* "Expenditures on Children by Families," 2010, USDA, excluding Health Care.

** Comanor, W.S., Sarro, M. and Rogers, R.M., "The Monetary Cost of Raising Children," *Research in Law and Economics*, Vol. 27, pp. 244.

Implications of Child Support Awards Which Exceed Direct Costs of Raising Children

- When support awards exceed direct costs of raising children, child custody becomes a financial asset.
  - the award structure provides a monetary incentive to gain maximum custody, which affects both payer and recipient.
- Even when custody is not as issue, this award structure creates resentment by the support obligor whose payments fund this asset.
- Payments are missed; enhanced enforcement efforts are taken; and parental conflict follows.
- See the following chart from the Federal Office of Child Support Enforcement, Annual Report to Congress, FY 2015.



MINNESOTA

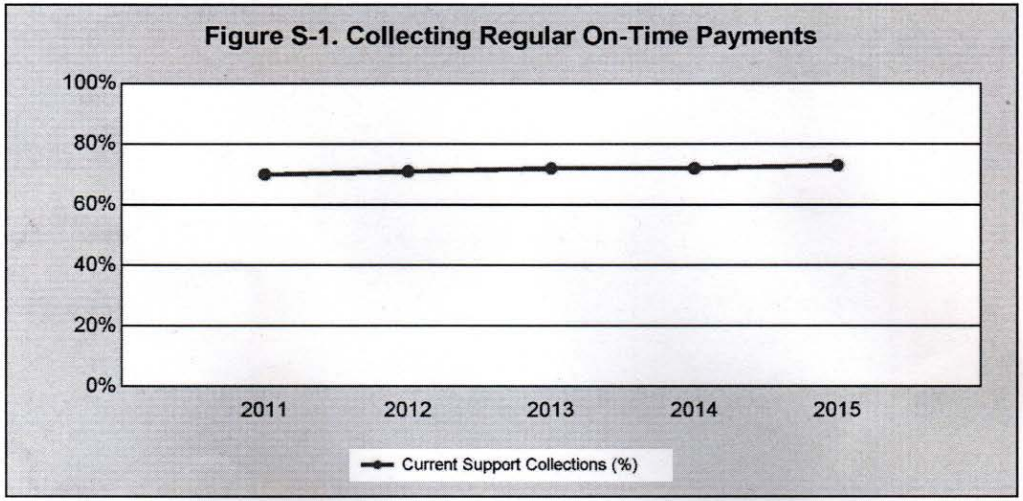


Figure S-1. Collecting Regular On-Time Payments					
Performance Measures	2011	2012	2013	2014	2015
Current Support Collections (%)	70.48	71.34	71.81	72.46	73.43
Arrearage Collections (%)	70.53	70.53	70.48	70.99	72.11

Table S-1. Other Incentive Performance Measures					
Performance Measures	2011	2012	2013	2014	2015
Statewide Paternity Establishment (%)	NA	NA	NA	NA	NA
IV-D Paternity Establishment (%)	101.37	102.51	102.29	100.42	99.00
Support Order Establishment (%)	86.02	86.54	86.61	88.00	88.70
Cost-Effectiveness ($)	3.60	3.50	3.66	3.58	3.55

Table S-2. Total Number of Children in the Child Support Program					
	2011	2012	2013	2014	2015
Number of Children in Child Support Cases	268,389	269,680	270,383	261,628	250,210

My Judgment

- An effective child support system rests on the willingness of obligor parents to make their assessed payments.

- This outcome is enhanced when payment amounts reflect the actual monetary costs of raising children.

Table 1: Housing Costs

Income Group	Constant	Income	Child Age	Number of Children			Urban	Northeast	Midwest	West	R2	N
				Kids1	Kids2	Kids3+						
	Married Households											
Low	(324.67)	0.11	14.51	969.81	1,438.92	1,319.86	1,284.67	1,319.15	226.79	1,061.28	0.18	3,927
	(1.25)	22.25	0.52	5.57	8.05	6.61	6.48	7.62	1.49	7.00		
	1,207.02	0.11	12.93	994.75	1,521.93	1,345.54					0.15	3,927
	6.25	22.46	0.46	5.63	8.39	6.64						
Middle	(948.38)	0.10	(129.94)	1,133.05	1,852.55	2,162.91	2,096.85	1,541.71	778.98	2,228.23	0.08	3,927
	(1.36)	12.55	(3.20)	4.14	6.85	6.31	5.30	5.45	3.05	8.58		
	1,703.80	0.10	(132.44)	1,188.15	1,920.14	2,282.15					0.06	3,927
	2.81	12.78	(3.21)	4.29	7.00	6.58						
High	(1,979.81)	0.07	(247.39)	2,660.91	4,110.62	4,493.77	4,639.86	2,603.14	239.63	2,650.34	0.20	3,927
	(1.62)	28.08	(3.26)	5.06	8.09	6.82	4.09	4.88	0.45	5.26		
	3,495.86	0.08	(240.59)	2,757.54	4,211.62	4,588.28					0.19	3,927
	6.40	28.48	(3.14)	5.21	8.24	6.91						
	Single Households											
Low	352.71	0.12	(51.65)	1,045.79	1,402.35	1,134.08	655.88	388.70	(205.88)	490.09	0.27	5,710
	1.89	41.95	(0.86)	3.83	5.25	3.44	3.86	3.46	(2.00)	4.43		
	1,039.01	0.13	(47.29)	1,045.78	1,398.59	1,117.00					0.26	5,710
	11.43	42.42	(0.79)	3.82	5.21	3.38						
Middle / Hiigh	1,725.59	0.07	411.10	(495.17)	4,720.49	2,181.66	1,463.99	2,057.13	(121.39)	2,542.14	0.18	1,564
	1.12	15.09	1.18	(0.29)	2.91	0.92	0.99	3.38	(0.19)	4.60		
	4,211.57	0.07	327.59	(148.13)	4,952.19	2,794.19					0.16	1,564
	8.74	15.16	0.93	(0.09)	3.03	1.17						

Table 2: Food Costs

Income Group	Constant	Income	Child Age	Number of Children			Urban	Northeast	Midwest	West	R2	N
				Kids1	Kids2	Kids3+						
	Married Households											
Low	1,358.19	0.04	65.30	274.82	473.73	792.94	163.73	18.50	(245.58)	24.49	0.12	3,927
	10.89	16.34	4.92	3.29	5.53	8.28	1.72	0.22	(3.36)	0.34		
	1,467.22	0.04	66.02	289.35	494.88	795.81					0.11	3,927
	16.10	16.24	4.97	3.47	5.78	8.33						
Middle	1,766.53	0.02	112.69	(123.10)	486.89	1,017.33	283.28	163.08	(269.98)	188.78	0.07	3,927
	6.54	8.13	7.15	(1.16)	4.63	7.64	1.84	1.48	(2.73)	1.87		
	2,019.85	0.02	112.85	(99.21)	499.21	1,029.29					0.06	3,927
	8.68	8.16	7.13	(0.93)	4.74	7.73						
High	1,462.64	0.02	171.35	34.80	741.37	1,376.56	1,168.77	358.69	(495.94)	114.78	0.12	3,927
	3.65	18.47	6.87	0.20	4.45	6.37	3.14	2.05	(2.87)	0.69		
	2,518.46	0.02	171.05	63.98	777.46	1,383.92					0.11	3,927
	14.11	18.88	6.84	0.37	4.66	6.38						
	Single Households											
Low	884.61	0.04	97.37	112.21	565.52	973.76	146.22	(47.84)	(220.74)	95.38	0.19	5,710
	10.86	28.13	3.73	0.94	4.85	6.78	1.97	(0.98)	(4.92)	1.98		
	959.68	0.04	100.75	115.38	566.57	977.08					0.18	5,710
	24.24	28.54	3.85	0.97	4.85	6.78						
Middle / Hiigh	1,827.86	0.01	321.80	(610.27)	513.93	1,548.30	315.47	415.57	(206.50)	359.19	0.14	1,564
	4.22	10.53	3.30	(1.27)	1.13	2.34	0.76	2.44	(1.18)	2.32		
	2,269.36	0.01	311.78	(563.81)	537.17	1,660.82					0.13	1,564
	16.90	10.64	3.19	(1.18)	1.18	2.50						

Table 3: Transportation Costs

Income Group	Constant	Income	Child Age	Number of Children			Urban	Northeast	Midwest	West	R2	N
				Kids1	Kids2	Kids3+						
	Married Households											
Low	277.49	0.07	38.68	260.11	168.06	376.81	(293.93)	(133.70)	(225.77)	116.30	0.07	3,927
	1.14	16.11	1.49	1.59	1.00	2.01	(1.58)	(0.82)	(1.58)	0.82		
	(5.10)	0.07	39.68	279.58	188.46	395.86					0.07	3,927
	(0.03)	15.96	1.53	1.72	1.13	2.12						
Middle	1,964.23	0.05	100.54	(203.00)	153.70	(66.41)	(312.61)	(317.18)	(458.29)	(282.14)	0.01	3,927
	2.58	5.84	2.26	(0.68)	0.52	(0.18)	(0.72)	(1.02)	(1.64)	(0.99)		
	1,504.22	0.05	101.16	(190.56)	151.57	(71.77)					0.01	3,927
	2.30	5.76	2.27	(0.64)	0.51	(0.19)						
High	3,648.73	0.02	263.46	554.37	(507.97)	248.01	(208.80)	(364.37)	127.35	707.39	0.02	3,927
	2.78	8.69	3.23	0.98	(0.93)	0.35	(0.17)	(0.64)	0.22	1.31		
	3,603.47	0.02	262.97	548.48	(484.18)	274.88					0.02	3,927
	6.19	8.66	3.22	0.97	(0.89)	0.39						
	Single Households											
Low	422.61	0.05	63.85	84.42	102.63	52.47	(275.32)	17.73	74.12	49.38	0.10	5,710
	2.99	24.30	1.41	0.41	0.51	0.21	(2.14)	0.21	0.95	0.59		
	204.29	0.05	64.67	72.06	94.96	37.15					0.10	5,710
	2.98	24.22	1.43	0.35	0.47	0.15						
Middle / Hiigh	(363.08)	0.05	387.24	(812.65)	(232.03)	640.23	187.18	25.92	(113.85)	100.14	0.09	1,564
	(0.26)	11.65	1.24	(0.53)	(0.16)	0.30	0.14	0.05	(0.20)	0.20		
	(175.47)	0.05	380.43	(772.68)	(213.13)	691.17					0.09	1,564
	(0.41)	11.70	1.22	(0.51)	(0.15)	0.33						

Table 4: Child Care and Education Costs (Tobit)

Income Group	Constant	Income	Child Age	Number of Children			Urban	Northeast	Midwest	West	R2	N
				Kids1	Kids2	Kids3+						
	Married Households											
Low	(2,608.89)	0.02	(22.00)	1,229.29	1,448.10	1,386.73	(70.31)	(84.36)	126.57	(94.05)	0.06	590
	(16.54)	8.63	(1.61)	14.22	16.52	14.77	(0.76)	(0.98)	1.79	(1.34)		
	(2,672.49)	0.02	(22.14)	1,219.49	1,432.39	1,384.33					0.06	590
	(19.85)	8.65	(1.62)	14.13	16.40	14.79						
Middle	(4,357.49)	0.02	(75.39)	2,520.90	2,806.30	2,917.52	(148.72)	(396.16)	81.61	58.19	0.04	1,061
	(13.48)	6.53	(3.82)	19.25	21.52	19.54	(0.89)	(3.07)	0.75	0.53		
	(4,488.75)	0.02	(76.04)	2,511.69	2,800.45	2,933.24					0.04	1,061
	(15.64)	6.42	(3.86)	19.25	21.52	19.67						
High	(8,659.54)	0.01	(95.41)	5,524.22	6,531.23	7,213.26	594.03	(223.55)	392.17	(31.18)	0.03	1,427
	(12.42)	8.51	(2.22)	19.05	23.19	21.71	0.94	(0.81)	1.48	(0.12)		
	(8,031.55)	0.01	(92.87)	5,519.03	6,524.13	7,221.78					0.03	1,427
	(23.83)	8.45	(2.16)	19.06	23.20	21.74						
	Single Households											
Low	(1,935.67)	0.01	(186.29)	1,758.79	1,933.28	1,763.64	(136.85)	(92.39)	50.46	106.64	0.08	488
	(14.84)	8.10	(8.28)	15.89	17.21	13.16	(1.41)	(1.33)	0.83	1.71		
	(2,040.18)	0.01	(184.34)	1,744.03	1,921.12	1,761.59					0.08	488
	(21.41)	8.04	(8.22)	15.82	17.15	13.18						
Middle / Hiigh	(4,522.78)	0.01	(478.03)	5,314.47	7,178.48	6,848.78	(466.19)	(433.49)	(239.34)	(481.68)	0.06	217
	(5.22)	2.47	(3.44)	7.50	10.32	7.09	(0.58)	(1.17)	(0.65)	(1.48)		
	(5,217.19)	0.01	(459.78)	5,255.78	7,117.33	6,737.67					0.06	217
	(13.50)	2.35	(3.34)	7.51	10.30	7.03						

Table 5: Children's Clothing Costs (Tobit)

Income Group	Constant	Income	Child Age	Number of Children			Urban	Northeast	Midwest	West	R2	N
				Kids1	Kids2	Kids3+						
	Married Households											
Low	(381.13)	0.00	(11.32)	325.47	407.22	478.57	(27.34)	(11.00)	14.85	(9.44)	0.05	1,348
	(13.81)	5.94	(4.02)	19.39	23.82	25.66	(1.42)	(0.64)	1.00	(0.65)		
	(405.31)	0.00	(11.34)	324.23	404.88	478.07					0.05	1,348
	(18.64)	5.94	(4.03)	19.35	23.76	25.72						
Middle	(396.24)	0.00	(11.66)	339.65	436.27	540.47	(35.40)	(6.82)	41.99	22.43	0.03	1,698
	(7.99)	3.15	(3.87)	17.50	22.78	23.39	(1.30)	(0.34)	2.36	1.24		
	(412.79)	0.00	(11.71)	337.22	435.61	541.71					0.03	1,698
	(9.57)	3.12	(3.89)	17.42	22.76	23.49						
High	(389.93)	0.00	(19.55)	455.18	623.80	750.02	(26.28)	(5.20)	13.51	24.23	0.03	1,905
	(6.62)	2.91	(5.02)	17.70	25.22	24.65	(0.48)	(0.20)	0.54	1.02		
	(405.50)	0.00	(19.51)	454.21	623.38	750.30					0.03	1,905
	(14.72)	2.85	(5.02)	17.68	25.27	24.67						
	Single Households											
Low	(387.45)	0.00	(28.40)	428.21	493.65	538.00	(62.76)	0.78	(1.67)	0.86	0.07	940
	(14.20)	7.36	(4.88)	15.49	17.86	16.21	(2.81)	0.05	(0.12)	0.06		
	(445.86)	0.00	(28.09)	427.04	492.90	535.19					0.07	940
	(25.10)	7.25	(4.82)	15.43	17.81	16.12						
Middle / Hiigh	(460.28)	0.00	(33.92)	561.71	872.04	889.20	(43.43)	6.78	50.92	(67.28)	0.06	308
	(4.29)	0.39	(1.89)	6.25	10.00	7.24	(0.43)	0.16	1.21	(1.70)		
	(505.26)	0.00	(29.05)	534.78	856.58	859.65					0.06	308
	(12.33)	0.23	(1.63)	6.00	9.85	7.03						

Table 6: Summary of Healthcare Costs

Panel A: Composition of Healthcare Costs

($avg/year)	Married			Single		Total
	Low	Mid	High	Low	Middle/High	
	With Children					
Observations	1,632	1,913	2,068	984	282	6,879
Avg. age of ref. person	37	40	43	37	44	40
Insurance Premiums	$339	$661	$872	$176	$432	$569
Out-of-Pocket Costs	$258	$528	$774	$162	$484	$484
Total Healthcare Costs	$596	$1,190	$1,646	$337	$917	$1,053
	Without Children					
	All Households					
Observations	2,295	2,014	1,859	4,726	1,282	12,176
Avg. age of ref. person	61	54	53	51	47	53
Insurance Premiums	$962	$958	$1,033	$333	$427	$672
Out-of-Pocket Costs	$587	$733	$947	$208	$415	$501
Total Healthcare Costs	$1,549	$1,691	$1,980	$542	$842	$1,173
	Households with ref. person < 60 years old:					
Observations	914	1,272	1,344	2,965	1,044	7,539
Avg. age of ref. person	45	46	48	38	42	42
Insurance Premiums	**$406**	$687	$810	$163	**$334**	**$420**
Out-of-Pocket Costs	**$387**	$579	$798	$135	**$325**	**$385**
Total Healthcare Costs	**$793**	$1,266	$1,608	**$298**	**$659**	**$805**

(Bold indicates statistically significant differences in average cost with v. without children)

Table 6: Summary of Healthcare Costs

Panel B: Distribution of Out-of-Pocket Healthcare Costs (observations by income group)

	Married			Single		
	Low	Mid	High	Low	High	Total
			With Children			
$0 / year	777	555	357	545	86	2,320
	48%	29%	17%	55%	30%	34%
< $100 / year	276	327	303	179	51	1,136
	17%	17%	15%	18%	18%	17%
$100 - $200 / year	133	158	203	73	22	589
	8%	8%	10%	7%	8%	9%
$200 - $500 / year	200	321	383	101	59	1,064
	12%	17%	19%	10%	21%	15%
$500 - $1,000 / year	123	264	360	46	28	821
	8%	14%	17%	5%	10%	12%
> $1,000 / year	123	288	462	40	36	949
	8%	15%	22%	4%	13%	14%
			Without Children			
$0 / year	594	417	300	2,146	496	3,953
	26%	21%	16%	45%	39%	32%
< $100 / year	314	300	239	974	237	2,064
	14%	15%	13%	21%	18%	17%
$100 - $200 / year	235	192	174	453	124	1,178
	10%	10%	9%	10%	10%	10%
$200 - $500 / year	436	371	363	606	185	1,961
	19%	18%	20%	13%	14%	16%
$500 - $1,000 / year	324	301	275	295	105	1,300
	14%	15%	15%	6%	8%	11%
> $1,000 / year	392	433	488	252	135	1,700
	17%	21%	26%	5%	11%	14%

Table 7: Summary of Entertainment Costs

	Married			Single		
	Low	Mid	High	Low	Middle/High	Total
	Number of Observations					
With Children	1,632	1,913	2,068	984	282	6,879
Without Children	2,295	2,014	1,859	4,726	1,282	12,176
Total	3,927	3,927	3,927	5,710	1,564	19,055
	Entertainment Expenditures ($avg/year)					
With Children	$445	$1,019	$2,050	$369	$1,283	$1,111
Without Children	$487	$935	$1,807	$346	$914	$753

Table 8: Entertainment Costs

Income Group	Constant	Income	Child Age	Number of Children			Urban	Northeast	Midwest	West	R2	N
				Kids1	Kids2	Kids3+						
	Married Households											
Low	105.13	0.01	(14.68)	(49.67)	(0.55)	(13.15)	(68.30)	48.81	47.94	4.44	0.05	3,927
	2.13	13.03	(2.79)	(1.50)	(0.02)	(0.35)	(1.82)	1.49	1.65	0.15		
	60.21	0.01	(14.65)	(54.82)	(6.28)	(17.88)					0.04	3,927
	1.67	13.19	(2.79)	(1.66)	(0.19)	(0.47)						
Middle	120.60	0.01	3.70	(65.84)	202.29	89.93	(140.68)	118.65	187.17	171.35	0.01	3,927
	0.66	5.41	0.34	(0.91)	2.82	0.99	(1.34)	1.58	2.77	2.49		
	89.90	0.01	3.64	(70.85)	202.76	94.77					0.01	3,927
	0.57	5.44	0.34	(0.98)	2.83	1.05						
High	(391.90)	0.01	28.42	105.91	95.72	461.27	468.40	90.51	277.88	229.22	0.05	3,927
	(1.30)	14.17	1.52	0.82	0.76	2.84	1.67	0.69	2.14	1.85		
	189.08	0.01	29.70	109.45	98.18	474.37					0.05	3,927
	1.41	14.26	1.58	0.84	0.79	2.92						
	Single Households											
Low	61.64	0.01	(0.94)	17.05	2.80	(41.25)	(49.56)	27.36	51.61	44.40	0.06	5,710
	1.59	18.43	(0.08)	0.30	0.05	(0.60)	(1.41)	1.18	2.42	1.94		
	44.06	0.01	(0.85)	11.67	(0.50)	(46.35)					0.06	5,710
	2.35	18.36	(0.07)	0.21	(0.01)	(0.68)						
Middle / Hiigh	64.14	0.00	116.78	(428.30)	308.48	21.08	277.87	153.46	119.36	233.05	0.06	1,564
	0.26	6.76	2.06	(1.54)	1.17	0.05	1.16	1.56	1.18	2.60		
	453.13	0.00	108.66	(398.61)	331.49	64.93					0.05	1,564
	5.84	6.83	1.92	(1.44)	1.26	0.17						

Table 9: Total Monetary Child Costs by Category, Income Group, and Number of Children ($/year)

	Number of Children								
	1	2	3+	1	2	3+	1	2	3+
Income Group:	Low			Middle			High		
Income Range:	< $55,859			$55,860 - $101,120			> $101,120		
Average Income:	$36,726			$76,307			$168,221		
t ≥ 0.5	$ 3,421	$ 4,291	$ 4,745	$ 4,749	$ 6,663	$ 7,475	$ 11,138	$ 13,706	$ 15,957
t ≥ 1.0	$ 3,376	$ 4,248	$ 4,697	$ 4,749	$ 6,509	$ 7,385	$ 10,478	$ 13,610	$ 15,957
t ≥ 2.0	$ 2,998	$ 3,964	$ 4,570	$ 4,749	$ 6,509	$ 7,385	$ 10,365	$ 13,512	$ 15,855

Single Households

Income Group:	Low			Middle/High		
Income Range:	<= $55,859			> $55,859		
Average Income:	$27,207			$94,344		
t ≥ 0.5	$ 3,972	$ 5,073	$ 5,013	$ 11,399	$ 18,316	$ 17,127
t ≥ 1.0	$ 3,860	$ 4,971	$ 5,013	$ 11,399	$ 18,316	$ 14,945
t ≥ 2.0	$ 3,613	$ 4,744	$ 4,775	$ 7,828	$ 14,432	$ 11,286

Sources and Notes:
Based on esimated category costs reported in Tables 1 through 8, excluding healthcare costs.

Table 10: Comparison of Total Monetary Child Costs by Analytical Method ($/year)

		Number of Children								
		1	2	3+	1	2	3+	1	2	3+
Married Households										
	Income Group:	Low			Middle			High		
	Income Range:	< $55,859			$55,860 - $101,120			> $101,120		
	Average Income:	$36,726			$76,307			$168,221		
[1]	Comanor, et al.	$ 3,421	$ 4,291	$ 4,745	$ 4,749	$ 6,663	$ 7,475	$ 11,138	$ 13,706	$ 15,957
[2]	Center for Policy Research	$ 6,504	$10,008	$12,216	$10,740	$16,368	$19,764	$16,872	$25,620	$30,828
[3]	USDA	$ 10,402	$16,643	$19,473	$14,479	$23,167	$27,105	$24,715	$39,543	$46,266
Single Households										
	Income Group:	Low			Middle/High					
	Income Range:	<= $55,859			> $55,859					
	Average Income:	$27,207			$94,344					
[1]	Comanor, et al.	$ 3,972	$ 5,073	$ 5,013	$ 11,399	$ 18,316	$ 17,127			
[2]	Center for Policy Research	*N/R*	*N/R*	*N/R*	*N/R*	*N/R*	*N/R*			
[3]	USDA	$ 10,025	$ 15,310	$ 17,593	$ 21,560	$ 32,925	$ 37,836			

Sources and Notes:

[1] Estimates reported in Table 9 for all coefficients with t-statistics ≥ 0.5.

[2] CPR, "Economic Basis for Updating a Child Support Schedule for Georgia," Appendix B, April 2011. Betson-Rothbarth estimates at average income levels indicated; excludes child care and private tuition.

[3] Lino, USDA, May 2011, excluding healthcare costs for comparability.

Report to the Minnesota Child Support Task Force

William S. Comanor,[1*] Mark Sarro,[**] and R. Mark Rogers[***]

Introduction

Under federal law, states are required to review periodically their child support guidelines such that "a state must consider economic data on the cost of raising children."[2] The purpose for this requirement is to ensure that award amounts reflect actual costs. For these reasons, the methods used to determine the costs of raising children are critically important; and are the subject of this Report.

The time spent by parents in raising their children is a major component of the economic costs of raising children. However, we do not assign values here because they are ambiguous. For some parents, raising children may detract from their welfare or utility in the same manner as time spent on any other job. For others, their welfare would decline substantially if parenting opportunities were not available. Since one cannot distinguish between these alternatives, our position is that regulatory policy should focus on the actual monetary costs of raising children.

Strikingly, current methods used to determine child costs do not reflect actual household outlays on children but instead are estimated through indirect means. The costs of raising children, which underlie child support guidelines, are derived in most states from the Income Equivalence of a child. That concept measures, in principle, the

* University of California, Los Angeles and Santa Barbara
** The Brattle Group, Cambridge, MA
*** Rogers Economics, Atlanta, GA
[2] 45 CFR § 302.56(h).

compensation required by the adults in a household to return them to the same welfare or utility levels they would have reached hypothetically without children, while specifically ignoring any utility gained from spending time with their children. Most current state guidelines rely on estimates obtained using this indirect approach.

In contrast, Minnesota relies principally on cost figures published by the U.S. Department of Agriculture (USDA). Strikingly, the UDSA relies on its own set of assumptions to impute these costs even though it acknowledges that child expenditures could be determined directly from available data.[3] In the succeeding section, we describe both methods.

The Income Equivalence Approach

For given levels of household income, spending more on children often means spending less on adults, although of course it could also rest on reduced savings. From this premise, it is proposed that the economic cost of raising children is defined by the adults' utility foregone from the purchases not made for adult goods in order to support their children. The cost of raising children is then measured by the compensation required by the household's adults to just offset the adult goods foregone.

While there is some logic to that position, various problems arise when put into practice, which detract from its usefulness in a policy setting. First, consumers purchase goods and services because their own valuations of the particular items exceed the prices set for them. Therefore, the required compensation used by this model to define child

---

3 Mark Lino, *Expenditures on Children by Families, 2009.* U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, June 2010, p. 8..

costs includes not only the monetary expenditures made for the children but also an imputed surplus (what economists call Consumer Surplus). Therefore, costs measured in this manner impute higher values to the consumption items foregone by adults than they would have needed to pay for them. And therefore child costs are necessarily inflated by the Income Equivalence method as compared with monetary outlays.

Second, Income Equivalence methods require the use of generalized proxies to represent welfare or utility levels. Espenshade,[4] for example, used the share of expenditures on food in the household budget for this purpose. In contrast, the widely used Rothbarth method[5] imputes the same utility level to households according to their purchases of specific adult-only goods, most commonly adult clothing. While both approaches to Income Equivalence measures can be implemented, they require major restrictions on household welfare or utility functions, which are very limiting and which many economists consider unacceptable.[6] Even a recent California report in which Dr. Venohr participated, acknowledged that "the assumptions needed to identify this [Rothbarth] approach are strong," and that "some might object to whether adult clothing,

---

4 Thomas J. Espenshade, *Investing in Children: New Estimates of Parental Expenditures.* Urban Institute, 1984. This voloume was an early application of the income equavalence method to deerminiung child costs.

5 David M. Betson, "Parental Expenditures on Children: Rothbarth Estimates," Report prepared for the State of California, April, 2010.

6 See for example Martin Browning, Martin. "Children and Household Economic Behavior," *Journal of Economic Literature,* XXX (September 1992) 1434-1446. Robert A. Pollack, and Terence J. Wales. "Welfare Comparisons and Equivalence Scales." *American Economic Review* 69 (1979): 216. Nancy Folbre, *Valuing Children: Rethinking the Economics of the Family.* Harvard University Press, 2008, p. 48

which constitutes less than 5 percent of a family's total spending, provides a reliable basis for estimating the cost of raising children."[7]

Particularly important is the fact that whatever generalized variable is used to measure family well-being, whether food or adult clothing, Income Equivalence methods require making utility comparisons in two very different states of the world: households with and without children. Making utility comparisons requires the assumption that preferences remain the same with children as without, (what economists call state-independent preferences). However, **if preferences in households with children are substantially different from those without children, then there are no logical means to make these comparisons**.

On this point, there is considerable support in the economic literature; there is wide agreement that utility functions or preferences are truly state dependent.[8] The Income Equivalence method fails most fundamentally because it requires one to assume that households without children act in the same manner and have the same welfare standards as those households with children. Specifically, it is apparent that parents' preferences for allocating expenditures among various types of goods are different in the presence of children. This factor affects the reliability of using adult goods (adult

---

7 *Review of Statewide Uniform Child Support Guidelines 2010,* A Report to the California Legislature, Center for Families, Children and the Courts, June 2011, p. 166. Dr. Jane Venohr served as the project manager for this Review.

8 See for example H.E. Frech,"State-Dependent Utility and the Tort System as Insurance: Strict Liability versus Negligence." *International Review of Law and Economics* 14 (1994): 261-271; Robert Kremslehner and Alexander Muermann. "State-Dependent Preferences and Insurance Demand." December 2009; Amy Finkelstein,"Approaches to Estimating the Health State Dependence of the Utility Function." *American Economic Review, Papers and Proceedings 2009* 99:2 (2009): 116-121; Ryan D.Edwards, "Optimal Portfolio Choice when Utility Depend on Health." *International Journal of Economic Theory* 6:2 (2010): 205-225.

clothing in particular) as the same measure of the parents' living standard before and after children arrive.

The USDA Reports on Expenditures on Children

Unlike the Income Equivalence approach, these reports employ the Consumer Expenditure Surveys conducted each year by the U.S. Census Bureau. These surveys include detailed data on characteristics, income, and expenditures for consumer units.[9] Although some expenditure items refer to individual household members, not all do. Such major expenditure categories as housing, food and transportation pertain to outlays made for the household as a whole. In order to divide these outlays among household members, and in particular assign those pertaining to children, the USDA authors make various arbitrary assumptions. Even Dr. Venohr's recent California report observes that the "assumptions [made by the USDA's approach...] are certain to be wrong."[10] Interestingly, and attesting to their arbitrary nature, the authors sometimes revise their assumptions.

Prior to 2008, the USDA estimated expenditures for leading household collective goods such as housing, food and transportation on a per capita basis; that is, by dividing

---

[9] For more information on the Consumer Expenditure Survey, see *www.bls.gov/cex*. A recent USDA survey is Mark Lino et al., *Expenditures on Children by Families, 2015.* U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, Janaury 2017.

[10] *Review of Statewide Uniform Child Support Guidelines 2010*, A Report to the California Legislature, Center for Families, Children and the Courts, June 2011, p. 165. Dr. Jane Venohr served as the project manager for this Report.

category expenditures by the number of people in the household.[11] More recently, the USDA authors revised this approach but only for housing expenditures. They wrote in their 2011 report (using 2010 data) that "the presence of a child in a home does not affect the number of kitchens or living rooms, but does affect the number of bedrooms." On this basis, they changed their computations so that a child's housing costs would henceforth be limited to "the average cost of an additional bedroom."[12] Implicit in their revised approach is the presumption that the same household without children would live in a similar dwelling but one with fewer bedrooms.

While that presumption could be true, it is not necessarily so. Consider the following statement made by a journalist in a story describing a recent USDA report:

> The biggest expense on the [USDA] list is housing, which I think is kind of silly in my case because my husband and I would probably live in the same size house regardless of whether we had a son or not… My son isn't really adding to our housing costs.[13]

While that conclusion applies only to this journalist's circumstances, it suggests that both the original and revised USDA approaches to estimating children's housing costs rest on arbitrary presumptions that can be misleading. And furthermore, this conclusion might apply as well to the food and transportation expenses attributed to children.

---

[11] Although the Census data collects expenditures on food for the entire household, the USDA authors apportion these outlays to children according to the USDA food plans which depend on the ages of household members, household size and income.

[12] Lino, May 2011, p. 8.

[13] See Miranda Marquit, "Kids & Money: How Much Does It Cost to Raise Your Child?" www.bargaineering.com, October 4, 2011.

As a matter of economics, one should avoid the arbitrary assumptions made by the USDA but instead investigate how household expenditures are actually made. In our work, we return to the accepted economic construct of incremental costs and observe how households with children actually make different expenditure decisions than those made by similar households, with similar incomes but without children. The issue is **not** how expenditure decisions are made in principle but rather how they are reflected in available data. In the results reported below, we determine the incremental expenditures made by households with children as compared with those made in comparable households without children.

The Empirical Framework

The results reported here are drawn from our published research paper entitled "The Monetary Costs of Raising Children."[14] Rather than searching for a hypothetical welfare standard that can be applied to households both with and without children, we look instead at data on actual expenditures made in different households. Our figures reflect the additional expenditures made in households with children as compared with those made in similar households but without children; and we attribute the observed differences to the presence of children.

Our empirical results rest on the same data source used by USDA. However, we combine data from four years, 2006 through 2009, rather than for a single survey year as

[14] William S. Comanor, Mark Sarro and R.Mark Rogers, "The Monetary Cost of Raising Children," *Research in Law and Economics*, Vol. 27, 2015.

the USDA reports do.[15] By using four year's worth of data, we have more observations and therefore more detail on expenditure differences between similar households with and without children.[16] Ideally, we would like to compare identical households in the two circumstances, but instead employ statistical means to find as much comparability as possible.

For each household in this sample, the Census data reports expenditures for various broad categories, including the seven expenditure categories we analyze here: Housing, Food, Transportation, Child Care and Education, Children's Clothing, Health Care, and Entertainment. We employ these data to determine the monetary cost of raising children in each of these categories.

We estimate regression equations which distinguish between households with zero, one, two and three plus children along with the children's age, family income, the urban-rural divide and regions of the country. The equations are carried out separately for five sub-samples of households by distinguishing between married and single households and for different income classes. From this procedure, we estimate the additional expenditures made in households with different numbers of children as compared to those without children. For some expenditure categories, we get robust and

[15] The observations from each yearly survey, which are reported in nominal dollars, are combined with an adjustment made for changes in the average price level from the relevant year to the present, so that all costs are measured in June 2011 dollars. Across the four survey years, we have a sample of 19,055 households for which all necessary data and information are available, with roughly 4,000 to 5,700 observations in each survey year. Of these households, 62 percent are married households, which include a husband and wife, and 38 percent are headed by single persons. Of the married households in our sample, 48 percent include at least one child and the rest do not include children. For single households, only 17 percent include at least one child. Each microdata set reflects interviews conducted every 3 months over five calendar quarters, thus straddling two calendar years.

[16] Children in this data set are those residents under age 18 who reside in the Consumer Unit and not elsewhere.

statistically significant results, while for others, notably health care expenditures, we do not. Overall, the empirical results provide considerable insight into the effects of children on household expenditure patterns.

Our findings reflect the fact that household spending is constrained by the household's budget. When comparing household expenditures with and without children, these results reflect the reality that totals spending is constrained by available funds. Spending on children may be much below the amounts that would be made if budgetary constraints were not present.

A Summary of Empirical Findings by Expenditure Categories

Housing: Housing costs are higher in the presence of children except for single households with an only child where on average no increased expenditures are made. In most cases, households with children spend more on housing than those without children. However, there is no indication in the data that housing outlays in single or low-income married households with three or more children are any greater than with two children. There appear to be increased housing costs going from one to two children but often not to more children.

Food: Except for low income, married households, there is no evidence that including a single child in the household leads to increased expenditures on food. Succeeding children lead to higher outlays on food but not the first one.

Transportation: Except for low income, married households, there is no evidence that households with children spend more on transportation than do households without children. While households with children may take different types of trips, there is no

indication that they take more trips leading to higher costs. For this reason, dividing household transportation cost by the number of people in the household overstates the monetary cost allocated to children.

Child Care and Education: Unlike the conclusions reached in the USDA reports, these outlays are the largest component of child costs. This finding is not surprising since they are not generally made in childless households. For this variable, the child age variable is nearly always statistically significant and always negative. The latter finding indicates that these outlays are primarily made for the care of younger children. Furthermore, only for high income, married households are these outlays significantly greater for three children than for two. For most households, there is little evidence that these expenditures are greater when the number of children exceeds two.

In addition to these four expenditure categories, we report findings in our research paper for children's clothing, health care, and entertainment, which are the categories reported in the Census data.

Strikingly, we obtain few significant coefficients for outlays on health care. A likely reason for this result is that, unlike other expenditure categories, households directly pay only a minor share of their own health care costs. For higher-income households, employers pay the largest share of these outlays in the form of health insurance benefits which are not included in taxable earnings. For lower-income households, government agencies and charitable organizations provide many health care services at minimal direct cost. As a result, health care costs need to be evaluated separately from other expenditure categories.

Overall Empirical Findings

Our empirical findings are reported in Tables 1 through 9. The most prominent implication of these results is that costs per child decline with the number of children in the household. Child costs for two children are always less than twice those costs for a single child. Furthermore, for single households, total child costs with three or more children are no greater than for two children. We also observe that total child costs in single, middle/high income households are generally greater than those in married, high income households.

Of considerable interest is how these results compare with those obtained from the other two methods described above. These comparisons are reported in Table 10. As indicated there, the direct economic approach leads to much lower values. The differences are particularly striking in regard to the USDA figures, which use the same data that we do. The essential differences between the USDA method and the one proposed here is our full application of marginal cost principles within broad categories of expenditures. Our approach is consistent with economic principles.

To the extent that current child support guidelines rest on the other two methods, our results suggest that the amounts imposed by the guidelines substantially exceed the monetary cost of raising children.

THE MONETARY COST OF RAISING CHILDREN

William S. Comanor, Mark Sarro and
R. Mark Rogers

ABSTRACT

Purpose – *Under the impetus of federal law, each state is required to develop Guidelines by which to determine presumptive child support awards following divorce. The key federal requirement is that during the specified quadrennial reviews of each state's Guidelines, "a state must consider economic data on the cost of raising children." Our purpose here is to compare presumptive child support awards provided in typical state Guidelines with the actual monetary costs of raising children.*

Methodology/approach – *To this end, we estimate these monetary costs from government data on consumer outlays in households with children as compared with substantially similar childless households. We review and reject current methods for determining child costs: both from income equivalence methods and those offered in annual government surveys; and provide quite different results despite using the same data employed by others.*

Economic and Legal Issues in Competition, Intellectual Property, Bankruptcy, and the Cost of Raising Children
Research in Law and Economics, Volume 27, 209–251

ISSN: 0193-5895/doi:10.1108/S0193-589520150000027008

Findings – *Our econometric results indicate much lower monetary costs than reported for either of the two alternatives. Since presumptive child support awards in most states rely on current methods, these findings suggest that existing award structures should be re-evaluated.*

Practical implications – *Current award structures create a financial asset resulting from the gap between presumptive awards and monetary costs for custodial parents. This factor engenders resentment by support payers since it is his or her payments that fund this asset. And this resentment harms relationships between the parents. Increased willingness of non-custodial parents to make their assessed payments is an outcome promoted when payment amounts reflect the actual monetary costs of raising children.*

Keywords: Child costs; Child Support Awards; Child Support Guidelines

INTRODUCTION

Under the impetus of federal law, each state is required to develop Guidelines by which to determine child support awards following divorce. While judges are permitted to deviate from these guidelines, they are then required to give their reasons, so deviations are infrequent. For the most part, court-ordered child support awards follow whatever guidelines are established. How they are constructed is therefore an important matter for payers and recipients.

The law is quite general on the specific criteria by which state Guidelines should be based. The only stated requirement is that during the specified quadrennial reviews of each state's Guidelines, "a state must consider economic data on the cost of raising children."[1] That statutory requirement is the reason for this paper.

In the early sections, we review the economic principles inherent in cost determination, and their application to the cost of raising children. We discuss the advantages and disadvantages of the methods that have been used in the past and why they do not adequately measure the appropriate values. Following that discussion, we report our empirical findings and suggest why our results offer more accurate values.

Finally, we contrast our estimated child costs with the presumptive child support awards contained in the Guidelines employed by four states. Our purpose is to direct attention to the relationship between actual child costs

and award amounts. In all cases, the presumptive award amounts exceed the monetary costs of raising children.

COSTS AND HOUSEHOLD PRODUCTION

Costs reflect the minimum level of expenditures needed to achieve particular purposes.[2] For a firm, they are the outlays used to purchase essential inputs for the production process, while for a household, they are the outlays needed to achieve certain objectives.

In some circumstances, households engage in production as well as consumption activities.[3] Members of a household may purchase items they do not value for themselves but rather as inputs for some other commodity which in turn is valued. Through this process, they are engaged in "household production."[4] Although these outputs can sometimes also be purchased, households may find it more convenient to buy the necessary inputs and produce the outputs themselves.

The cost of a household good produced in this manner is the aggregate cost of the inputs used to produce it. The household's objective is to minimize the short-run costs of producing a desired quantity and quality of a particular household good (the output) by selecting the quantities of market goods (the inputs) needed to achieve that result. The final cost of a household good depends on the prices and quantities of the purchased market goods that are employed.[5]

In the case of raising children, the time spent by parents in this effort is the major factor in the household production function. However, we ignore that input in the analysis below, not because it is unimportant but rather because the utility values and thus the costs to the parent of providing such services are ambiguous. For some parents, raising children may detract from their utility in the same manner as time spent at any other job. They would prefer to be engaged in their regular leisure-time activities. For other parents, their utility would decline if parenting opportunities were not available. Since we cannot distinguish between these alternatives, and since federal law requires that state Guidelines consider economic data on child costs, we deal only with the additional monetary costs of the market goods purchased to produce the household good of raising children.

To be sure, this household good is not homogeneous but rather covers in a vast array of forms and varieties. There is no single way to raise children and no single figure for the costs of doing so. Although this point seems self-evident to us, it is denied by various writers who allege that child

costs are limited to subsistence levels.[6] Just as many consumer items differ according to their attributes, so also do the process of raising children.

This analytic structure rests on that proposed in Becker's *A Treatise on the Family*.[7] He posits a household utility function that depends in part on the level of nonmarket household goods consumed, which in turn are produced from the purchased market goods used in their production. Becker writes, "commodities (household goods) do not have market prices because they are not purchased, but they do have shadow prices equal to the cost of production."[8] He explains further, "the relevant shadow prices are determined by marginal, not average, costs of production."[9] In the analysis below, we follow this approach.

Within a household which includes children, the adults have preferences that encompass both their parenting activities and their envisioned child outcomes.[10] Based on these preferences, certain market goods are purchased, and it is the cost of these goods that represents monetary child cost.[11] *These costs are those borne for child rearing as a household good but which would not have been borne otherwise.*[12]

ECONOMIC COSTS AND MONETARY COSTS

An important issue is the relationship between economic and monetary costs. For the most part, these costs track each other; but not always. Economic costs are broader than monetary costs in that they can include non-pecuniary, opportunity costs. Consider the following examples which relate specifically to the costs of raising children.

Suppose a married couple without children lives alone in a two-bedroom apartment, where they use the second bedroom as a den. Then a child is added to the household; they remain in the same apartment; and the den is transformed into a nursery. In this example, what housing costs should be attributable to the child? The household pays no additional monetary costs although the adults in this example are deprived of the use of a den. The economic cost of the child includes this opportunity cost even if there are no additional monetary costs.

Interestingly, those were the exact circumstances noted in a press account of a US Department of Agriculture (USDA) report on the cost of raising children. In her account, the journalist observed:

> The biggest expense on the [USDA] list is housing, which I think is kind of silly in my case because my husband and I would probably live in the same size house regardless of whether we had a son or not … My son isn't really adding to our housing costs.[13]

What the journalist is suggesting is that in her circumstances, there are no monetary housing costs due to her son, whether or not there are associated opportunity costs. Her concept of cost is limited to the monetary cost involved.

Another example applies to transportation costs. Suppose a "stay at home" parent uses the family car to drive her children to their activities; although without children in the household, she would use the same car to visit friends or museums. If the distances involved were similar, what transportation costs appropriately apply to the children? Although the monetary costs might be minimal since levels of expenditures were similar, there again could be non-pecuniary opportunity costs. However and critically, there might be little inclination for her to behave in the same manner with children as she did without children, so there are no easy means to identify those opportunity costs, or even to know if they exist.

Another point of distinction between monetary and economic costs follows from recognizing that with given levels of disposable income, spending more on children means spending less on the adults in the household. Measuring full economic costs therefore means including the consumer surplus foregone on these adult goods as part of child costs, in addition to the monetary expenditures actually made on children. For this reason, economics costs can exceed, often substantially, total monetary outlays.

Whatever the advantages resulting from the economic concept of costs, it suffers from the need to define a broad measure of household welfare or utility which is the same for households with and without children. This factor intrudes because differences between economic and monetary costs necessarily involve measuring opportunity costs. The proxies used for this purpose raise important issues which we explore in detail below. Before doing so, however, we review the policy context in which these issues arise.

SETTING CHILD SUPPORT GUIDELINES

As noted above, the 1988 federal legislation requires states to establish guidelines on penalty of having certain federal funds withdrawn. The statute also requires that these guidelines be founded on the available economic data on the cost of raising children. The leading data source, then as now, is the Consumer Expenditure Survey (CEX) compiled by the United States Bureau of the Census, which gathers detailed data within broad categories of expenditure patterns in US households. However, for many

expenditure categories, such as the important ones of housing, food, and transportation, these data apply to the household rather than to individuals. To many observers, that was a critical flaw in using these data since what was needed were outlays made specifically for children.

Just a few years earlier, a short volume had appeared which seemed to offer a solution (Espenshade, 1984). Published as a report to the Urban Institute in Washington, the author used this same data source but with a possible answer to the question of how to derive the cost of children from household data. As stated by his book, Espenshade's approach was

> to develop an index of a family's material standard of living and then apply this index to a comparison of the living standards of families that may differ substantially in income, consumption and family size and composition. … [The index used was simply] the percentage of total current consumption expenditure devoted to food consumed at home. … [Using this index,] two families with the same value [of this percentage] … have the same standard of living regardless of other differences with respect either to the volume of total consumption or to family size and/or composition. (Espenshade, 1984, p. 19)

In other words, richer or poorer, with children or without, two households would be considered to have the same welfare or utility levels if they spent the same proportions of their income on food; and households which spend less proportionately on food were considered better off. Strikingly, his empirical results, which were relied upon so commonly afterwards, rested fundamentally on this particular assumption. The child cost estimates which underlie many state Guidelines rely on economic data as filtered through this specific methodology.

Whatever the technical defects of this approach, which are explored in the next section, income equivalence measures of child costs such as the one suggested by Espenshade have become standard. In one form or another, they have been adopted in most states. While there are differences, largely in terms of which index is used to define welfare equivalence in households with and without children, they rested on the premise that *child costs could be measured through the indirect means of finding the compensation required to return adults in a household with children to utility levels they had reached without children while ignoring any utility gained from the presence of children*.

What is unclear in the general adoption of this approach was whether it was recognized that the amounts obtained in this manner could far exceed the actual amounts spent on children. One reason for this neglect may have been that the results obtained from these income equivalence methods largely tracked the child cost figures reported in the annual surveys published

by the USDA. For the most part, those surveys measured per capita expenditures within the various categories. Little effort was made at tracking household costs within expenditure categories as between households with and without children, which is the approach that follows directly from Becker's treatise.

THE TWO ALTERNATE METHODS

Before proceeding to our derivation of monetary costs, we examine further the two alternate methods which have been used to measure child costs. The first of these does not measure direct expenditures at all but rather defines the cost of raising children as the income equivalence of a child. Under this method, the economic cost of raising children is determined by the compensation required to return the household's adults to the welfare or utility levels they would have reached hypothetically in the absence of children, while specifically ignoring any utility they receive from having children.[14] In the prior example, it represents the compensation required to make up for the loss of the den that had been turned into a nursery.

As might be expected, finding an appropriate welfare or utility measure with which to make such comparisons is no easy matter. Critically, whatever measure is employed, its application requires comparing utility levels in two very different states of the world: households with children and those without children. To make such comparisons requires that household preferences remain the same with children as without, or what are referred to as state-independent preferences. If, on the other hand, household preferences with children are substantially different from those present in the absence of children, such that there are state-dependent preferences, then conceptually this method cannot be used to make adequate comparisons.

There is a large economic literature on this subject. Its widespread conclusion is that utility functions are state-dependent and that one cannot accurately compare preferences (or utility functions) in different circumstances. These issues have been studied most often in the two settings: evaluating preferences related to insurance outcomes[15] and in different health circumstances.[16] However, the same issue applies to comparing preferences in such different circumstances as having a child and being childless. The common observation that adult preferences change sharply when a child arrives supports this conclusion.

There are further questionable assumptions required to obtain results from income equivalence measures. Since its proponents can hardly observe

actual utility functions across large segments of the population, they necessarily employ generalized proxies. While Espenshade used the share of outlays on food in the household budget to represent welfare or utility levels, in what is often referred to as the Engel model, the more widely used Rothbarth model imputes the same utility levels to households with the same consumed levels of a specified adult-only good.[17] *A frequently used adult good is adult clothing so that child costs are estimated by the difference in aggregate spending in households with and without children but which spend the same proportions of their total expenditures on adult clothing*.

While dollar figures can be obtained from both the Engel and Rothbarth models, they require major limitation be imposed on the underlying household utility functions in order to draw any conclusions from the results obtained. On this point, Folbre (2008) writes:

> it is … impossible to directly measure the happiness of households with and without children … [and that the empirical proxies employed] are based on arbitrary assumptions about the relationship between material standards of living and happiness.

Other economists reach the same conclusion.[18] Browning, for example, following his review of these issues notes "it is difficult to see why this [approach] commands any widespread attention."[19] And Pollack and Wales (1979) reach the same outcome and judge such methods as "illegitimate."[20]

Because welfare or utility functions may differ widely between households with and without children, there are really no adequate means to compare the utility levels under the two circumstances. Therefore, there are no adequate means available to measure the relevant opportunity costs. All we can really do is measure the higher level of expenditures occasioned by the presence of children in a household. Those outlays represent the additional monetary expenditures associated with having children, and thereby comport with commonly accepted measures of household costs.

In the empirical analysis below, we offer estimates of these increased costs. To determine the monetary cost of children, we employ available data on household expenditures. In this effort, our approach is similar to that taken by the USDA in its annual reports. Where we differ with the USDA reports is not in their use of actual expenditure data but rather in the empirical methodology employed.

Prior to 2008, the USDA estimated expenditures for leading household collective goods such as housing, food, and transportation on a per capita basis by dividing the expenditures for a given category of outlays by the number of people in the household.[21] A variant of the USDA approach is

that employed by Lazear and Michael (1998). Instead of simply dividing expenditures for these household goods by the number of people in the household, Lazear and Michael allocate those costs to children in the same proportion as they observe for individual private goods. Since they find that an average family spends about 38% as much on a child as on an adult ($38 per child for every $100 spent per adult),[22] they allocate that proportion of household expenditures for housing, food, and transportation to each child in the household.

Whichever variant is employed, the USDA approach violates the economic principle that allocation decisions depend on marginal rather than average costs. Optimal decisions require balancing the additional benefits with the additional costs from any proposed action, which includes the decision to bring children into the household. And if that is the correct measure of cost to use when the original decision was made, it applies as well through the life of the decision. Both the USDA and the Lazear/Michael methods describe average costs and therefore do not represent the incremental costs of raising children.

Interestingly, the USDA authors have more recently taken a half step toward the correct marginal cost approach. In most recent reports, the authors reject the use of per capita housing outlays and suggest instead that "the presence of a child in a home does not affect the number of kitchens or living rooms, but does affect the number of bedrooms." For this reason, they write, a child's housing costs should be limited to "the average cost of an additional bedroom."[23] Implicit in that approach is the assumption that the same household with children would live in a similar dwelling but with one more bedroom. While that may sometime be the case, it will not always be so. Recall the reporter's account of her own housing expenses quoted earlier. In making this methodological shift, the USDA authors offer no supporting evidence that households with children spend more on housing, although of course that may often be the case.

Consider the den-nursery example mentioned earlier. The income equivalence method seeks to determine the child's housing costs by estimating the payment required by adults in the household to compensate them for the loss of the den through its transformation into a nursery. In contrast, the revised USDA method fixes the child's housing costs as the additional rental charge required to acquire a larger unit with an additional bedroom. *Neither approach estimates the additional expenditures actually made to raise the child.*

In the empirical analysis below, we employ the appropriate marginal cost concept to determine the costs of raising children. Within each of the

same household cost categories used in the USDA reports, we determine actual expenditures made with and without children for similar households in similar circumstances. To be sure, our approach ignores any utility foregone by the loss of the den in our example. However, as suggested above, utility valuations on specific items in the presence or absence of children can vary widely. Presumably, adults with and without children have quite different preferences over their use of living space, and all that can readily be concluded is that there is no adequate means by which to determine that element of cost. Our approach is therefore limited to determining the monetary costs of raising children.

THE EMPIRICAL FRAMEWORK

The computations reported here employ the same data source used by USDA: the CEXs conducted by the United States Census Bureau on characteristics, income, and expenditures for individual consumer units.[24] In this study, we employ data reported in each of four years, 2006–2009, rather than relying on only a single survey year as the USDA reports do.[25]

The principles described above ideally refer to an identical household that appears in two states of the world: the first without children, and the second with one or more children. The relevant measure of cost is then found by comparing expenditures between the two alternate states. To make this approach operational in an empirical analysis, we aggregate and compare similar households with and without children.[26]

Since parenting practices stem from a cultural foundation, they are likely to vary across regions and income classes. The latter may be particularly important because higher incomes permit increased expenditures on children. For this reason, we control for both factors in the empirical analysis below. We also distinguish between two-parent (married) and one-parent (single) households, since that factor also may lead to different child rearing practices.

To be sure, the available data do not permit a perfectly detailed analysis of individual practices and necessarily leave much variation unexplained. For this reason, we anticipate finding substantial variation around the central tendencies provided in the estimating equations. Our estimates provide child costs for the average household within the indicated income, region, and family structure categories.

As noted earlier, we use four years of CEX data. Observations from each yearly survey, which are reported in nominal dollars, are combined

with an adjustment made for changes in the average price level from the relevant year to the present, so that all costs are measured in 2011 dollars.[27] Across the four survey years from 2006 to 2009, we have a sample of 19,055 households for which all necessary data and information are available, with roughly 4,000−5,700 observations in each survey year. Of these households, 62% are married households, which include a husband and wife, and 38% are headed by single persons. Of the married households in our sample, 48% include at least one child and the rest do not include children. For single households, only 17% include at least one child.

Average income for the married households in the sample was $93,751, with a median value of $75,069. For single households, average household income was $41,643 and median household income was $31,992. Because these income values are averages over a four-year period, they are more akin to permanent than current incomes. Furthermore, these values apply to the entire household and thereby do not permit us to investigate how individual adult incomes influence expenditures on children.

In this sample, 94% of married households and 95% of single households live in urban areas. Moreover, the percentages of married and single households across the four census regions (Northeast, Midwest, South, and West) are evenly distributed, with 36% of the total in the South, just over 20% in both the Midwest and West, and just under 20% in the Northeast.

For each household in this sample, the CEX reports expenditure data for several broad categories, including the seven expenditure categories we analyze in this paper: Housing, Food, Transportation, Childcare and Education, Children's Clothing, Health Care, and Entertainment. We employ these data to determine the monetary cost of raising children in each of these categories.[28] A more detailed discussion of the data and variables used in the empirical analysis is contained in a Data Appendix available from the authors.

For household expenditures in each of these categories, we estimate the following regression equation:

$$E_i = a + bY_i + c_1K_1 + c_2K_2 + c_3K_3 + d\mathrm{CA}_i + \sum e_iX_{ij}$$

where E are category expenditures made by the ith household, Y_i is its income, K_j is one when there are j children in the ith household and zero otherwise, CA_i is the ChildAge measure derived by the U.S. Bureau of Labor Statistics (BLS) from the CEX data[29] and X_{ij} are dummy variables that reflect other household characteristics, specifically whether a household

lies in an urban or rural area, and also the region of the United States in which it is located.

For a childless household, the different values of K_j are all zero as is the variable indicating the age of children in the household. As a result, the coefficients on K_j, together with that for the associated CA_i variable, indicate the additional expenditures made on each cost category, E_i, when there are one, two, or three or more children in the household as compared with when there are none. The estimated values of the coefficients c and d thereby indicate the marginal category cost of including that number of children of a particular age distribution in the household.

We estimate this regression equation separately for five sub-samples of households by distinguishing between married and single households and for different income classes. Following the approach used in the USDA reports, the married household sample was divided into three equal sub-samples of 3,927 households each; the first sub-sample included all those with household income less than approximately \$56,000, while the second included those with income levels between approximately \$56,000 and \$101,000, and the third contained households with incomes greater than \$101,000. Then, to maintain as much comparability as possible, the first sub-sample for single households included all those with incomes below the same benchmark of roughly \$56,000; there were 5,710 households in that category, or 78% of all single households. The remaining 22% of single households with middle to high incomes were placed in the final sub-sample of 1,564 members.

THE ISSUE OF ENDOGENEITY AND THE QUANTITY–QUALITY TRADE-OFF

Before presenting our empirical results, we consider the issue of endogeneity, which can arise if the monetary cost of raising children substantially affects the number of children in the household. To be sure, a household's current number of children cannot be influenced by its current level of expenditures overall or in any category, and it is those expenditures that are measured by the data used here. When specific outlays are made, the number of children is already determined and not a decision variable. At the same time, the number of children may well have depended on anticipated outlays in the future which are correlated with current outlays.

As noted above, the full costs of raising children include both the time costs of the parents and the additional monetary costs of the household;

and there are reasons to believe that the former may be more important than the latter. There is evidence that two parents together, on average, provide nearly 21 hours of childcare per week,[30] which can be compared with a standard work week of 40 hours. Since monetary child costs rarely account for half of a household's total income, this comparison suggests the predominance of time costs.[31] In that case, it is unlikely that small changes in the monetary costs of child rearing would have an important impact on the decision to have more or fewer children.

However, there are various reasons why the number of children in a household and family income could be jointly determined. Not only does the number of children influence labor supply decisions particularly for women,[32] but also because expenditure patterns within the household are affected by its composition.[33] For these reasons, we include an income variable in our estimating equations as well as divide our overall sample according to income classes and marital status.

More relevant for our purposes is that where the monetary costs of raising children are greater, families may choose to have fewer children but spend more on each of them. In that case, there could be a quality–quantity trade-off, as proposed originally by Becker.[34] However, that factor is also accounted for in our regression equations, which measure not the average amounts spent per child but rather their marginal expenditures. Furthermore, the empirical evidence on this question is mixed. Consider the following three studies, which provide evidence on this trade-off.

The first study examines effects on child-related expenditures due to exogenous changes in family size. From his approach, the author finds that adding an additional sibling reduces prospects that older siblings will attend a private school or have their own bedroom.[35] These results are consistent with Becker's hypothesis that the quality and quantity of children are substitutes in household expenditures.

A second empirical study reaches a different conclusion. Looking at effects of third or more children on performance outcomes of prior children, the authors find that once instruments are included in the equations, there is "no evidence for negative consequences of increased sibship size on outcomes."[36] This paper suggests that the quality and quantity of children are neither complements nor substitutes.

Finally, a third study reaches a still different conclusion. It emphasizes the role played by a child's initial endowment as measured by his or her birth weight. The authors report "within family, the child with higher birth weight receives more investment in the form of higher quality

parenting … [so that] postnatal investments are greater for more highly endowed children."[37] They conclude:

> 1) early human capital and investments are complements in the production of late human capital, 2) parental investments reinforce differences, and 3) the degree of reinforcement increases with family size.[38]

Despite Becker's original supposition, whether the quality and quantity of children in a household are complements or substitutes remains an open question.

This issue is relevant for our empirical findings on the cost of children because improved quality is costly so that the shadow price of children increases with the quality level sought. It was for this reason primarily that we divided our sample of households into five sub-samples where each can be considered as representing a distinct quality level for children raised in those households. In effect, we are estimating the cost of raising children at, for example, an upper income and married quality standard. Child quality is then indicated by the income level and marital status of the household, and our cost estimates pertain to children raised under conditions where a particular quality level is sought.

If we could rely completely on this assumption, that would be the end of it. The number and age of children in a household would be exogenous and the resulting estimates would be unbiased. However, to the extent that quality levels differ within and not merely between our five sub-samples, then an element of endogeneity could appear. Households seeking higher quality child outcomes could spend more on their children than those less concerned with this matter so that the estimated coefficients pertaining to the number and age of children could be biased. That result could occur because the estimates are affected directly by an omitted variable indicating child quality.

While this problem may be present, it is attenuated by the income and marital status groupings within which the estimates are derived. Furthermore, for the expenditure categories that represent household collective goods, it seems unlikely that child quality objectives play a major role. Adults typically put their own interests first when major household decisions are made.[39] On the other hand, for the primary child-specific expenditure categories of Childcare and Education, and Children's Clothing, the endogeneity problem could be more pronounced.

Even if the endogeneity problem is present in these two expenditure categories, a critical question is the direction of the resulting bias. When the quality and quantity of children are substitutes, as Becker hypothesized,

then the estimated coefficients should be biased downward, while if they are complements, any bias goes in the opposite direction. However, as observed above, that matter remains an open question. These factors may be substitutes for one child but complements for larger numbers of children. What is apparent is that the direction of any remaining bias remains uncertain.

THE EMPIRICAL RESULTS: OVERVIEW

In the sections below, we estimate the regression equation specified above for seven leading household cost categories that appear in the CEX data set. For some categories, we get robust and statistically significant results, while for others, notably health care expenditures, we do not. Overall, the empirical results provide considerable insight into the contribution of children to household costs. Finally, we offer estimates of the aggregate monetary costs of raising children using the approach described above in comparison to estimates obtained from the two leading alternative approaches as well as with presumptive child support awards.

To be sure, the regression equation estimated below is a simple representation of the more complex process by which marginal child costs are actually determined. The equation accounts for the factors most likely to influence these costs such as income, child age, the number of children, and various demographic factors. In this paper, however, we do not fully unravel the complexities by which actual child costs are determined, or even estimate them with maximum econometric precision. Our data set is too limited for that. Instead, our analysis is intended to indicate which categories of marginal child costs are most significant and which do not greatly influence these costs. Another purpose is to compare our results with those obtained from the alternate methods often consulted in policy debates.

THE EMPIRICAL RESULTS: HOUSING

In most households, housing is the largest category of expenditures.[40] However, it is a household collective good that all members consume jointly. That fact, however, does not mean that these outlays should simply be divided among the household members to determine individual shares. Instead, as emphasized above and acknowledged in the most recent USDA

report, monetary costs are measured by how much greater are housing outlays in the presence of a child than they would be otherwise. Again, the relevant economic concept is the marginal cost of including a child or children in the household.[41]

The regression results for housing expenditures are presented in Table 1. Even though the sub-samples are limited by income levels, household income within each category still remains a highly significant factor affecting household expenditures on housing. The income coefficients are highly significant for each of the five sub-samples. Similarly, housing expenditures are significantly higher in urban than rural areas, and in the Northeast and West than in the Midwest and South. For comparison, we also present the results of estimating the regression equation for each cost category without the regional dummies, since regional distinctions frequently are not significant.

For our purposes, the most interesting results are those for the child indicator variables, K_j, for households with one, two, and three or more children, respectively (labeled here as Kids1, Kids2, and Kids3+). In nearly all cases, the coefficients for housing expenditures are highly statistically significant.

We pay particular attention to the size of the coefficients for the various child indicator variables. For low-income married households, those with one child spend on average between $970 and $995 per year more on housing than do comparable childless households; while those with two children spend on average between $1,439 and $1,522 more per year. In the case of comparable households with three or more children, their outlays rise slightly less to between $1,320 and $1,346, again as compared with childless households in the same sub-sample.

The marginal cost of the second child is the difference between the coefficients of Kids2 and Kids1; and therefore we also test the significance of the difference between these coefficients. As indicated, this difference is statistically significant for these households. They spend between $469 and $527 more on housing with two children than they had spent for only one. Note however, that the marginal housing cost of the second child is only about half of that spent with only one child.

Furthermore, for these households, there is no indication here that housing costs for three or more children are any greater on average than for two children. The coefficient for Kids3+ is somewhat smaller although the difference is not statistically significant. Our best estimate is that for these households, the marginal housing cost of children beyond the second is

Table 1. Housing Costs.

Income Group	Constant	Income	ChildAge	Number of Children			Urban	Northeast	Midwest	West	R^2	N
				Kids1	Kids2	Kids3 +						
Married households												
Low	−324.67	0.11**	14.51	969.81**	1,438.92**†	1,319.86**	1,284.67**	1,319.15**	226.79	1,061.27**	0.18	3,927
	(−1.25)	(22.25)	(0.52)	(5.57)	(8.05)	(6.61)	(6.48)	(7.62)	(1.49)	(7.00)		
	1,207.02**	0.11**	12.93	994.75**	1,521.92**†	1,345.54**					0.15	3,927
	(6.25)	(22.46)	(0.46)	(5.63)	(8.39)	(6.64)						
Middle	−948.38	0.10**	−129.94**	1,133.05**	1,852.55**†	2,162.91**†	2,096.85**	1,541.70**	778.98**	2,228.23**	0.08	3,927
	(−1.36)	(12.55)	(−3.20)	(4.14)	(6.85)	(6.31)	(5.30)	(5.45)	(3.05)	(8.58)		
	1,703.80**	0.10**	−132.44**	1,188.15**	1,920.14**†	2,282.15**†					0.06	3,927
	(2.81)	(12.78)	(−3.21)	(4.29)	(7.00)	(6.58)						
High	−1,979.81	0.07**	−247.39**	2,660.91**	4,110.62**†	4,493.77**†	4,639.86**	2,603.14**	239.63	2,650.34**	0.20	3,927
	(−1.62)	(28.08)	(−3.26)	(5.06)	(8.09)	(6.82)	(4.09)	(4.88)	(0.45)	(5.26)		
	3,495.86**	0.08**	−240.59**	2,757.54**	4,211.62**†	4,588.27**†					0.19	3,927
	(6.40)	(28.48)	(−3.14)	(5.21)	(8.24)	(6.91)						
Single households												
Low	352.71*	0.12**	−51.65	1,045.79**	1,402.35**	1,134.08**	655.88**	388.70**	−205.88**	490.09**	0.27	5,710
	(1.89)	(41.95)	(−0.86)	(3.83)	(5.25)	(3.44)	(3.86)	(3.46)	(−2.00)	(4.43)		
	1,039.01**	0.13**	−47.29	1,045.78**	1,398.59**	1,116.99**					0.26	5,710
	(11.43)	(42.42)	(−0.79)	(3.82)	(5.21)	(3.38)						
Middle/high	1,725.59	0.07**	411.10	−495.17	4,720.49**†	2,181.6	1,463.99	2,057.13**	−121.39	2,542.14**	0.18	1,564
	(1.12)	(15.09)	(1.18)	(−0.29)	(2.91)	(0.92)	(0.99)	(3.38)	(−0.19)	(4.60)		
	4,211.57**	0.07**	327.59	−148.13	4,952.19**†	2,794.18					0.16	1,564
	(8.74)	(15.16)	(0.93)	(−0.09)	(3.03)	(1.17)						

*Indicates 90% confidence.
**Indicates 95% confidence.
†Indicates 95% confidence in difference from Kids1 coefficient.

zero. Taken together, these findings suggest the presence of scale economies in housing, especially with a third child in the household.

The estimated parameters are a bit larger for low-income single households. With one child, housing costs are $1,046 more per year than childless, single households, which in turn is about 6% per year more than is spent by comparable married households. This suggests having one child increases housing expenditures for low-income single households by more than for married households with comparable incomes. In contrast, for middle/high-income single households, there is no evidence in these data that including a single child in the household increases average housing costs at all.

However, that is not the case for any additional children. Housing costs in single households are approximately $1,400 more per year for two children, which is about 5% less per year than in married households. While the coefficient for Kids2 is significantly different from zero, it is not significantly greater than that for Kids1, which means that we cannot reject the hypothesis that housing costs are the same in these households. As before, housing costs for three or more children are somewhat lower than for two children, at just over $1,100 per year, although this difference is again not statistically significant. Interestingly, the housing coefficient for Kids3+ is lower than that for Kids2 in three of the five sub-samples but even when higher in the other two sub-samples, the difference is not statistically significant. This finding suggests that housing costs for three or more children are often not greater than for two children. Overall and for all income classes, there appear to be substantial economies of scale in children's housing costs.

The estimated coefficients for both middle-income and high-income married households are understandably higher. For high-income married households, with incomes greater than approximately $101,000, housing costs with one child are $2,709 per year higher as compared with childless households. In the case of single households, with incomes greater than approximately $56,000, the results are somewhat different. The regression coefficients for these households with one child are not significant, which indicates that housing expenditures are generally about the same as in single households with no children.

A possible explanation for this result is that a common housing unit occupied by these households includes two bedrooms, which leads to the same housing costs regardless of how the second bedroom is used. With two children, however, additional housing costs in high-income single households are sharply higher, ranging from roughly $4,700 to $4,900 per

year. Furthermore, the coefficients for three or more children are not statistically significant and are not meaningfully different from those in single households with two children.

These equations also include the "ChildAge" variable derived by the BLS from underlying data in the CEX about the ages of children in each household. As noted earlier, it has values running from 0 to 7 where higher values indicate the presence of older children. Interestingly, this variable is not generally statistically significant in the housing regressions. For most households, housing costs of younger and older children are not widely different. Even where the coefficient is significant (for middle- and high-income married households), it is negative, implying that older children are slightly less costly, although the differences here are minimal.

There are other interesting features of these regression equations. Housing expenditures in urban areas are always higher than those in rural locales; and higher in the Northeast and West than in the Midwest and South. In addition, higher incomes, even within these limited income categories, lead generally to higher expenditures for housing. For married households, an additional dollar of income leads to 11 cents more spent on housing in low-income households, 10 cents more in middle-income households, and 8 cents more in high-income households. For single households, the results are comparable: 13 cents additional expenditures follow from each dollar of income for low-income households and 7 cents for high-income single households. As expected, increased incomes lead to greater expenditures on housing especially for low-income households.

THE EMPIRICAL RESULTS: FOOD

Like Housing, Food is consumed collectively in the household so the CEX data are reported only for total household outlays. The dependent variable in the estimating equations is household outlays for food, whether consumed within the home or outside.[42] The regression equations are again estimated for the five income groups, and the results are given in Table 2.

As with Housing, even within income groups, household income remains an important factor affecting these outlays, but with a smaller impact; less than 5 cents of an additional dollar of income is spent on food. Interestingly, the region of the country in which a household is located is not typically a significant explanatory variable, nor is the urban/rural divide except for high-income married households.

Table 2. Food Costs.

Income Group	Constant	Income	ChildAge	Number of Children			Urban	Northeast	Midwest	West	R^2	N
				Kids1	Kids2	Kids3 +						
Married households												
Low	1,358.19**	0.04**	65.30**	274.82**	473.73**†	792.94**†	163.73*	18.50	−245.58**	24.49	0.12	3,927
	(10.89)	(16.34)	(4.92)	(3.29)	(5.53)	(8.28)	(1.72)	(0.22)	(−3.36)	(0.34)		
	1,467.22**	0.04**	66.02**	289.35**	494.88**†	795.81**†‡					0.11	3,927
	(16.10)	(16.24)	(4.97)	(3.47)	(5.78)	(8.33)						
Middle	1,766.53**	0.02**	112.69**	−123.10	486.89**†	1,017.33**†‡	283.28*	163.08	−269.98**	188.78*	0.07	3,927
	(6.54)	(8.13)	(7.15)	(−1.16)	(4.63)	(7.64)	(1.84)	(1.48)	(−2.73)	(1.87)		
	2,019.85**	0.02**	112.85**	−99.21	499.21**†	1,029.29**†‡					0.06	3,927
	(8.68)	(8.16)	(7.13)	(−0.93)	(4.74)	(7.73)						
High	1,462.64**	0.02**	171.35**	34.80	741.37**†	1,376.55**†‡	1,168.77**	358.69**	−495.94**	114.78	0.12	3,927
	(3.65)	(18.47)	(6.87)	(0.20)	(4.45)	(6.37)	(3.14)	(2.05)	(−2.87)	(0.69)		
	2,518.46**	0.02**	171.05**	63.98	777.46**†	1,383.92**†‡					0.11	3,927
	(14.11)	(18.88)	(6.84)	(0.37)	(4.66)	(6.38)						
Single households												
Low	884.61**	0.04**	97.37**	112.21	565.52**†	973.76**†‡	146.22**	−47.84	−220.74**	95.38**	0.19	5,710
	(10.86)	(28.13)	(3.73)	(0.94)	(4.85)	(6.78)	(1.97)	(−0.98)	(−4.92)	(1.98)		
	959.68**	0.04**	100.75**	115.38	566.57**†	977.08**†‡					0.18	5,710
	(24.24)	(28.54)	(3.85)	(0.97)	(4.85)	(6.78)						
Middle/high	1,827.86**	0.01**	321.80**	−610.27	513.92†	1,548.30**†	315.47	415.57**	−206.50	359.19**	0.14	1,564
	(4.22)	(10.53)	(3.30)	(−1.27)	(1.13)	(2.34)	(0.76)	(2.44)	(−1.18)	(2.32)		
	2,269.36**	0.01**	311.78**	−563.81	537.17†	1,660.82**†‡					0.13	1,564
	(16.90)	(10.64)	(3.19)	(−1.18)	(1.18)	(2.50)						

*Indicates 90% confidence.
**Indicates 95% confidence.
†Indicates 95% confidence in difference from Kids1 coefficient.
‡Indicates 95% confidence in difference from Kids2 coefficient.

Unlike housing expenditures, the ChildAge variable is always a significant explanatory factor in food costs. With older children in the household, we find higher expenditures on food, which increases with income. Also important is the number of children in the household. Overall, the presence of children in a household increases expenditures on food. However, the increase for the first child is not significant for any group except for low-income married households. Except in that case, adding a single child to the household does not substantially increase average food costs. Beyond one child, however, the increased cost of food can be quite pronounced. In all five sub-samples, two or more children significantly increase household spending on food, and, unlike the case of housing expenditures, three or more children lead to further increases in expenditures on food relative to households with two children. Strikingly, the marginal food cost per child beyond the second does not appear to decline with the number of children in the household.

For example, in low-income married households, additional food costs are approximately $484 per year for two children, increasing to approximately $795 per year for three or more children. The increases are even higher in low-income single households, $566 and $975 per year, respectively; although high-income married households see bigger increases in food expenditures for two or more children than comparable single households. Apparently, regardless of marital status or income level, food budgets are minimally affected by the presence of a first child but are affected substantially by the presence of a second child, and again for three or more children.

THE EMPIRICAL RESULTS: TRANSPORTATION

Transportation services are consumed both individually and collectively within the household. For a given trip, automobile costs are largely the same regardless of the number of passengers. However, it could be that many trips would not be made in the absence of children.

The available data provide total household expenditures on transportation, and comparable regression equations employing these data are provided in Table 3. As before, household income directly affects transportation expenditures in all categories. Among low-income married households, 7 cents from each additional dollar of income, on average, is spent on transportation as compared to 5 cents of each additional dollar

Table 3. Transportation Costs.

Income Group	Constant	Income	ChildAge	Number of Children			Urban	Northeast	Midwest	West	R^2	N
				Kids1	Kids2	Kids3 +						
Married households												
Low	277.49	0.07**	38.68	260.11	168.06	376.81**	−293.93	−133.70	−225.77	116.30	0.07	3,927
	(1.14)	(16.11)	(1.49)	(1.59)	(1.00)	(2.01)	(−1.58)	(−0.82)	(−1.58)	(0.82)		
	−5.10	0.07**	39.68	279.58*	188.46	395.86**					0.07	3,927
	(−0.03)	(15.96)	(1.53)	(1.72)	(1.13)	(2.12)						
Middle	1,964.23**	0.05**	100.54**	−203.00	153.70	−66.41	−312.61	−317.18	−458.29	−282.14	0.01	3,927
	(2.58)	(5.84)	(2.26)	(−0.68)	(0.52)	(−0.18)	(−0.72)	(−1.02)	(−1.64)	(−0.99)		
	1,504.22**	0.05**	101.16**	−190.56	151.57	−71.77					0.01	3,927
	(2.30)	(5.76)	(2.27)	(−0.64)	(0.51)	(−0.19)						
High	3,648.72**	0.02**	263.46**	554.37	−507.97	248.01	−208.80	−364.37	127.35	707.39	0.02	3,927
	(2.78)	(8.69)	(3.23)	(0.98)	(−0.93)	(0.35)	(−0.17)	(−0.64)	(0.22)	(1.31)		
	3,603.47**	0.02**	262.97**	548.48	−484.18	274.88					0.02	3,927
	(6.19)	(8.66)	(3.22)	(0.97)	(−0.89)	(0.39)						
Single households												
Low	422.61**	0.05**	63.85	84.42	102.63	52.47	−275.32**	17.73	74.12	49.38	0.10	5,710
	(2.99)	(24.30)	(1.41)	(0.41)	(0.51)	(0.21)	(−2.14)	(0.21)	(0.95)	(0.59)		
	204.29**	0.05**	64.67	72.06	94.96	37.15					0.10	5,710
	(2.98)	(24.22)	(1.43)	(0.35)	(0.47)	(0.15)						
Middle/high	−363.08	0.05**	387.24	−812.65	−232.03	640.23	187.18	25.92	−113.85	100.14	0.09	1,564
	(−0.26)	(11.65)	(1.24)	(−0.53)	(−0.16)	(0.30)	(0.14)	(0.05)	(−0.20)	(0.20)		
	−175.47	0.05**	380.43	−772.68	−213.13	691.17					0.09	1,564
	(−0.41)	(11.70)	(1.22)	(−0.51)	(−0.15)	(0.33)						

*Indicates 90% confidence.
**Indicates 95% confidence.

among low-income single households. As income levels increase, for both types of households, these amounts decline.

As with Food, but somewhat surprisingly for Transportation, the urban/rural divide does not appear to have a significant effect on transportation costs except in the case of low-income single households. In these circumstances, expenditures made in rural areas are higher, perhaps due to a relative lack of lower-cost public transportation options in rural areas.

Strikingly, for this category of expenditures, the number of children in the household is never a significant factor explaining expenditures, with the sole exception of low-income married households with three or more children. Apparently, only in that case does the number of children lead to higher transportations costs, by approximately $386 per year. In all other circumstances, our regression estimates give no indication that the presence of children leads to increased transportation costs independent of the age of children in a household. However, the ChildAge variable is only significant in middle-income to high-income married households, but then merely by $101 and $263 per year, respectively.

THE EMPIRICAL RESULTS: CHILDCARE AND EDUCATION

Unlike the previous categories of household expenditures, outlays on Childcare and Education are made specifically for children. We therefore expect them to be more closely related to the presence of children in the household.

Because few if any outlays in this category are made in households without children, there are a large number of zero values for the dependent variable. This clustering of observations at a single value creates a well-known statistical problem with a standard econometric specification available to account for it, which is termed a Tobit regression.[43] Therefore, we estimated the regression equations for expenditures on Childcare and Education using Tobit regressions rather than linear (ordinary least squares) regressions.[44] Table 4 reports the results.

As reported there, high-income households, whether married or single, spend more on their children for these services than for Food. Low-income married households spend roughly an additional $1,220–$1,450 per year on childcare and education costs. Low-income single households spend slightly more at $1,740–$1,940 per year. High-income households spend

Table 4. Childcare and Education Costs (Tobit).

Income Group	Constant	Income	ChildAge	Number of Children			Urban	Northeast	Midwest	West	R^2	N
				Kids1	Kids2	Kids3 +						
Married households												
Low	−2,608.81**	0.02**	−22.00	1,229.26**	1,448.06**†	1,386.71**	−70.31	−84.36	126.57*	−94.05	0.06	590
	(−15.68)	(8.45)	(−1.56)	(13.69)	(15.86)	(14.24)	(−0.75)	(−0.98)	(1.78)	(−1.33)		
	−2,672.41**	0.02**	−22.14	1,219.46**	1,432.35**†	1,384.31**†					0.06	590
	(−18.55)	(8.47)	(−1.57)	(13.61)	(15.76)	(14.26)						
Middle	−4,357.33**	0.02**	−75.38**	2,520.83**	2,806.23**†	2,917.45**†	−148.73	−396.16**	81.61	58.18	0.04	1,061
	(−12.98)	(6.41)	(−3.65)	(18.44)	(20.61)	(18.79)	(−0.86)	(−3.04)	(0.73)	(0.52)		
	−4,488.61**	0.02**	−76.04**	2,511.63**	2,800.39**†	2,933.18**†					0.04	1,061
	(−15.09)	(6.31)	(−3.68)	(18.41)	(20.60)	(18.90)						
High	−8,660.28**	0.01**	−95.42**	5,524.43**	6,531.47**†	7,213.56**†‡	594.09	−223.52	392.20	−31.16	0.03	1,427
	(−11.85)	(8.43)	(−2.11)	(18.11)	(22.12)	(20.81)	(0.91)	(−0.80)	(1.44)	(−0.12)		
	−8,032.26**	0.01**	−92.87**	5,519.25**	6,524.38**†	7,222.10**†‡					0.03	1,427
	(−22.32)	(8.37)	(−2.05)	(18.12)	(22.14)	(20.84)						
Single households												
Low	−1,935.65**	0.01**	−186.29**	1,758.78**	1,933.26**†	1,763.63**	−136.85	−92.39	50.46	106.64*	0.08	488
	(−14.15)	(7.97)	(−8.15)	(15.50)	(16.84)	(12.90)	(−1.39)	(−1.33)	(0.82)	(1.69)		
	−2,040.16**	0.01**	−184.33**	1,744.02**	1,921.11**†	1,761.58**					0.08	488
	(−19.98)	(7.91)	(−8.08)	(15.43)	(16.78)	(12.92)						
Middle/high	−4,522.32**	0.01**	−478.05**	5,314.45**	7,178.30**†	6,848.68**†	−466.28	−433.51	−239.35	−481.64	0.06	217
	(−4.90)	(2.50)	(−3.39)	(7.35)	(10.12)	(6.96)	(−0.55)	(−1.17)	(−0.64)	(−1.45)		
	−5,216.91**	0.01**	−459.79**	5,255.77**	7,117.20**†	6,737.58**†					0.06	217
	(−12.24)	(2.38)	(−3.29)	(7.35)	(10.10)	(6.90)						

*Indicates 90% confidence.
**Indicates 95% confidence.
†Indicates 95% confidence in difference from Kids1 coefficient.
‡Indicates 95% confidence in difference from Kids2 coefficient.

even more: approximately \$5,520–\$7,220 in married households and \$5,255–\$7,180 in single households. A consistent theme in these findings is that household outlays on Childcare and Education represent a major share of total child costs.

Although outlays to cover childcare and educational expenses are higher in higher income categories, they do not increase substantially with increased incomes within each sub-sample. Although income remains a significant factor, a dollar of additional income leads to only an additional cent or two in childcare and educational spending. Similarly, neither the urban/rural divide nor the geographic region has a significant effect on these expenditures.

On the other hand, adding more children to a household within each sub-sample leads to significantly greater expenditures for these services, but only up through a second child. Strikingly, there is no statistically significant support for finding that these outlays continue to increase in the presence of a third or more children. For low-income households, whether married or single, outlays with three or more children are apparently lower than those with two children. A possible explanation is that older children in larger, low-income families can look after their younger siblings, resulting in lower monetary childcare or schooling costs. In middle- and high-income households, the estimated coefficients for three or more children are higher than for two children, but the difference between coefficients is statistically significant only in high-income married households.

An important feature of the results for Childcare and Education is the finding that older children have lower costs, implying that these outlays are mainly for childcare. The ChildAge coefficients are always negative and statistically significant everywhere except in low-income married households. For these expenditures, older children lead on average to lower costs.

THE EMPIRICAL RESULTS: CHILDREN'S CLOTHING

The next category of children's expenditures is that for Children's Clothing. Again, since these outlays are used specifically by children, the relevant observations are generally zero for childless households. Since those observations are necessarily zero, there is a cluster of observations at that value, which again requires the Tobit correction. These results are presented in Table 5.

Table 5. Children's Clothing Costs (Tobit).

Income Group	Constant	Income	ChildAge	Number of Children			Urban	Northeast	Midwest	West	R^2	N
				Kids1	Kids2	Kids3 +						
Married households												
Low	−381.13**	0.00**	−11.32**	325.48**	407.22**†	478.58**†‡	−27.34	−11.00	14.85	−9.44	0.05	1,348
	(−13.65)	(5.93)	(−3.85)	(18.75)	(23.10)	(24.88)	(−1.41)	(−0.63)	(0.99)	(−0.65)		
	−405.32**	0.00**	−11.34**	324.23**	404.88**†	478.08**†‡					0.05	1,348
	(−18.41)	(5.93)	(−3.85)	(18.72)	(23.04)	(24.95)						
Middle	−396.23**	0.00**	−11.66**	339.65**	436.27**†	540.47**†‡	−35.40	−6.82	41.99**	22.43	0.03	1,698
	(−7.86)	(3.13)	(−3.75)	(17.03)	(22.23)	(22.95)	(−1.28)	(−0.34)	(2.33)	(1.23)		
	−412.78**	0.00**	−11.71**	337.21**	435.61**†	541.71**†‡					0.03	1,698
	(−9.42)	(3.10)	(−3.77)	(16.93)	(22.20)	(23.05)						
High	−389.92**	0.00**	−19.55**	455.17**	623.79**†	750.01**†‡	−26.29	−5.20	13.51	24.23	0.03	1,905
	(−6.42)	(2.92)	(−4.86)	(17.16)	(24.52)	(24.13)	(−0.47)	(−0.20)	(0.53)	(1.01)		
	−405.49**	0.00**	−19.51**	454.21**	623.38**†	750.29**†‡					0.03	1,905
	(−14.27)	(2.86)	(−4.86)	(17.14)	(24.56)	(24.15)						
Single households												
Low	−387.45**	0.00**	−28.40**	428.21**	493.65**†	538.00†	−62.76**	0.78	−1.67	0.86	0.07	940
	(−14.06)	(7.36)	(−4.86)	(15.30)	(17.81)	(16.10)	(−2.82)	(0.05)	(−0.12)	(0.06)		
	−445.85**	0.00**	−28.09**	427.04**	492.90**†	535.18**†					0.07	940
	(−24.01)	(7.25)	(−4.80)	(15.24)	(17.76)	(16.01)						
Middle/high	−460.27**	0.00	−33.92*	561.71**	872.04**†	889.19**†	−43.43	6.78	50.92	−67.27*	0.06	308
	(−4.31)	(0.40)	(−1.86)	(6.12)	(9.94)	(7.21)	(−0.44)	(0.16)	(1.20)	(−1.69)		
	−505.25**	0.00	−29.05	534.79**	856.58**†	859.65**†					0.06	308
	(−11.73)	(0.23)	(−1.60)	(5.87)	(9.79)	(6.99)						

*Indicates 90% confidence.
**Indicates 95% confidence.
†Indicates 95% confidence in difference from Kids1 coefficient.
‡Indicates 95% confidence in difference from Kids2 coefficient.

Again, we see that income, even within each sub-sample, is statistically significant in all but one case (high-income single households) but is effectively zero, so that an additional dollar of income has a minimal impact on expenditures. Similarly, neither the urban/rural distinction nor regional differences appear as important causative factors. In contrast, the ChildAge variable is always negative, and is significant in all but one case (high-income single households), indicating that greater outlays for clothing are made generally for younger children.

More relevant for our purposes are the estimated coefficients for the three-child indicator variables. In all cases, they indicate the anticipated positive and significant values. Of interest is the finding that, at similar income levels, outlays on Children's Clothing are generally higher in single than in married households. At low-income levels, married households spend an additional \$325, \$407, and \$479 per year on clothing for one, two, and three-plus children, respectively; comparable single households spend \$428, \$493, and \$538 per year, or between 12% and 32% more. At higher incomes, married households spend considerably more on children's clothing, ranging from \$454 per year for one child to \$750 per year for three or more children. High-income single families spend slightly more: \$562 per year for one child to \$889 per year for three or more children. In married households at all income levels, spending on children's clothing increases significantly from one to two children, as well as from two to three or more children. In single households, however, this difference is significant only between one and two children, but not for any additional children.

THE EMPIRICAL RESULTS: HEALTH CARE

Initially, we estimated similar Tobit equations for household outlays on health care, but the results were both different and disappointing. Few of the coefficients for the presence of children in the household were significant and many were negative. An important reason for these results is that, unlike other expenditure categories, households pay directly only a minor share of their health care costs. For high-income households, employers pay the largest share of these outlays in the form of health insurance benefits, which are not included in taxable earnings. In contrast, for low-income

households, government agencies and charitable organizations often provide many health care services at minimal direct cost.

Furthermore, unlike other expenditure categories, these costs are strongly influenced by the age of the adults in the household. Older adults spend far more on health care than younger adults or children, both in total and out-of-pocket, which is another factor that confounds the empirical analysis. Because many households without children include older adults, we constructed a more limited sample of households designed to be more comparable to those that include children. This sub-sample is limited to households without children but where the older adult is less than 60 years of age.

Table 6 summarizes some relevant data on health care expenditures by the households in our CEX sample. As indicated there, households with children spend $1,053 per year on average on health care, which is less than the amount spent by households without children of $1,173 but greater than the $805 per year spent by childless households where the primary adult is under age 60. Moreover, this latter difference (between $1,053 and $805) is statistically significant at the conventional 5% confidence level. Interestingly, households with children spend significantly more than childless households only in single households.

Another distinctive feature about health care costs is that they are highly skewed. Most households make out-of-pocket payments of less than $200 per year; these households represent about 60% of the total for both those with and without children. At the other end of the spectrum, 14% of all households, whether with or without children, spend more than $1,000 per year. Households apparently treat health care costs differently than other types of expenditures. Not only they are closely related to the age of the adults in the household but they also depend heavily on external factors, which accounts for their highly skewed distribution.

Although these data suggest that single households with children may spend more on health care than do comparable households without children, this observation offers little insight on the amounts actually spent on children. For high-income single households, the average yearly difference between households with and without children is $258 (i.e., $917 per year less $659 per year); of which $159 (61%) are higher out-of-pocket costs and $99 are higher average insurance premiums. However, our estimating equations yield no indication that these average differences can be linked to the presence or number of children.

Table 6. Summary of Health Care Costs.

Panel A: Composition of Health Care Costs

($avg/Year)	Married			Single		
	Low	Middle	High	Low	Middle/High	Total
With children						
Observations	1,632	1,913	2,068	984	282	6,879
Average age of reference person	37	40	43	37	44	40
Insurance premiums	$339	$661	$872	$176	$432	$569
Out-of-pocket costs	$258	$528	$774	$162	$484	$484
Total health care costs	$596	$1,190	$1,646	$337	$917	$1,053
Without children						
All households						
Observations	2,295	2,014	1,859	4,726	1,282	12,176
Average age of ref. person	61	54	53	51	47	53
Insurance premiums	$962	$958	$1,033	$333	$427	$672
Out-of-pocket costs	$587	$733	$947	$208	$415	$501
Total health care costs	$1,549	$1,691	$1,980	$542	$842	$1,173
Households with ref. person <60 years old						
Observations	914	1,272	1,344	2,965	1,044	7,539
Average age of ref. person	45	46	48	38	42	42
Insurance premiums	$406	$687	$810	$163	$334	$420
Out-of-pocket costs	$387**	$579	$798	$135	$325**	$385**
Total health care costs	$793**	$1,266	$1,608	$298*	$659**	$805**

Panel B: Distribution of Out-of-Pocket Health Care Costs (Observations by Income Group)

	Married			Single		
	Low	Middle	High	Low	High	Total
With children						
$0/year	777	555	357	545	86	2,320
	48%	29%	17%	55%	30%	34%
<$100/year	276	327	303	179	51	1,136
	17%	17%	15%	18%	18%	17%
$100–$200/year	133	158	203	73	22	589
	8%	8%	10%	7%	8%	9%
$200–$500/year	200	321	383	101	59	1,064
	12%	17%	19%	10%	21%	15%
$500–$1,000/year	123	264	360	46	28	821
	8%	14%	17%	5%	10%	12%
>$1,000/year	123	288	462	40	36	949
	8%	15%	22%	4%	13%	14%
Without children						
$0/year	594	417	300	2,146	496	3,953
	26%	21%	16%	45%	39%	32%
<$100/year	314	300	239	974	237	2,064
	14%	15%	13%	21%	18%	17%

Table 6. (*Continued*)

Panel B: Distribution of Out-of-Pocket Health Care Costs (Observations by Income Group)

	Married			Single		
	Low	Middle	High	Low	High	Total
$100–$200/year	235	192	174	453	124	1,178
	10%	10%	9%	10%	10%	10%
$200–$500/year	436	371	363	606	185	1,961
	19%	18%	20%	13%	14%	16%
$500–$1,000/year	324	301	295	295	105	1,320
	14%	15%	16%	6%	8%	11%
>$1,000/year	392	433	488	252	135	1,700
	17%	21%	26%	5%	11%	14%

*Indicates statistically differences in average cost with vs. without children with 90% confidence.

**Indicates statistically differences in average cost with vs. without children with 95% confidence.

Table 7. Summary of Entertainment Costs.

	Married			Single		
	Low	Middle	High	Low	Middle/High	Total
Number of observations						
With children	1,632	1,913	2,068	984	282	6,879
Without children	2,295	2,014	1,859	4,726	1,282	12,176
Total	3,927	3,927	3,927	5,710	1,564	19,055
Entertainment expenditures ($avg/year)						
With children	$445	$1,019	$2,050	$369	$1,283	$1,111
Without children	$487	$935	$1,807	$346	$914	$753

THE EMPIRICAL RESULTS: ENTERTAINMENT

Our final category of household expenditures for children refers to Entertainment. Table 7 summarizes entertainment spending by households with and without children in each of our five sub-samples. The data indicate that households with children spend substantially more on average on entertainment than those without children. Across all households, households with children spend $1,111 per year on entertainment as compared with $753, or 48% less, for households without children. Furthermore, such differences persist across all household types except for low-income

married households. At high-income levels, married households with children spend $243 (13%) more per year, and single households with children spend $369 (40%) more per year. In relative terms, therefore, single households spend more on entertainment in the presence of children than do comparable married households. These differences are statistically significant.

As with other expenditure categories, we estimated regression equations for entertainment expenditures in the same form as those reported earlier. Table 8 reports the results, which indicate that neither the presence, number, or age of children in a household significantly explain its entertainment outlays. For single households, none of the estimated coefficients for the number of children is statistically significant. For married households, the estimated coefficients are both positive and significant for middle-income households with two children and for high-income households with three or more children. The corresponding cost estimates are approximately $202 and $468, respectively. There is no indication in these results that low-income married or single households bear any entertainment costs for their children, or that having one child results in additional entertainment costs in any of the sub-samples. Strikingly, only for middle/high-income single households are the ChildAge variables positive and significant.

AGGREGATE MONETARY CHILD COSTS

The CEX data set also includes expenditures used exclusively by adults such as Adult Clothing and Beverages as well as for miscellaneous expenditures such as those on Personal Care Items and Reading Material. Presumably, increased outlays on children lead to lower outlays in such categories as well as to lower savings and taxes.

In the discussion above, we considered seven categories of expenditures (i.e., Housing, Food, Transportation, Childcare and Education, Children's Clothing, Health Care, and Entertainment), which together accounted for between 72% and 82% of total household expenditures in each of the five sub-samples:

Married households	
Low income	82%
Medium income	79%
High income	75%
Single households	
Low/medium income	79%
High income	72%

Table 8. Entertainment Costs.

Income Group	Constant	Income	ChildAge	Number of Children			Urban	Northeast	Midwest	West	R^2	N
				Kids1	Kids2	Kids3+						
Married households												
Low	105.13**	0.01**	−14.68**	−49.67	−0.55	−13.15	−68.30*	48.81	47.94*	4.44	0.05	3,927
	(2.13)	(13.03)	(−2.79)	(−1.50)	(−0.02)	(−0.35)	(−1.82)	(1.49)	(1.65)	(0.15)		
	60.21*	0.01**	−14.65**	−54.82*	−6.28	−17.88					0.04	3,927
	(1.67)	(13.19)	(−2.79)	(−1.66)	(−0.19)	(−0.47)						
Middle	120.60	0.01**	3.70	−65.84	202.29**†	89.93	−140.68	118.65	187.17**	171.35**	0.01	3,927
	(0.66)	(5.41)	(0.34)	(−0.91)	(2.82)	(0.99)	(−1.34)	(1.58)	(2.77)	(2.49)		
	89.90	0.01**	3.64	−70.85	202.76**†	94.77					0.01	3,927
	(0.57)	(5.44)	(0.34)	(−0.98)	(2.83)	(1.05)						
High	−391.90	0.01**	28.42	105.91	95.72	461.27**†‡	468.40*	90.51	277.88**	229.22*	0.05	3,927
	(−1.30)	(14.17)	(1.52)	(0.82)	(0.76)	(2.84)	(1.67)	(0.69)	(2.14)	(1.85)		
	189.08	0.01**	29.70	109.45	98.18	474.37**†‡					0.05	3,927
	(1.41)	(14.26)	(1.58)	(0.84)	(0.79)	(2.92)						
Single households												
Low	61.64	0.01**	−0.94	17.05	2.80	−41.25	−49.56	27.36	51.61**	44.40*	0.06	5,710
	(1.59)	(18.43)	(−0.08)	(0.30)	(0.05)	(−0.60)	(−1.41)	(1.18)	(2.42)	(1.94)		
	44.06**	0.01**	−0.85	11.67	−0.50	−46.35					0.06	5,710
	(2.35)	(18.36)	(−0.07)	(0.21)	(−0.01)	(−0.68)						
Middle/high	64.14	0.00**	116.78**	−428.30	308.48†	21.08	277.87	153.46	119.36	233.05**	0.06	1,564
	(0.26)	(6.76)	(2.06)	(−1.54)	(1.17)	(0.05)	(1.16)	(1.56)	(1.18)	(2.60)		
	453.13**	0.00**	108.66*	−398.61	331.49†	64.93					0.05	1,564
	(5.84)	(6.83)	(1.92)	(−1.44)	(1.26)	(0.17)						

*Indicates 90% confidence.
**Indicates 95% confidence.
†Indicates 95% confidence in difference from Kids1 coefficient.
‡Indicates 95% confidence in difference from Kids2 coefficient.

These percentages do not include savings, taxes paid or any changes in the value of household assets, all of which are included in the reported measures of household income.

Although the regression equations reported above provide estimated child costs for the various expenditure categories, aggregating these values requires deciding on the statistical significance of the coefficients to be included. Even when a regression coefficient is not significantly different from zero at conventional confidence levels, the coefficient still offers the best available estimate of the underlying parameter. In addition, the fact that one cannot reject at conventional confidence levels the null hypotheses that the true underlying coefficient equals zero does not mean that the actual coefficient is zero.

Coefficients are statistically significant when the probability of rejecting the null hypothesis (commonly that the true value equals zero) is 5% or less. This procedure minimizes the Type I error of rejecting this null hypothesis when it is actually true; or in other words, of finding a positive or negative effect of the relevant variable when it is actually absent.

Relying exclusively on significance tests, however, means ignoring Type II errors, which are made by accepting the null hypothesis when it is false. In the context of these equations, Type II errors are present when we conclude that particular factors do not contribute to child costs when in fact they do. Because we are also concerned with Type II errors, and do not wish to understate child costs, we do not simply exclude all non-significant coefficients in determining total costs.

Since there are no obvious criteria by which to include or reject non-significant coefficients, we arbitrarily use three alternate values of the relevant *t*-statistic: 0.5, 1.0, and 2.0. Table 9 provides three estimates of total monetary child costs using the alternate *t* values for each of our five sub-samples and for one, two, and three-plus children in the household. These values do not include health care costs since our data are too limited to provide reliable results for this class of expenditures. However, those outlays account for only between 3% and 5% of total household expenditures.[45]

As expected, total child costs are greater with lower *t* values, but not that much greater. The greatest difference appears for single households using a *t* value of 2.0 rather than 1.0. Apparently, the relevant coefficients for single households are estimated with less accuracy than for married households so that estimated costs are substantially greater when a *t* value of 1.0 is used.

There are various regularities which appear in these results. The first is that single households tend to bear slightly higher costs of raising children than do married households. However, the differences are small. Overall,

Table 9. Total Monetary Child Costs by Category, Income Group, and Number of Children ($/Year).

	Number of Children								
	1	2	3+	1	2	3+	1	2	3+
Married households									
Income group	Low			Middle			High		
Income range	≤$55,859			$55,864–$101,113			>$101,120		
Average income	$36,726			$76,307			$168,221		
$t \geq 0.5$	$3,421	$4,291	$4,745	$4,749	$6,663	$7,475	$11,138	$13,706	$15,957
$t \geq 1.0$	$3,376	$4,248	$4,697	$4,749	$6,509	$7,385	$10,478	$13,611	$15,957
$t \geq 2.0$	$2,998	$3,964	$4,570	$4,749	$6,509	$7,385	$10,365	$13,512	$15,855
Single households									
Income group	Low					Middle/High			
Income range	≤$55,837					≥$55,865			
Average income	$27,207					$94,344			
$t \geq 0.5$	$3,969	$5,070	$5,011			$11,409	$18,337	$17,137	
$t \geq 1.0$	$3,857	$4,967	$5,011			$11,409	$18,337	$14,955	
$t \geq 2.0$	$3,610	$4,741	$4,773			$7,838	$14,453	$11,296	

Notes: Based on estimated category costs reported in Tables 1–8, excluding health care costs.

there is no indication here that child costs for single households are lower than for married households.

A second important finding is the appearance of economies of scale in raising children.[46] In none of the sub-samples is the cost of raising two children twice the cost of raising the first child. Furthermore, the cost of raising three or more children is often not much greater than the cost of raising two children. Indeed, for the high income, single household sub-sample, we report slightly lower costs with three-plus children, although that difference is not likely to be statistically significant.

Two factors might explain this result. In the case of expenditures on Childcare and Education, the presence of three or more children in the household may indicate sufficient age differences so that an older child can care for a younger sibling. As expected, this result is stronger in low-income households. In regard to housing costs, there may be more opportunity for shared bedrooms with more children in the household. These considerations suggest that determining the costs of a second or third child by simply multiplying the first child's costs by the number of children in the household leads to greatly inflated child costs.

To place our figures in perspective, we also provide published estimates obtained from the two alternate approaches mentioned earlier. The first is the income equivalence approach, which aims to compare household utility levels with and without children; while the second is the USDA approach, which largely apportions expenditure data according to the number of people in the household. Both alternatives also exclude health care costs. Table 10 shows the child costs estimated under each alternative along with our highest estimates based on t values of 0.5 or more.

As reported in Table 10, our estimates of the costs of raising children are much lower than those offered by the two alternatives. The substantial differences found between our estimates and the two other methods require explanation. Critically, the differences arise not from the underlying data since we all use the same source. Instead, they result from more basic methodological differences.

As noted above, income equivalence methods aim to include non-pecuniary opportunity costs in addition to monetary outlays as part of the cost of raising children. Apparently, estimated non-pecuniary opportunity costs account for a substantial share of overall child costs under that method. Furthermore, the models used to impute household utility levels offer merely rough approximations, which cannot accurately discern differences between households with and without children. In contrast, the

Table 10. Comparison of Total Monetary Child Costs by Analytical Method ($/Year).

		Number of Children								
	Married households	1	2	3+	1	2	3+	1	2	3+
	Income group	Low			Middle			High		
	Income range	≤$55,859			$55,864–$101,113			≥$101,120		
	Average income	$36,726			$76,307			$168,221		
[1]	Comanor et al.	$3,421	$4,291	$4,745	$4,749	$6,663	$7,475	$11,138	$13,706	$15,957
[2]	Center for Policy Research	$6,504	$10,008	$12,216	$10,740	$16,368	$19,764	$16,872	$25,620	$30,828
[3]	USDA	$10,402	$16,643	$19,473	$14,479	$23,167	$27,105	$24,715	$39,543	$46,266

		Single Households					
	Income group	Low			Middle/High		
	Income range	≤$55,837			≥$55,865		
	Average income	$27,207			$94,344		
[1]	Comanor et al.	$3,969	$5,070	$5,011	$11,409	$18,337	$17,137
[2]	Center for Policy Research	*N*/*R*	*N*/*R*	*N*/*R*	*N*/*R*	*N*/*R*	*N*/*R*
[3]	USDA	$10,025	$15,310	$17,593	$21,560	$32,925	$37,836

Sources and notes:
[1] Denotes estimates reported in Table 9 for all coefficients with *t*-statistics ≥0.5.
[2] CPR, "Economic Basis for Updating a Child Support Schedule of Georgia," Appendix B, April 2011.
Betson-Rothbarth estimates at average income levels indicated; excludes childcare and private tuition.
[3] Lino, USDA, May 2011, excluding health care costs for comparability.

empirical findings presented here are limited to monetary costs, which can be estimated with reasonable degrees of assurance.

As between this study and the USDA report, the essential difference is that the latter aims to find individualized cost figures for particular members of the household. As such, its cost estimates are fundamentally per capita cost values even when costs are not the same for all members of the household. In contrast, the cost values offered here rest on a different principle. Instead, we determine the additional cost to the household of including a child or children among its members. These costs apply to the household rather than to an individual member. They reflect the additional cost of producing the household good of raising children.

CHILD COSTS AND CHILD SUPPORT PRESUMPTIVE AMOUNTS

To determine the policy implications of our revised child cost estimates, we compare them with the presumptive child support amounts indicated in the Guidelines of four states: Maryland, Georgia, Colorado, and Ohio. These states are merely illustrative. The first three states rely on child costs as measured by income equivalence methods, while the fourth relies on adjusted USDA estimates.

Maryland is typical of these states; its support guidelines are well described in a recent state report. Parental expenditures on children are measured by Rothbarth methods (Econometrica, Inc., 2013, pp. 3–12). The approach used by Colorado is similar (State of Colorado, 2014) with differences between them largely resulting from the age of the data employed and state income tax rates. As indicated in Table 11, the presumptive amounts set in these states are roughly similar. In contrast to Maryland and Colorado, Georgia's guidelines rest on averages of the two variants of the income equivalence method currently in use. The first relies on the assumption that household well-being can be measured by the percentage of household expenditures for food and the second for adult clothing (Policy Studies, Inc., 2005, p. 10; see also Center for Policy Research, 2010). Our final example is Ohio where the guidelines rely on "USDA data for estimating actual expenditures," but then adjusted for income levels (Ohio Department of Job and Family Services, 2013, pp. 5, 13).

For each of these illustrative states, we derive presumptive child support awards under the assumption that the entire household income is earned by the non-custodial parent while at the same time all of the custodial time for a

Table 11. Illustrative Child Support Presumptive Amounts, 2014 ($/Year).

	Maryland	Georgia	Colorado	Ohio
(I) Low income	$6,840	$7,548	$6,492	$6,330
$36,726 or $3,061/mo.				
Comanor et al.	$3,421	$3,421	$3,421	$3,421
Center for Policy Research	$6,504	$6,504	$6,504	$6,504
USDA	$10,402	$10,402	$10,402	$10,402
(II) Middle income	$12,192	$12,180	$11,388	$9,473
$76,307 or $6,359/mo.				
Comanor et al.	$4,749	$4,749	$4,749	$4,749
Center for Policy Research	$10,740	$10,740	$10,740	$10,740
USDA	$14,479	$14,479	$14,479	$14,479
(III) High income	$21,786	$18,744	$18,072	$15,218
$168,221 or $14,018/mo.				
Comanor et al.	$11,138	$11,138	$11,138	$11,138
Center for Policy Research	$16,872	$16,872	$16,872	$16,872
USDA	$24,715	$24,715	$24,715	$24,715

Assumptions: 100% income to NCP; 100% time to CP; 1 child. See also notes to Table 10.

single child lies with the custodial parent. We make these assumptions to direct attention to the relationship between estimated child costs and award amounts.

The resulting amounts are provided in Table 11. As indicated there, support amounts in Maryland and Georgia are always greater than the corresponding Rothbarth estimates, while in Colorado they lie above these estimates for only medium- and high-income households. In Ohio, on the other hand, award amounts lie below the comparable USDA estimates and also those derived from income equivalence methods. Note that Ohio's support amounts lie below those reported in the other three states despite their reliance on the higher USDA figures. *In all cases, however, the presumptive child support awards exceed the monetary costs of raising children*. Replacing the income equivalence and USDA methods with one linked directly to actual monetary outlays would correct this overage.

The effect of this overage is to create a financial asset for the custodial parent such that increased custodial time has a monetary value. Moreover, it is an asset whose returns are paid and received in after-tax dollars. Its presence creates an economic incentive to maximize custodial time for the child support recipient even where it might not otherwise be preferred. At the margin, creating this asset leads to different custodial outcomes than would otherwise exist.

Even where actual custody is not at issue, the creation of this financial asset engenders resentment by the support payer since it is his or her payments that fund this asset. And this resentment harms relationships between parents. As a result, nonpayment rates are increased, enhanced enforcement efforts are taken to ensure payment, and children are affected by parental conflict. Overall, *an effective child support system rests on the willingness and ability of non-custodial parents to make their assessed payments, which is an outcome enhanced when payment amounts reflect the actual monetary costs of raising children.*

CONCLUDING COMMENTS

Emphasizing the methodological differences between the different methods used to estimate child costs is the primary purpose of this paper. The empirical findings suggested here could be refined by using a more detailed empirical model, and we hope further research in this direction will be carried out. For this reason, our specific empirical results must be considered as preliminary. At the same time, our findings leave little doubt but that current estimates of the cost of raising children, along with the child support awards that rest on them, are substantially overstated.

As every parent knows, there are substantial costs and benefits of raising children. However, this research suggests that the monetary costs are much lower than heretofore believed.

NOTES

1. 45 CFR § 302.56(h).
2. Perloff (2008). These objectives are not limited to subsistence as is sometimes maintained.
3. Becker (1981).
4. For the theory of household production, see Deaton and Muellbauer (1980).
5. Deaton and Muellbauer (1980, p. 245).
6. Espenshade (1984), Ellman (2004).
7. Becker (1981).
8. Becker (1981, p. 8).
9. Becker (1981, p. 8n).
10. We ignore here the analytic problems inherent in deriving household preferences from those of the adult members, who are the decision-makers of the

household. The economic literature on decision-making within the family is reviewed in Bergstrom (1997).

11. For further elaboration of this approach, including relevant conditions, see Deaton and Muellbauer (1980, chap. 10).

12. Becker's approach is similar. He writes: "Children are usually not purchased but are self-produced by each family, using market goods and services and the own time of parents, especially of mothers. Since the cost of own time and household production functions differ among families, the total cost of producing and rearing children also differs" (Becker, 1981, p. 96).

13. See Marquit (October 4, 2011).

14. Deaton and Muellbauer (1986).

15. Frech (1994), Kremslehner and Muermann (2009).

16. Finkelstein (2009), Edwards (2010).

17. Rothbarth (1943), Deaton and Muellbauer (1986).

18. Browning (1992, pp. 1443–1446).

19. Browning (1992, p. 1443).

20. Pollack and Wales (1979).

21. Although the CEX data set collects expenditures on food for the entire household, it apportions these outlays to children according to data in the USDA food plans, which depend on the ages of household members, household size, and income. See Pollack and Wales (1979, p. 7).

22. Lazear and Michael (1998, p. 87).

23. Lino (May 2011, p. 8) and See also Lino and Carlson (2010).

24. For more information on the Consumer Expenditure Survey, see www.bls.gov/cex and Lino (May 2011, p. 1).

25. Each CEX microdata set reflects interviews conducted every 3 months over five calendar quarters, thus straddling two calendar years. The USDA (2010) report uses data from the 2005–06 CEX (Lino, May 2011, p. iii). Our paper starts with the same data but also includes the subsequent three CEX data sets as well, covering 2007–2009.

26. Children in this data set are those under age 18 who reside in the Consumer Unit and not elsewhere.

27. We adjusted the nominal CEX data for each expenditure category to present-day dollars using the relevant Consumer Price Index published by the BLS as of June 2011 for each category (e.g., housing, food, transportation, education, and clothing).

28. This is the same data source used by Lazear and Michael (1998), and the same cost categories estimated in the USDA reports (with Entertainment included in a "Miscellaneous" cost category).

29. "ChildAge" is defined by the BLS as follows: 0, no children; 1, all children less than 6; 2, oldest child between 6 and 11 and at least one child less than 6; 3, all children between 6 and 11; 4, oldest child between 12 and 17 and at least one child less than 12; 5, all children between 12 and 17; 6, oldest child greater than 17 and at least one child less than 17; 7, all children greater than 17.

30. Guryan, Hurst, and Kearney (2008, p. 27). These data apply to 2003–2006. See also the discussion of parental time as a major share of the costs of children in Apps and Rees, 2002.

31. See also Browning's (1992, pp. 1443–1444) observation that the time costs of children generally exceed the monetary costs.
32. Angrist and Evans (1998).
33. Browning and Lechene (2003).
34. See for example, Becker and Lewis (1974, pp. 81–90), Becker and Tomes (1976, pp. 143–162).
35. Caceres-Delplano (2006).
36. Angrist, Lavy, and Schlosser (2010).
37. Aizer and Cunha (2012).
38. Ibid., p. 22.
39. Lazear and Michael (1998).
40. Since 2008, BLS housing data on which both Lino and we rely include mortgage interest and principal payments for owned homes as well as rental payments for leased homes. They also include utilities, property taxes, maintenance, insurance, and repairs. A full list of the components of this variable is included in the data appendix available from the authors.
41. There may be circumstances where households acquire larger residences in anticipation of having a child. However, only 11% of the childless households in our sample have the oldest person under age 32 where this issue might apply. This factor is therefore unlikely to affect our empirical findings.
42. The CEX data identify food costs within and outside of the home separately, but since that distinction is not specifically relevant to this analysis we use total outlays.
43. See, e.g., Tobin (1958, pp. 24–36), McDonald and Moffitt (1980, pp. 318–321).
44. The coefficients reported here are the corrected values, which indicate the prospective effect on expenditures of the explanatory variable conditional these expenditures being greater than zero. See McDonald and Moffitt (1980, p. 319).
45. This range applies to all sub-samples except low-income married households, where it reaches 7% on average.
46. The presence of these economies has been reported by others. See Lino (2011, p. 17) and Espenshade (1984, p. 29). See also similar results reported for France and Switzerland in Thevenon (2009, p. 21).

ACKNOWLEDGMENT

We gratefully acknowledge the helpful input and comments of Ted Bergstrom, H.E. Frech, and Shelly Lundberg, and also the valuable research assistance of Nicoleta-Livia Dinu, Katherine Smith, and Andrea Lehman in the preparation of this paper.

REFERENCES

Aizer, A., & Cunha, F. (2012). *The production of child human capital: Endowments, investments and fertility*. Working Paper. National Bureau of Economic Research, 14.

Angrist, J., & Evans, W. (1998). Children and their parents: Evidence from exogenous variation in family size. *American Economic Review*, *88*, 450–477.

Angrist, J., Lavy, V., & Schlosser, A. (2010). Multiple experiments for the causal link between quantity and quality of children. *Journal of Labor Economics*, *28*, 773–824.

Apps, P., & Rees, R. (2002). Household production, full consumption and the costs of children. *Journal of Labor Economics*, *28*, 773–824.

Becker, G. S. (1981). *A treatise on the family*. Cambridge, MA: Harvard University Press.

Becker, G. S., & Lewis, H. G. (1974). Interaction between quantity and quality of children. In T. W. Schultz (Ed.), *Economics of the family: Marriage, children, and human capital* (pp. 88–90). Cambridge, MA: National Bureau of Economic Research.

Becker, G. S., & Tomes, N. (1976). Child endowments and the quantity and quality of children. *Journal of Political Economy*, *84*, S143–S162.

Bergstrom, T. C. (1997). A survey of theories of the family. In M. Rosenzweig & O. Stark (Eds.), *Handbook of population and family economics* (pp. 31–44). Amsterdam: Elsevier Science B.V.

Browning, M. (1992). Children and household economic behavior. *Journal of Economic Literature*, *30*, 1434–1475.

Browning, M., & Lechene, V. (2003). Children and demand: Direct and non-direct effects. *Review of the Economics of the Household*, *1*, 9–31.

Caceres-Delplano, J. (2006). The impacts of family size on investment in child quality. *Journal of Human Resources*, *41*, 738–754.

Center for Policy Research [CPR]. (2010). *Economic basis of an updated child support schedule for Georgia*, December 14.

Deaton, A. S., & Muellbauer, J. (1980). Economics and consumer behavior. Cambridge: Cambridge University Press.

Deaton, A. S., & Muellbauer, J. (1986). On measuring child costs: With applications to poor countries. *Journal of Political Economy*, *94*(723), 720.

Econometrica, Inc. (2013). *Maryland Child Support Guidelines*, April 2.

Edwards, R. D. (2010). Optimal portfolio choice when utility depend on health. *International Journal of Economic Theory*, *6*(2), 205–225.

Ellman, I. M. (2004). Fudging failure: The economic analysis used to construct Child Support Guidelines. The University of Chicago Legal Forum, *2004*, 167–224.

Espenshade, T. J. (1984). *Investing in children: New estimates of parental expenditures*. Washington, DC: Urban Institute.

Finkelstein, A. (2009). Approaches to estimating the health state dependence of the utility function. *American Economic Review, Papers and Proceedings*, *99*(2), 116–121.

Folbre, N. (2008). *Valuing children: Rethinking the economics of the family*. Cambridge, MA: Harvard University Press.

Frech, H. E. (1994). State-dependent utility and the tort system as insurance: Strict liability versus negligence. *International Review of Law and Economics*, *14*, 261–271.

Guryan, J., Hurst, E., & Kearney, M. (2008). Parental education and parental time with children. *Journal of Economic Perspectives*, *22*, 23–46.

Kremslehner, R., & Muermann, A. (2009). *State-dependent preferences and insurance demand*. Retrieved from http://ssrn.com/abstract=1466719

Lazear, E. P., & Michael, R. T. (1998). *Allocation of income within the household*. Chicago, IL: University of Chicago Press.

Lino, M. (2011). *Expenditures on children by families, 2010*. Alexandria, VA: U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.

Lino, M., & Carlson, A. (2010). Estimating housing expenses on children: A comparison of methodologies. *Journal of Legal Economics*, *16*, 61–79.

Marquit, M. (2011). "Kids & money: How much does it cost to raise your child?" October 4.

McDonald, J. F., & Moffitt, R. A. (1980). The uses of Tobit analysis. *Review of Economics and Statistics*, *62*, 318–321.

Ohio Department of Job and Family Services. (2013). *Child Support Guidelines review*, Report to the General Assembly.

Perloff, J. M. (2008). *Microeconomics theory and applications with calculus*. London: Pearson.

Policy Studies, Inc. (2005). *Georgia Child Support Guidelines*, December 30.

Pollack, R. A., & Wales, T. J. (1979). Welfare comparisons and equivalence scales. *American Economic Review*, *69*, 216.

State of Colorado. (2014). *Colorado Child Support Guidelines* (revised January).

Thevenon, O. (2009). "Assessing the costs of children: A challenge for policy" in Marie Therese Latablier et al., *The Costs of Raising Children and the Effectiveness of Policies to Support Parenthood in European Countries: A Literature Review*, Report to the European Commission, pp. 17–37.

Tobin, J. (1958). Estimation of relationships for limited dependent variables. *Econometrica*, *26*, 24–36.

Appendix E

Dr. Venohr's Report, March 2017

Appendix E

REVIEW OF THE MINNESOTA BASIC CHILD SUPPORT TABLE: ECONOMIC DATA ON THE COST OF RAISING CHILDREN AND OTHER CONSIDERATIONS

Submitted to:

State of Minnesota Department of Human Services

Submitted by:

Jane Venohr, Ph.D.

Center for Policy Research

Denver, CO 80218

March 31, 2017 (revised)

Points of view expressed in this document are those of the author and do not necessarily represent the official position of the Task Force, State or Court. The author is responsible for any errors and omissions.

CONTENTS

EXECUTIVE SUMMARY

Minnesota is reviewing its child support guidelines. This includes reviewing the table of basic support obligations (Minnesota Statutes 2016 Section 518A.35 subdivision 2). The table is based on economic data on the cost of raising children that is over 10 years old. A Task Force of diverse stakeholders has been formed to assist with the review. Minnesota Department of Human Services (DHS) is administering the review. DHS has contracted individually with two economists to provide separate reports "summarizing the commonly used methods for determining base child support in the United States, as well as the methods used by R. Mark Rogers and William Comanor."

One economist is Comanor. The other is Dr. Jane Venohr, who has prepared this report. Venohr interprets the task as summarizing the data and assumptions underlying state child support tables including the economic studies of child-rearing expenditures and other assumptions such as the state's choice of guidelines models. State guidelines are part economic data and part policy decisions. Venohr's approach is to identify the major assumptions and data underlying a child support table, as well as the merits and limitations of alternative assumptions and data. The intent is to provide Minnesota decision makers with objective information to make guidelines changes that will better serve Minnesota children and families.

ECONOMIC STUDIES OF CHILD-REARING COSTS

There are nine different studies of child-rearing expenditures that form the basis of state guidelines. They vary in data years and economic methodologies used to separate the child's expenditures from total expenditures for a household that includes the parents and possibly other adults. Economists have not reached a consensus on which methodology best reflects actual child-rearing expenditures, but economists and policymakers generally agree that any amount between the lowest of the most current credible measurements and the highest of the most current credible measurement is appropriate for a state's guidelines. To this end, Venohr compares the exiting Minnesota table, which is mostly based on a 2001 study of child-rearing costs, to three current studies of child-rearing expenditures.

- *The most current United States of Department of Agriculture (USDA) study*.[1] An older USDA study forms the basis of the existing Minnesota table. The USDA measurement is often used as the highest measurement when assessing a state's guidelines.
- *The most current Betson-Rothbarth (BR) study*.[2] The BR measurements form the basis of most state guidelines tables. Historically, the Rothbarth estimator has been considered the lowest of credible measurements.

[1] Lino, Mark, et al. (2017). Expenditures on Children by Families: 2015 Annual Report. U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2015, Washington, D.C. Available at http://www.cnpp.usda.gov/publications/crc/crc2015.pdf.

[2] Betson, David M. (2010). "Appendix A: Parental Expenditures on Children." In Judicial Council of California, *Review of Statewide Uniform Child Support Guideline*. San Francisco, California. Retrieved from: http://www.courts.ca.gov/partners/documents/2011SRL6aGuidelineReview.pdf.

- *The Comanor study.*[3] This offers a new method for measuring the cost of children.

All three studies were updated to 2017 prices using information published by the U.S. Bureau of Labor Statistics.[4] The comparisons of the existing Minnesota table to the USDA study and BR study suggest that increases to the Minnesota table are warranted. This makes sense given changes in price levels alone. The comparisons of the existing Minnesota table to the Comanor study amounts (even when updated to 2017 price levels), however, suggest substantial decreases. In fact, the Comanor study yields child support amounts significantly below poverty levels.

ANALYSIS OF THE COMANOR STUDY

Comanor measures child-rearing expenditures separately for most of the same expenditure categories that the USDA does (*i.e.*, the child's housing, food, transportation, health care, clothing, child care and education and miscellaneous expenses that include personal items and entertainment). Comanor's results are significantly less than the USDA amounts. Some do not seem plausible when compared to other data sources. For example, Comanor estimates that food costs $8 to $14 per week for one child which is essentially the cost of a gallon of milk, a dozen of eggs, and two loaves of bread, based on Minneapolis food prices. Iowa also examined the Comanor et al. amounts and rejected them because they were below basic needs amounts. Most states believe that a state's child support guidelines should provide amounts that allow a child to share in the standard of living enjoyed by the obligated parent if the obligated parent can afford a higher standard of living.

ANALYSIS OF OTHER STUDIES

There are also limitations with the BR study and USDA study; however, the BR study and the USDA study have been reviewed and critiqued extensively in the past 25 years. They yield similar amounts. Either the BR study or the USDA study would be appropriate for updating the Minnesota child support table.

RECOMMENDATIONS

The Task Force should review all major factors underlying a child support table (see Exhibit 2 for a list). The first factor of discussion should be the guidelines model. The Task Force may want to consider more than one measurement of child-rearing expenditures (*e.g.*, both the BR and USDA measurements) and variations in other underlying assumptions. If there is still interest in the Comanor study, the discussion should consider whether a child support table that yields below-poverty level orders is appropriate; or whether the child support guidelines should yield amounts that allow the child to share in the standard of living afforded by an obligated parent. Beliefs about these outcomes relate to appropriate guidelines model for Minnesota; hence, underscore guidelines models being the first consideration.

[3] The Comanor study refers to the 2017 materials that Comonar presented to the Minnesota Task Force. Those materials also consist of a paper co-authored by Comanor that provides more detail on the methodology and the results of the measurements of child-rearing costs that Comanor presented to the Task Force in February. Comanor, William. (February 22, 2017.) *Presentation to the Minnesota Child Support Task Force*, Minnesota Department of Human Services, St. Paul, MN. https://mn.gov/dhs/assets/2017-02-22-Dr-Comanor-Report-to-the-Minnesota-Child-Support-Task-Force_tcm1053-280776.pdf.

[4] The February 2017 Consumer Price Index was used. It is available at https://www.bls.gov/cpi/ .

SECTION I: INTRODUCTION AND PURPOSE

Minnesota is reviewing its child support guidelines. At the core of the Minnesota child support guidelines is a table of basic support obligations owed by both parents (Minnesota Statutes 2016 Section 518A.35 subdivision 2). (An excerpt of the table is shown in Exhibit 1.) The obligated parent's prorated share of the basic support obligation forms the guidelines-calculated order amount. Additional adjustments are made for actual child care expenses, the actual cost of health insurance for the children, parenting-time expense, and other factors when calculating the child support order. The table considers a range of incomes and number of children. The basic obligations reflect economic data on what families spend to raise their children.

Exhibit 1: Excerpt from the Existing Minnesota Child Support Basic Table

Combined Parental Income for Determining Support			One Child	Two Children	Three Children
2500.00	-	2599.00	560	903	1040
2600.00	-	2699.00	570	920	1060
2700.00	-	2799.00	580	936	1078
2800.00	-	2899.00	589	950	1094
2900.00	-	2999.00	596	963	1109
3000.00	-	3099.00	603	975	1122
3100.00	-	3199.00	613	991	1141
3200.00	-	3299.00	623	1007	1158
3300.00	-	3399.00	636	1021	1175
3400.00	-	3499.00	650	1034	1190
3500.00	-	3599.00	664	1047	1204
3600.00	-	3699.00	677	1062	1223
3700.00	-	3799.00	691	1077	1240

A Task Force of diverse stakeholders has been formed to assist with the review. Minnesota Department of Human Services (DHS) is administering the review. DHS has contracted individually with two economists to provide separate reports "summarizing the commonly used methods for determining base child support in the United States, as well as the methods used by R. Mark Rogers and William Comanor."

One of the contracted economists is Dr. Comanor, Professor of Economics, University of California at Santa Barbara. The other is Dr. Jane Venohr, an economist with a non-partisan, non-profit organization, that has over 20 years of experience assisting states with guidelines reviews and the development of guidelines. This is Dr. Venohr's report.

OVERVIEW OF MATERIALS SUBMITTED BY DR. COMANOR TO TASK FORCE

Dr. Comanor provided his materials on February 22, 2017.[5] It includes a PowerPoint presentation, an 11-page report to the Minnesota Child Support Task Force, and his co-authored 2015 paper that measured the "monetary cost" of raising children.[6] In this report, "Comanor" is used to refer to the 2017

[5] Comanor, William. (February 22, 2017.) *Presentation to the Minnesota Child Support Task Force*. Minnesota Department of Human Services, St. Paul, MN. https://mn.gov/dhs/assets/2017-02-22-Dr-Comanor-Report-to-the-Minnesota-Child-Support-Task-Force_tcm1053-280776.pdf .

[6] Comanor, William S., Sarro, Mark, and Rogers, R. Mark. (2015). "The Monetary Cost of Raising Children." *Economic and Legal Issues in Competition,* in James Langenfeld (ed.) *Economic and Legal Issues in Competition, Intellectual Property, Bankruptcy, and the Cost of Raising Children (Research in Law and Economics, Volume 27)* Emerald Group Publishing Limited, pp.209 http://www.emeraldinsight.com/doi/abs/10.1108/S0193-589520150000027008 .

document while "Comanor et al." is used to refer to the Comanor, Sarro, and Roger's study that was appended. Comanor's Powerpoint presentation (and his 11-page report at a general level) mostly compare United States Department of Agriculture (USDA) 2009 measurements of child-rearing expenditures to the Comanor et al. study, as well provide a limited comparison to "Rothbarth" estimates of child-rearing expenditures. As explained in this report, Rothbarth is an economic methodology used to measure child-rearing expenditures (*i.e.*, separate expenditures for the child from expenditures for adults living in the same household). Measurements of child-rearing expenditures using the Rothbarth methodology form the basis of the majority of state guidelines schedule and formulas.

Comanor concludes that child support guidelines exceeding actual child-rearing costs create some financial incentives around custody of the children and reduces the willingness of obligated parents to pay child support.

DR. VENOHR'S APPROACH

Venohr's approach to fulfilling the scope of work differs from Comanor's. (As a refresher, the contracted scope of work is shown in the textbox to the right.) Venohr focuses on the state's basic guidelines table as provided in Minn. Stat. §§ 518A.35 Subd. 2. (An excerpt was shown in Exhibit 1.) The table reflects economic data on how much families spend on children.

> *Contracted task: "*summarizing the commonly used methods for determining base child support in the United States, as well as the methods used by R. Mark Rogers and William Comanor."

There are nine different studies of child-rearing expenditures that form the basis of state guidelines. They vary in data years and economic methodologies used to separate the child's expenditures from total expenditures for a household that includes the parents and possibly other adults. Economists have not reached a consensus on which methodology best reflects actual child-rearing expenditures, but economists and policymakers generally agree that any amount between the lowest of the most current credible measurements and the highest of the most current credible measurements is appropriate for a state's guidelines. Currently, the fourth Betson-Rothbarth study (the BR4 measurement) is typically considered the lowest of credible measurements and the United States Department of Agriculture (USDA) measurement is typically considered the highest of credible measurements.[7] Using the lowest and the highest of the credible amounts to gauge whether a state guidelines amounts are appropriate was first developed from a U.S. Department of Health and Human Services project aimed to help states with the development of child support guidelines.[8]

[7] Jane C. Venohr. (2013). "Child Support Guidelines and Guidelines Reviews: State Differences and Common Issues," *Family Law Quarterly*, vol. 43, no. 3 (Fall 2013).
[8] Lewin/ICF. (1990). *Estimates of Expenditures on Children and Child Support Guidelines*. Report to U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Fairfax, Virginia.

ASSUMPTIONS AND FACTORS UNDERLYING CHILD SUPPORT TABLES

The underlying economic study on child-rearing costs/expenditures is just one of many components underlying a state's basic guidelines table/formula. Exhibit 2 shows other economic data and assumptions that typically underlie a state's guidelines table and contribute to differences in guidelines amounts among states. In all, state guidelines are part economic data and part policy decision. The state's guidelines model is a policy decision. (As discussed later, there are three guidelines models in use by states and several alternative models.)

Another issue is that most measurements are not presented in a format readily adoptable for base guidelines schedules/formula. States often make adjustments for the number of children, interpolate between income ranges, subtract the child's healthcare expenses and childcare expenses from the base amounts because most states consider the actual amount expended for these items on a case-by-case basis. These also require policy or technical decisions. The number of children is an issue because most studies only measure child-rearing expenditures for one, two and three children since there are few families with four or more children in the data typically used to measure child-rearing expenditures. Still, there are other adjustments. For example, a few states (*e.g.*, Kansas, Louisiana, and Pennsylvania) incorporate a parenting-expense adjustment into the child support table rather than the worksheet as Minnesota does.

Exhibit 2 provides an overview and summary of the typical data and assumptions underlying basic child support tables, what is known about the data and assumptions underlying the existing Minnesota table, under states' tables, and what alternatives are available for an update. The remainder of this report focuses on the economic cost of raising children. However, the information in Exhibit 2 can serve as a tool to the Task Force when it focuses on whether and how to update the basic child support table.

ECONOMIC BASIS OF MINNESOTA'S CURRENT BASIC TABLE

Exhibit 2 shows that the existing Minnesota table dates to 2001 economic data. Although the 2001 United States Department of Agriculture (USDA) study is the major source of the Minnesota basic table, Exhibit 2 shows several other studies of child-rearing expenditures underlie the existing table as well. One reason for this was that the draft Minnesota table was reviewed to determine if it adequately provided for children or produced amounts above measurements of child-rearing expenditures. There were some areas in which it did not fulfill these requirements so was adjusted using the study amount with the lowest amount if the proposed amount was below the lowest amount, and using the study amount with the highest amount if the proposed amount was above the highest amount. In other words, the existing Minnesota schedule is bounded by the lowest and highest amounts measured by credible studies of child-rearing expenditures at the time the basic table was developed.[9] There are some notable exceptions. For example, the underlying data source for the table below $2,000 gross per month is unknown.

[9] See Exhibit 2 in Jane Venohr. (Sept. 16, 2015.) *Economic Basis of Minnesota Basic Schedule and Parenting-Time Expense Adjustment*. Prepared for the Child Support Work Group, Minnesota Department of Human Services, St. Paul, MN.

Exhibit 2: Major Factors and Assumptions underlying Minnesota Child Support Guidelines Schedule (Minnesota Compared to Other States)			
	Basis of Existing Minnesota Table	Summary of Basis of Other States	Possible Updates or Alternatives
1. Measurement of child-rearing expenditures	Mostly USDA (2001) for gross incomes of $2,000 - $8,500/mo for 2+ children.[10] Other sources include Betson-Rothbarth (BR)[11] measurements (for 1 child for $3,300-$7,299 and Betson-Engel (BE) for very high incomes.	29 states rely on Betson-Rothbarth (BR) measurements.	• USDA (2017) • Comanor (2015) • BR (2010—most current) • Other
2. Guidelines model	Income shares	39 states rely on the income shares model. The other two models used by states are the percentage-obligor income model and the Melson formula.	Several alternatives
3. Adjustments for state cost of living	Housing expense in USDA (2001) were adjusted because the USDA methodology used at the time was believed to overstate housing expenses.	States with extraordinary high or low incomes or cost of living often adjust BR measurements, which reflect national data	MN is close to average so no adjustment is probably warranted (*e.g.*, MN price parity is 97.6% while US prices are on average 100%)[12]
4. Tax assumptions	• No tax assumption needed for USDA measurements because USDA measurements are gross-income based • Further research needed to know tax assumptions underlying other measurements in table	BR measurements, based on expenditures/after-tax income, must be backed in to gross income. Most states doing so use federal and state income tax and FICA withholding formula and in prevailing year and use the tax schedule for single/head-of-household	2016 tax rates, different tax assumptions (*e.g.,* married couple with same number of children for whom support is being determined), base guidelines on net income instead of gross income, and other options.
5. Price levels	Appears to be based on 2002 price levels	Most states use the Consumer Price Index (CPI) from the year in which they updated their schedule	2017 CPI. (There are few alternatives to CPI, and none are in notable or significant use)
6. Adjustments for more than 3 children (and possibly amounts between 1, 2 & 3 children)	Appears to use USDA multipliers	Most states use equivalence scales developed by the National Academy of Science[13]	Several alternatives. See discussion in Section III.

[10] *Ibid.*

[11] Betson is the economist (Professor David Betson, University of Notre Dame) preparing the estimates. "Rothbarth" is the economic method for determining the child's share of total expenditures.

[12] Price parity measures prices relative to the U.S. as a whole. If a state's price parity is less than 100 percent, it has prices below the national average. If a state's price parity is more than 100 percent, it has prices above the national average. The U.S. Bureau of Economic Analysis. (2016). *Real Personal Income for States and Metropolitan Areas, 2014*. http://www.bea.gov/newsreleases/regional/rpp/rpp_newsrelease.htm .

[13] Citro, Constance F. and Robert T. Michael, Editors. (1995). *Measuring Poverty: A New Approach*. National Academy Press. Washington, D.C.

7. Exclude highly variable child-rearing expenses	Childcare expenses and health care expenses are excluded from table	Most income shares states make a similar exclusion except include $250 per child per year for ordinary and routine medical expenses	Alter the amounts are excluded/included
8. Families that spend more/less of their Income	Not an issue for USDA but an issue for BE and BR.	Most states use actual ratios with cap on those that spend more than after-tax income	Several alternatives. Depends on which economic measurement of child-rearing expenditures is used.
9. Low-income adjustment and minimum order	MN does not include the adjustment in the basic table. It is addressed in the worksheet.	Most income shares states incorporate a SSR and minimum order in schedule	Several alternatives. Worksheet option has many advantages.
10. Adjustment at high incomes	Current table goes up to $15,000 gross per month.	Most income shares tables go up to $20,000 -$30,000 per month gross.	The highest income considered depends on the measurement of child-rearing expenditures. To address higher incomes, an extrapolation can be made.
11. Adjustments for time-sharing	None included in the basic table	Only three states include an adjustment in the basic table	Several alternatives

ORGANIZATION OF REPORT

This report is organized into four sections.

- The second section examines three alternative economic data sources for updating the Minnesota table. This section also discusses other economic evidence on the cost of raising children.
- The third section provides more information about guidelines models since that is a core factor underlying the basic table.
- The final section provides a conclusion and recommends next steps.

This report is prepared by Center for Policy Research (CPR), a non-profit organization with almost 35 years of experience conducting research and evaluation and providing technical assistance on policies affecting children and families for government agencies at the federal, state, and local level; courts, and private foundations. Since 2007, CPR has assisted over 25 states, including Minnesota, with the review of their guidelines or development of special factors (*e.g.*, low-income adjustments or parenting expense adjustments).

SECTION II: ECONOMIC DATA AND THE BASIC TABLE

This section provides an analysis of the economic studies on the cost of raising children as well as preliminary comparisons of the existing Minnesota table to tables based on three different studies that could be used to update the Minnesota table:

- The most current United States of Department of Agriculture (USDA) study,[14]
- The most current Betson-Rothbarth (BR) study,[15] in which BR measurements form the basis of most state guidelines tables, and
- The Comanor study.[16]

The first subsection compares the results from updated tables based on each of these three studies. The remaining subsection examines the studies, particularly the Comanor study in detail because of its anomalous results.

COMPARISONS OF EXISTING TABLE TO UPDATES USING USDA, BR, AND COMANOR

This section compares child support orders using the existing table to amounts using the three economic studies of child-rearing expenditures mentioned above: USDA, BR, and Comanor study. The studies were converted to tables using data at hand, so may not perfectly align with the assumptions favored by Minnesota once Minnesota decision makers have an opportunity to review all of the factors in Table 2. Nonetheless, this is still a useful framework for examining these studies. Differences between what assumptions are used in the comparisons and what would be favored by Minnesota are likely to be minor.

Exhibit 3 summaries the assumptions underlying the existing table and the USDA, BR and Comanor tables, and the North Dakota, South Dakota and Wisconsin child support tables/formulas. North Dakota, South Dakota and Wisconsin are included in the comparisons because they are bordering states. Iowa and Montana, the two other states bordering Minnesota, rely on BR measurements and the Melson formula, respectively. (The Melson formula is discussed in more detail in a later section about guidelines models.) (CPR did not have either of these states' formulas readily available in a format that could be used for inclusion in the comparisons.)

[14] Lino, Mark, et al. (2017). *Expenditures on Children by Families: 2015 Annual Report.* U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2015, Washington, D.C. Available at http://www.cnpp.usda.gov/publications/crc/crc2015.pdf.

[15] Betson, David M. (2010). "Appendix A: Parental Expenditures on Children." In Judicial Council of California, *Review of Statewide Uniform Child Support Guideline*. San Francisco, California. Retrieved from: http://www.courts.ca.gov/partners/documents/2011SRL6aGuidelineReview.pdf.

[16] Comonar (2017), Table 10 in PowerPoint.

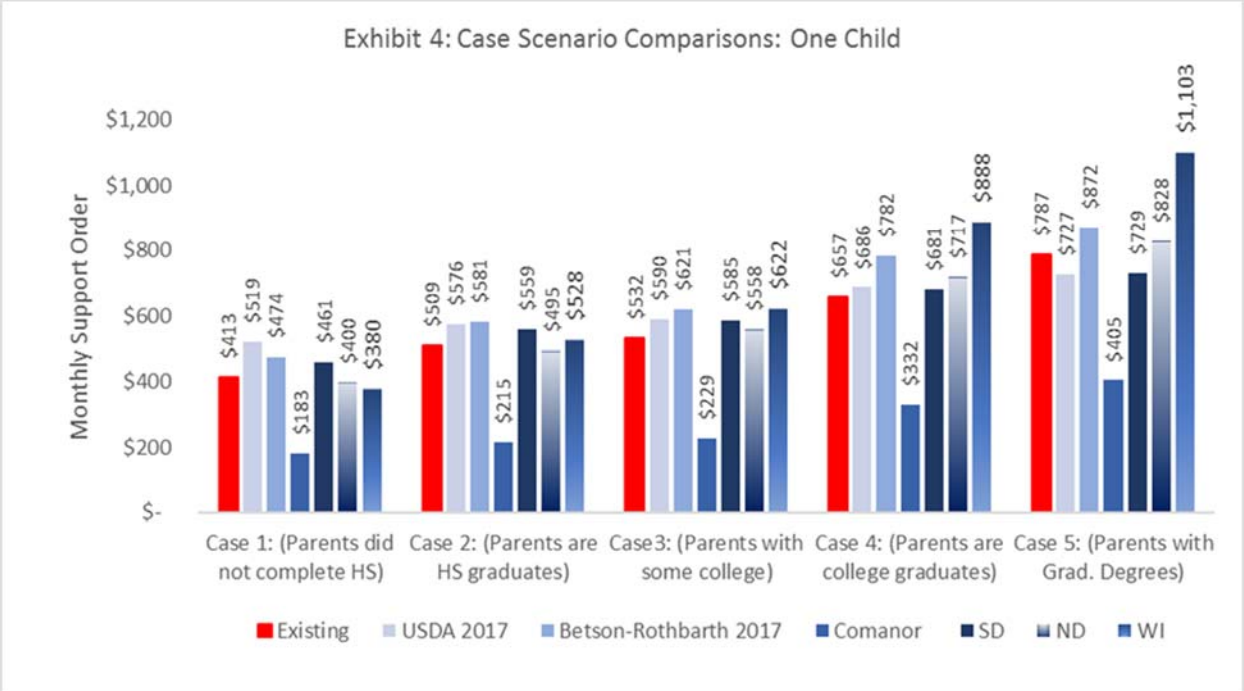
Exhibit 3: Major Factors and Assumptions underlying Comparisons							
	Existing MN Table	**USDA (2017)**	**Betson-Rothbarth**	**Comanor**	**North Dakota**	**South Dakota**	**Wisconsin**
1. Measurement of child-rearing expenditures	Mostly USDA (2001)	USDA (2017)	Betson-Rothbarth (4th study)	Comanor (Table 10 from PPT)	Unknown	Betson-Rothbarth (3rd study)	van der Gaag (1981)[17]
2. Guidelines model	Income shares	Income shares	Income shares	Income shares	% of obligor income	Income shares	% of obligor income
3. Adjustments for state cost of living	Housing expense in USDA (2001)	USDA for Midwest region	None	None	Unknown	Yes, SD cost of living lower	None
4. Tax assumptions	No tax assumption needed	N/A	2017 MN and fed. tax rates and FICA	N/A	N/A	N/A	N/A
5. Price levels	Appears to be 2002	2017	2017	2017	Unknown	2008	Unknown
6. Adjustments for more children	None	None	None	None	None	None	None
7. Exclude highly variable child-rearing expenses	Child care expenses and health care expenses are excluded from table	Excludes child care and all medical except $250 per child per year	Excludes child care and all medical except $250 per child per year	Excludes medical, includes child care	DK	Excludes child care and all medical except $250 per child per year	DK
8. Families that spend more/less of their Income	N/A	N/A	actual ratios with cap on those that spend more than after-tax income	N/A	DK	actual ratios with cap on those that spend more than after-tax income	DK
9. Interpolation between income ranges	Yes	Yes	Yes	Yes	Unknown	Yes	No
10. Low-income adjustment and minimum order	N/A (comparisons don't consider extremely low income)	N/A	N/A	N/A	N/A	N/A	N/A
11. Adjustment at high incomes	N/A (comparisons don't consider extremely high income)	N/A	N/A	N/A	N/A	N/A	N/A
12. Adjustments for time-sharing	None	None	None	None	None	None	None

[17] van der Gaag, Jacques. (1981). *On Measuring the Cost of Children*. Discussion Paper 663-81. University of Wisconsin Institute for Research on Poverty, Madison, Wisconsin.

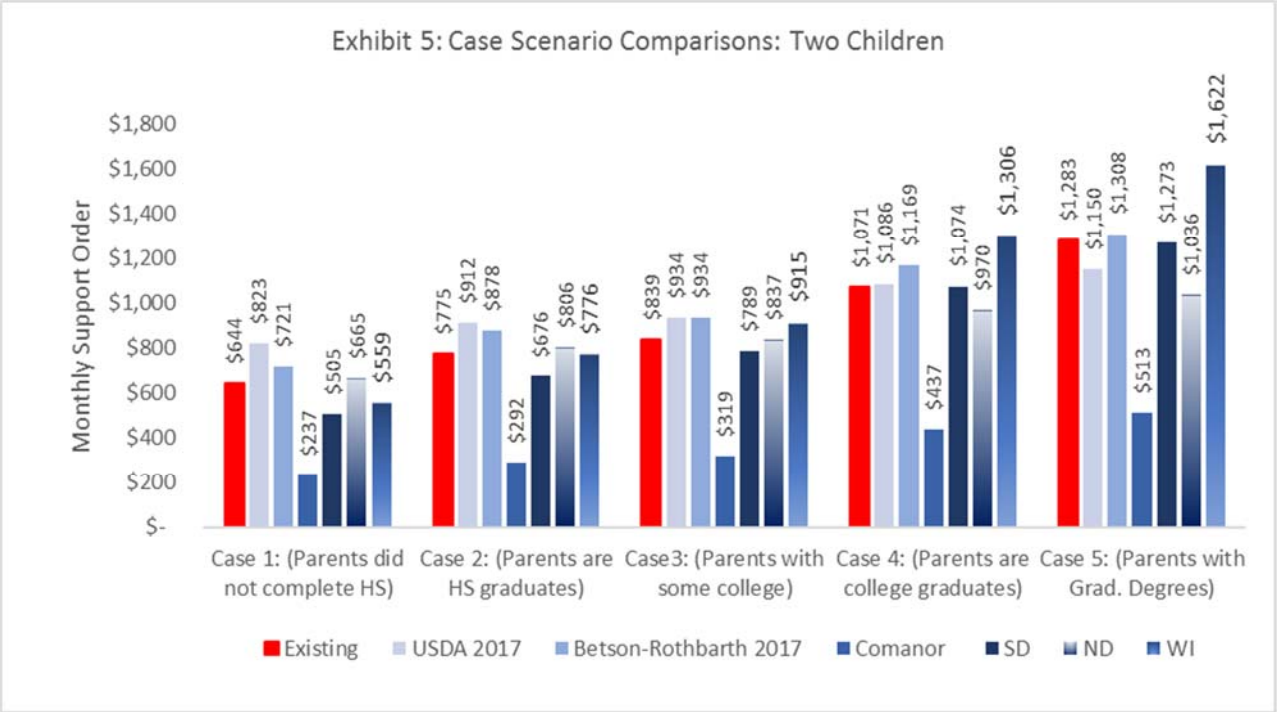
Five different case scenarios are used for the comparisons. They consider median incomes by five different levels of educational attainment of Minnesota workers. The data are from the 2015 U.S. Census American Community Survey.[18] Median earnings for five levels of educational attainment are:

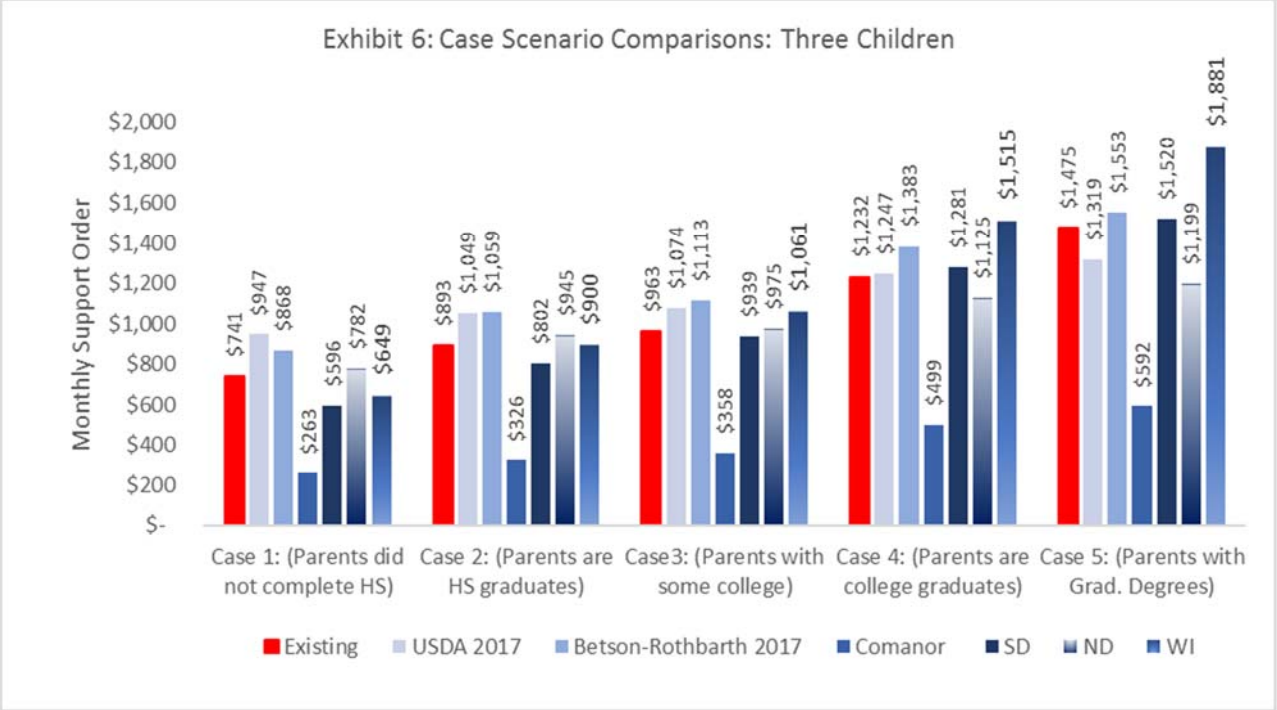
- $18,061 for females and $26,844 for males with less than a high school degree;
- $24,020 for females and $37,256 for males with a high school degree or GED;
- $31,099 for females and $43,917 for males with some college or associate's degree;
- $42,703 for females and $62,708 for males with a bachelor's degree; and
- $60,319 for females and $77,837 for males with a graduate or professional degree.

The case scenarios assume that median male earnings is the obligated parent's income and the median female earnings is the income of the parent with primary custody. Statistically, the clear majority of obligated parents are male. Exhibits 4, 5, and 6 compare amounts for one, two, and three children, respectively. The calculations only consider the base table amounts. There are no adjustments for additional dependents, child care expenses, the cost of the child's health insurance, shared-parenting expense, or other factors. Application of Minnesota's shared-parenting expense would lower the Minnesota amounts. South Dakota, North Dakota, and Wisconsin have more restrictive shared-parenting expense, and are not as likely to be applied. In other words, the existing Minnesota amounts would be lower if its shared-parenting expense was applied; but that is not true of other states due to the more restrictive adjustment in those states.



[18] www.census.gov .





Several conclusions are drawn from the comparisons.

- In most scenarios, Minnesota is generally in mid-range of bordering states.
- Using either the USDA or Betson-Rothbarth measurements will generally result in increases to the existing Minnesota amounts for most case scenarios. (There are some exceptions at very high incomes.)

- In all scenarios, the Comanor amounts are significantly less than any state's guidelines amounts as well as significantly less than the USDA and Betson-Rothbarth measurements. The Comanor amounts would be even less if child care and educations expenses were excluded. (They are excluded in the Minnesota table and Betson-Rothbarth and USDA amounts).
- Most of the Comanor amounts are below the 2017 poverty level for each additional person in a household (*i.e.*, $350 per month per person). If each parent was only responsible for his/her prorated share of the poverty level based on the incomes in the case scenarios, the obligated parent's order would be $197 to $213 per child per month. The one-child amounts under Comanor are close to these levels, which suggests that the Comanor amounts produce a basic needs level of support or support less than that.

Based on the case scenarios for one child, the Comanor amounts produce a basic needs level of support that align to the obligated parent's prorated share of the federal poverty level for the child.

- The Comanor amounts are the only amounts to include child care and education expenses. Child care expenses are excluded from the Minnesota basic table and excluded from the USDA and BR amounts. If child care and education expenses were excluded from the Comanor amounts, it would cut the Comanor amounts to about a half to two-thirds as much as the amount shown.
- The USDA and Betson-Rothbarth measurements produce similar amounts. The USDA amounts are higher at low incomes, while the Betson-Rothbarth measurements are higher at high incomes. One reason that the USDA is higher than the Betson-Rothbarth measurements at low incomes is that the Betson-Rothbarth amounts are capped to assume that families do not and cannot spend more than their after-tax incomes. (The reality is, however, that on average, very low-income families do spend all or more of their income. Without the cap, the Betson-Rothbarth amounts would be more at low incomes.)
- The Wisconsin guidelines produce the lowest amount among states for the low-income scenario (Case 1) and the highest amount among states for the high-income scenario (Case 2). This is a consistent pattern among percentage-of-obligor income guidelines. Wisconsin is a percentage-of-obligor income guidelines.

ANALYSIS OF COMANOR STUDY

Comanor's major objective is to challenge whether the studies of child-rearing expenditures used for state guidelines reviews reflect actual expenditures on children.[19] Nonetheless, the bottom-line question is whether the Comanor amounts are a realistic basis for a child support basic table. The Comanor amounts are lower than other studies and produce amounts much lower than state guidelines (see Exhibits 4, 5 and 6). This question is answered three ways:

[19] See slide 4 of Comanor's PowerPoint presentation.

- From what can be learned from other states that have considered the Comanor study as part of their guidelines review;
- Comparing Comanor's amounts for specific expenditure categories to amounts from other data source; and
- Analyses of the theoretical and empirical results.

CONSIDERATION OF THE COMANOR STUDY BY OTHER STATES

The Comanor study has been considered by a few states (*e.g.,* Iowa, Massachusetts, and Virginia). CPR also did an online search for other states that may have considered the Comanor study as part of its guidelines review but could find none. One reason that few states have considered it is that the study was just released in 2015.

MASSACHUSETTS

Massachusetts is currently reviewing its guidelines and has not released any information to the general public yet. Mark Sarro, one of Comanor's co-authors, is the economist for Massachusetts current review. Sarro and Mark Rogers, who also co-authored with Comanor, were the economists to Massachusetts' 2013 review.[20] In that study, they concluded that the Massachusetts guidelines were generally high relative to the USDA and Betson-Rothbarth study. Venohr (2017 forthcoming)[21] also provides evidence that the Massachusetts guidelines are high even when considering Massachusetts' higher cost of living. With or without the help of Comanor's research, given the findings of the 2013 review and Venohr's new research, it is expected that the same conclusion will be reached: Massachusetts guidelines are still too high.

VIRGINIA

According to the minutes of the Virginia Child Support Guidelines Review Panel,[22] a Panel member suggested Comanor speak to the Panel, however, he did not. The Panel had concerns whether Comanor could address the specific guidelines issues they were pursuing since he has not been heavily involved in child support work. Virginia was dealing with very nuanced and complex issues (*e.g*., changing the multiplier used in the shared custody cross-credit formula, deviation factors for child's age and educational expenses, and the cost of living in various parts of the state). In other words, the Virginia Panel was addressing issues other than the table, which is where Comanor's expertise would apply. After over twenty years, Virginia had just successfully updated its guidelines table as a result of its last guidelines review, so a table update was not a major agenda item for this review. Venohr was the economist who assisted the Panel with the table update that was legislated.

[20] Mark Sarro and R. Mark Rogers. (June 2013). *Economic Review of the Massachusetts Child Support Guidelines*. http://www.mass.gov/courts/docs/child-support/economist-report.pdf .

[21] Jane C. Venohr (2017 Forthcoming). "Differences in State Child Support Guidelines Amounts: Guidelines Models, Economic Basis, and Other Issues. *Journal of the American Academy of Matrimonial Lawyers*.

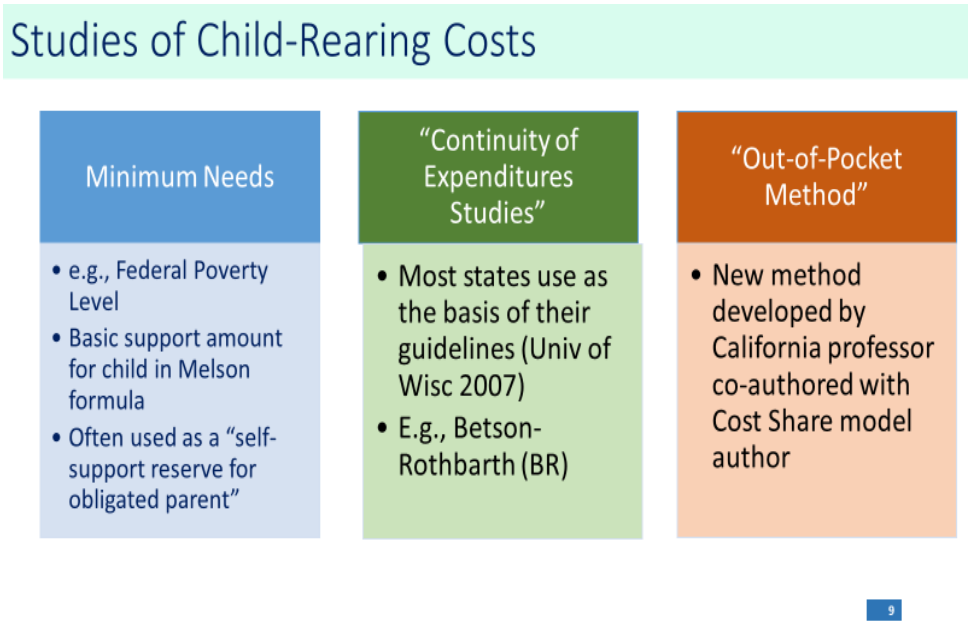
[22] Virginia Child Support Guidelines Review Panel. April 27, 2016). Meeting Minutes. http://dls.virginia.gov/GROUPS/childsupport/meetings/042716/sm042716.pdf

IOWA

Iowa reviewed its guidelines in 2016. Iowa hired Venohr to provide technical assistance and asked her to review the Comanor, Sarro and Rogers (2015) study, as well as some Iowa-specific basic needs studies. Her Iowa slides responding to this charge are shown and explained below.[23]

Iowa Slide 9

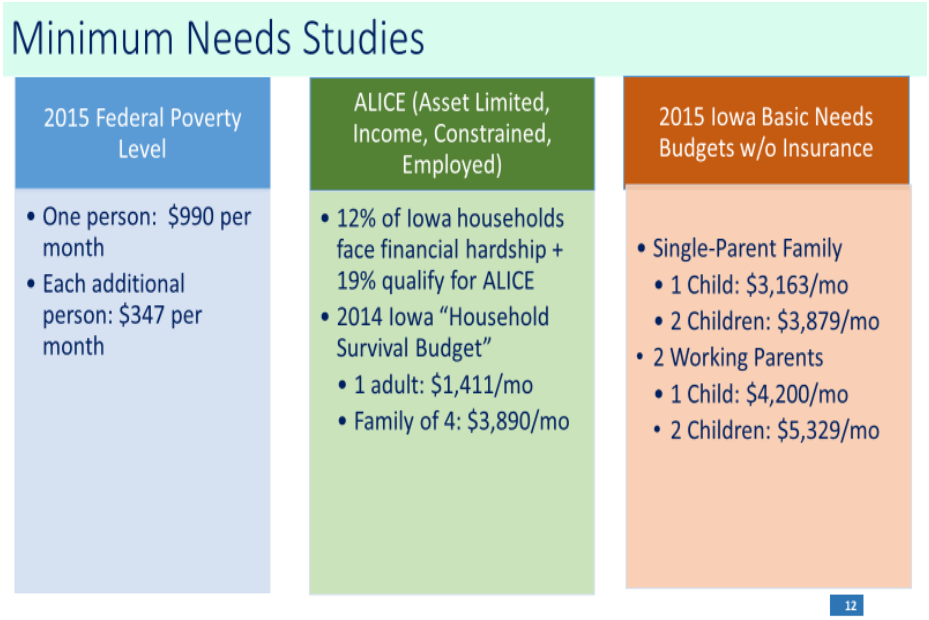
This slide identifies the three types of studies measuring child-rearing costs: minimum needs, "continuity of expenditures," and "out-of-pocket method." Most states do not use a minimum needs study as the basis of their guidelines formula/table because most states believe that a child should share in the standard of living enjoyed by their parent(s) particularly if a parent can afford a standard of living beyond basic needs. The "continuity of expenditures" description is a term coined by University of Wisconsin to refer to measurements of child-rearing expenditures in intact families.[24] "Continuity" means the child should continue to enjoy the standard of living the child would experience had the parents lived together and shared financial resources. In other words, the child's standard of living should be unaffected by the parents' decisions to marry, separate, divorce or never marry. The "out-of-pocket" method is another way to refer to the Comanor et al. method. In the Comanor PowerPoint slides, it is called "incremental costs" or "monetary child costs."



[23] Jane Venohr, (August 2016). *Economic Review of the Iowa Child Support Guidelines.* Presentation to the Iowa Child Support Commission, Des Moines, Iowa.

[24] Ingrid Rothe and Lawrence Berger, "Estimating the Costs of Children: Theoretical Considerations Related to Transitions to Adulthood and the Valuation of Parental Time for Developing Child Support Guidelines" (April 2007), *IRP Working Paper*, University of Wisconsin: Institute for Research on Poverty, Madison, Wisconsin.

Iowa Slide 12



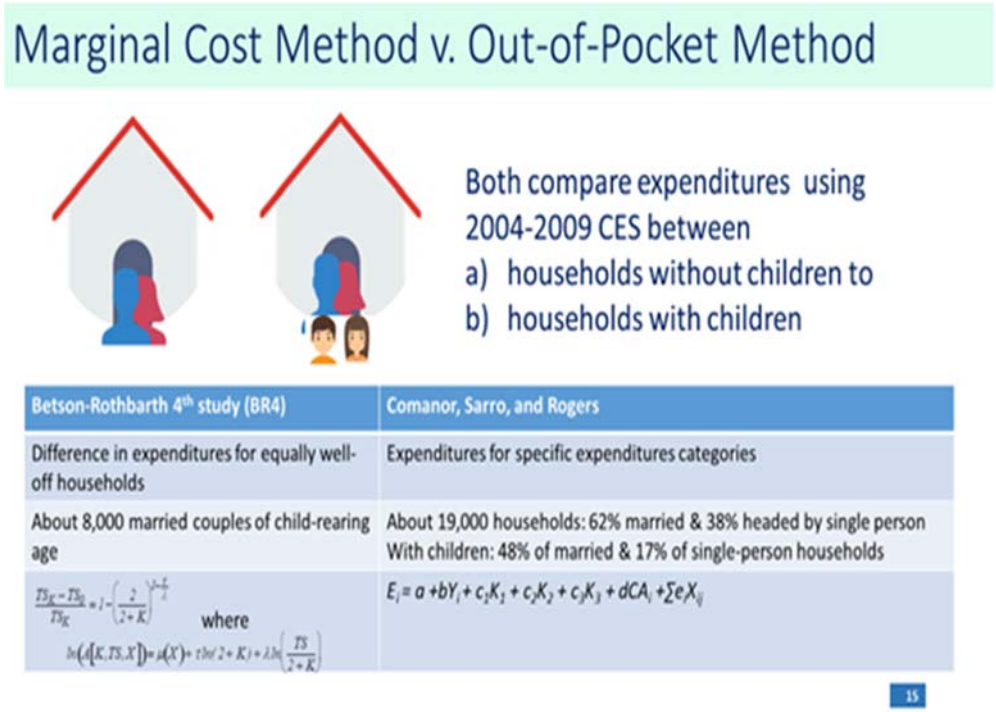
This slide identifies three minimum needs studies: the federal poverty level, and two Iowa-specific minimum needs studies: ALICE and the 2015 Iowa Basic Needs Budget. ALICE is conducted by United Way of Iowa.[25] The federal poverty level shown on the slide is from 2015. The 2016 federal poverty level is $1,050 for one person and $350 for each additional person.[26] The Iowa Basic Needs Budget is measured by the Iowa Policy Project.[27] Other economic indicators[28] find that the cost of living in Minnesota is more than the cost of living in Iowa. This would suggest that the Minnesota basic needs amounts may be more than the Iowa amounts.

ALICE and basic needs studies are not conducted for Minnesota; however, the Minnesota Department of Employment and Economic Development prepares an annual report to the legislature on the cost of living in Minnesota.[29] It finds it costs $54,804 per year for a typical Minnesota family of two adults and one child to maintain a simple living that meets basic needs for health and safety.

> *It costs $54,804 for a typical Minnesota family of two adults and one child to maintain a simple living that meets basic needs for health and safety.*

[25] United Ways of Iowa. (2014). *ALICE: Asset Limited, Income Constrained, Employed*. United Way of Northern New Jersey. http://www.unitedwayalice.org/documents/16UW%20ALICE%20Report_IA_FINAL_6.28.2016_Lowres.pdf .
[26] U.S. Department of Health and Human Services. (January 2017). *US Federal Poverty Guidelines*. https://aspe.hhs.gov/poverty-guidelines ,
[27] Fisher, Peter. (2016). *The Cost of Living in Iowa: 2016 Edition. Part 1: Basic Family Budgets*, The Iowa Policy Project, Iowa City, IA. Retrieved from: http://www.iowapolicyproject.org/2016Releases/160405-COL-release.html .
[28] On a scale where 100 percent is the U.S. average price level, Minnesota's price parity is 97.6 percent while Iowa at 90.3 percent is considerably less. Source: U.S. Bureau of Economic Analysis. (2016). *Real Personal Income for States and Metropolitan Areas, 2014*. http://www.bea.gov/newsreleases/regional/rpp/rpp_newsrelease.htm .
[29] John Clay, et al. (May 2016). *Minnesota Cost of Living Study Annual Report*. Report to the Legislature. https://www.leg.state.mn.us/docs/2016/mandated/160558.pdf

Iowa Slide 15



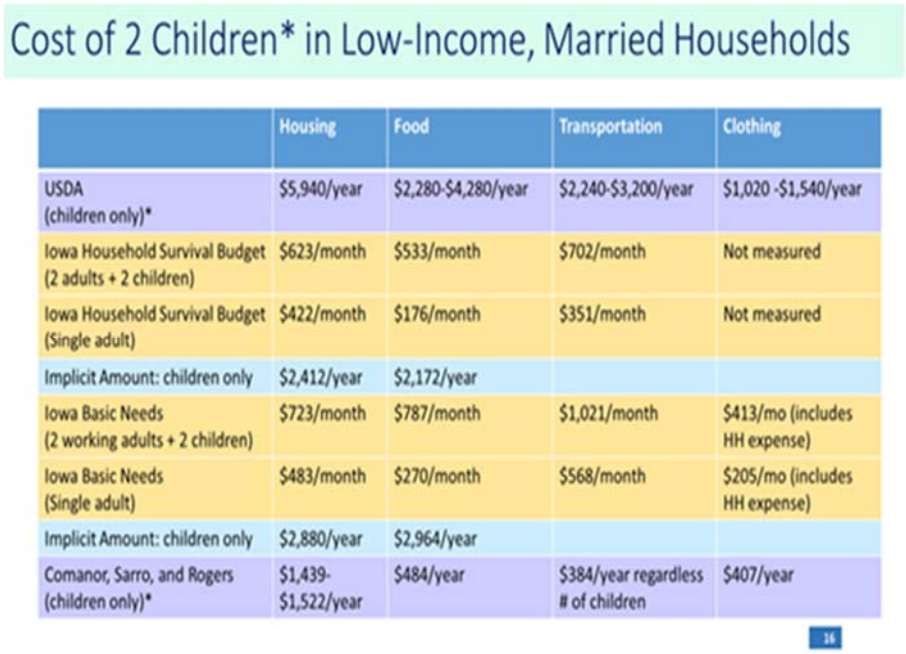
This slide compares the data and estimating equation of the Betson-Rothbarth study and the Comanor et al. study. A key difference is that Comanor et al. study includes single individuals without chlidren and single-person households, while the Betson-Rothbarth measurements do not. Single parents generally spend less on children than two-parent households do. One reason is that many single-parent families have incomes below poverty (38 percent of Minnesota female-headed families with related children live in poverty).[30] Using expenditures from impoverished families as the basis of child support guidelines leads to poverty-level child support guidelines, whereas most states believe that the child should share in the standard of living afforded by parents who can afford to enjoy a higher standard of living. Another key point of the slide is the difference in the estimating equations. The Betson-Rothbarth equation, which is not excerpted in its entirety, includes exponentials and is generally more complicated because it is more reflective of how families actually spend. (As discussed more later, and even in the Comanor materials, economic models describing household decisions on income, number of children that a couple has, and hours work by each parent are complex and intertwined.) In contrast, the Comanor equation is linear meaning that families spend the same proportion of income regardless of their income level. Consumption patterns change depending on how much income a family has. For example, low-income families may spend all or more of their income while high-income families may only spend part of their income. The linear equation, as Comanor et al. specifies, cannot capture this.[31] Including logged income variables and squared income and cubed income improve the equation's ability to capture the non-linear relationship between income and expenditures.

[30] 2015 American Community Survey. www.census.gov .

[31] Comanor partially offsets by analyzing expenditures separately for three income ranges: low, middle, and high. Still there may be non-linear consumption patterns within each of these ranges not captured by this equation.

Iowa Slide 16

This slide compares Iowa minimum need amounts (and the USDA amounts) to the Comanor et al. amounts for housing, food, transportation, and clothing. Housing cost for two children under the Iowa minimum needs studies is $2,412 to $2,880 per year. In contrast, Comanor et al. find the housing cost for two children is $1,439 to $1,522 per year for a low-income household. The disparity in food cost between the Iowa basic needs studies and the Comanor et al. study is much larger: $2,172 to $2,964 per year under the Iowa basic needs studies and $484 per year under the Comanor et al. study.



Cost of 2 Children* in Low-Income, Married Households

	Housing	Food	Transportation	Clothing
USDA (children only)*	$5,940/year	$2,280-$4,280/year	$2,240-$3,200/year	$1,020 -$1,540/year
Iowa Household Survival Budget (2 adults + 2 children)	$623/month	$533/month	$702/month	Not measured
Iowa Household Survival Budget (Single adult)	$422/month	$176/month	$351/month	Not measured
Implicit Amount: children only	$2,412/year	$2,172/year		
Iowa Basic Needs (2 working adults + 2 children)	$723/month	$787/month	$1,021/month	$413/mo (includes HH expense)
Iowa Basic Needs (Single adult)	$483/month	$270/month	$568/month	$205/mo (includes HH expense)
Implicit Amount: children only	$2,880/year	$2,964/year		
Comanor, Sarro, and Rogers (children only)*	$1,439-$1,522/year	$484/year	$384/year regardless # of children	$407/year

16

COMPARISONS TO OTHER MEASUREMENTS BY EXPENDITURE CATEGORY

Exhibits 7 and 8 summarize the Comanor results[32] by expenditure categories for one and two children in a married household. (The vast majority of child support orders cover one and two children.) The categories generally align with five of the seven categories measured by the USDA (*i.e.*, housing, food, transportation, children's clothing, and child care and education). Comanor excludes the child's health care cost, which is another USDA expenditure category, for reasons explained below. Comanor does not explain why he excludes entertainment/miscellaneous expenses as an expenditure category. One reason may be that some family types spend a negative amount on entertainment when they have children. Based on Comanor et al. (p. 238), low-income, married households with children spend $42 per year less on entertainment than low-income, married households without children spend. For middle and higher income families, however, married families with children spend more on entertainment ($84 per year and $247 per year, respectively) than those without children.

In all, Comanor et al. find that together, expenditures on the seven categories, account for 72 to 82 percent of total household expenditures.[33]

[32] From slides 16, 17, and 18 of Comanor PowerPoint.
[33] Comanor et al. (p. 239).

Exhibit 7: Imputed Child-Rearing Costs for One Child: Married Households (Source: Comanor slides 16, 17, & 18)

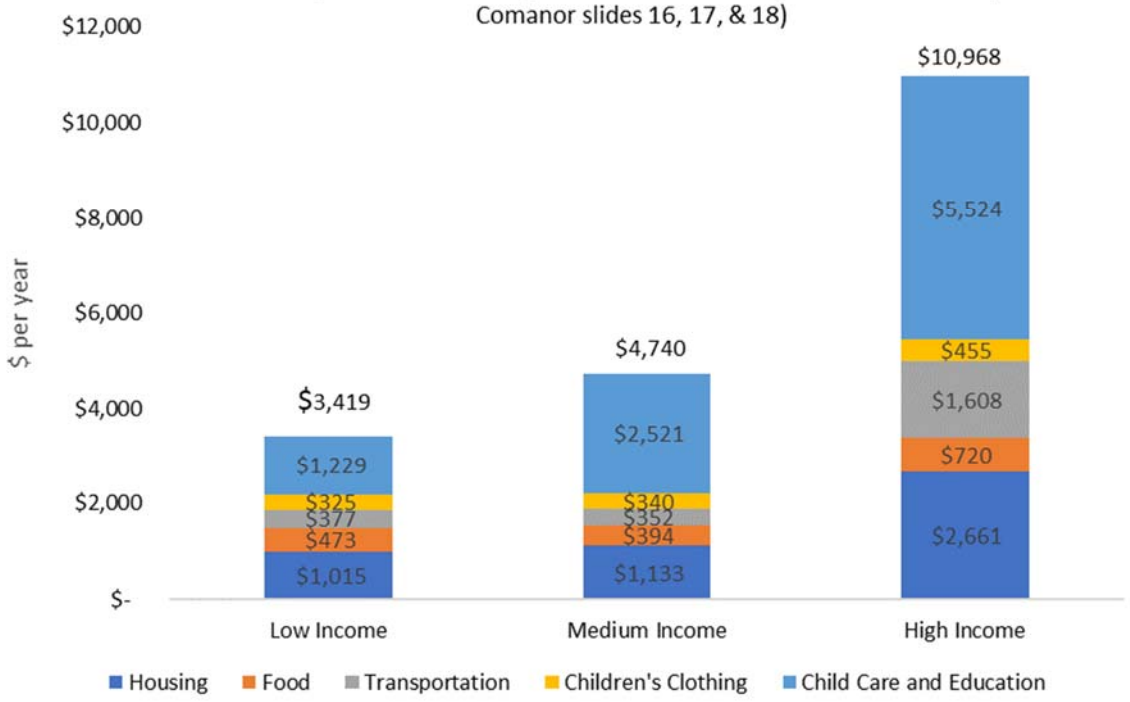
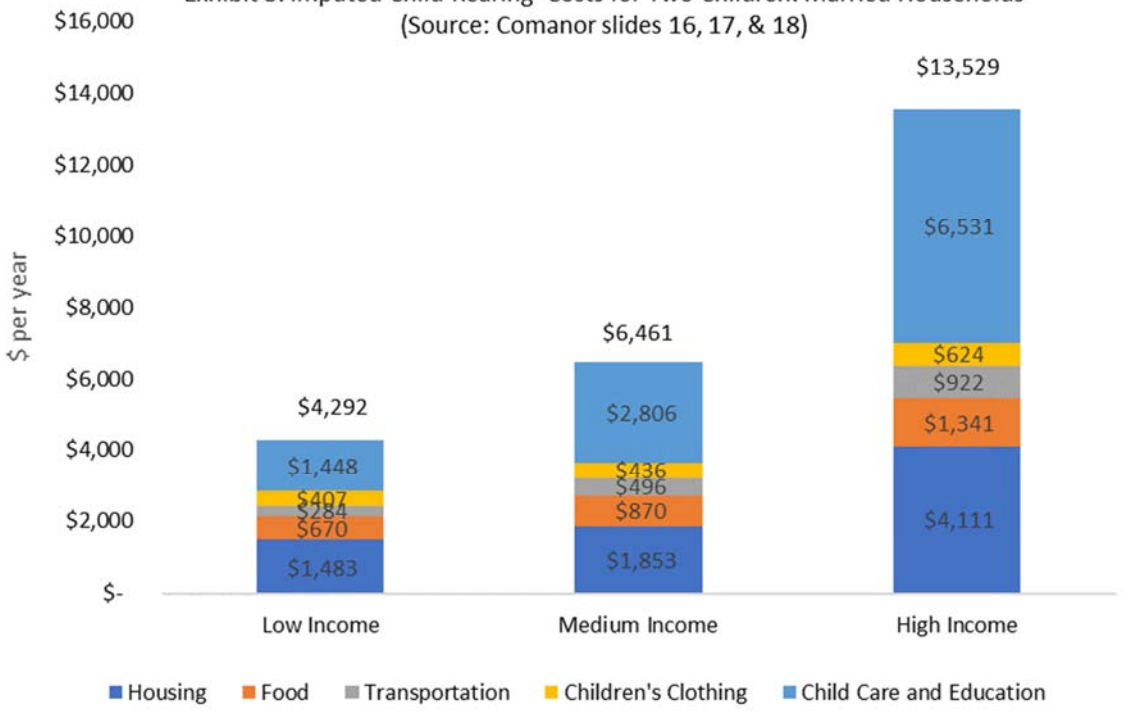


Exhibit 8: Imputed Child-Rearing Costs for Two Children: Married Households (Source: Comanor slides 16, 17, & 18)



CHILD'S HEALTH CARE COST

Comanor excludes outlays for the child's health care costs because

> ". . . households directly pay only a minor share of their own health care costs. For higher-income households, employers pay the largest share of these outlays in the form of health insurance benefits which are not included in taxable earnings."[34]

For the purposes of updating the Minnesota basic table, exclusion of the child's health care cost is appropriate. As identified in Exhibit 2, the current Minnesota basic table does not include the child's health care costs. Instead, the actual cost of the child's health care cost (whether it be the cost of the child's health insurance or for out-of-pocket medical expenses) is considered elsewhere in the guidelines calculation.

As an aside based on the 2014 Medical Expenditure Panel Survey (MEPS) data, 87 percent of children incur a health-services related expense, and although just over half is paid for by private insurance, 12.1 percent is paid out-of-pocket, which amounts to an average of $288 per child per year for those with health service expenses.[35] The average amount would be higher for those with private insurance because they incur out-of-pocket expenses more often and less for those with public insurance such as Medicaid.

CHILD CARE AND EDUCATION

Child care and education comprise the largest expenditure category in Comanor's summary tables. They comprise $1,229 to $5,524 per year for one child, which is 36 to 50 percent of the total child-rearing costs shown in Comanor's summary tables. Child care expenses (see Exhibit 2) are not included in Minnesota's basic table. Instead, the actual amount expended for child care is addressed on a case-by-case basis in the guidelines calculation.

The dollar amount expended for child care and education in the Comanor study may be plausible for all families if it is averaged across families with and without child care and education expenses. For example, the results of a Minnesota statewide survey of prices charged by licensed family child care and licensed center child care providers finds that provider prices at the 50th percentile (*i.e.,* median price) ranged from $115 to $325 per child per week; and, at the 75th percentile of provider prices ranged from $120 to $356 per child per week depending on the age of the child.[36] Using the median price and assuming 52 weeks of paid care, this would result in annual child care expenditures of $5,980 to $16,900. The amounts may be less because not all parents have paid care for 52 weeks of the year, and some families incur no child care expenses. 2011 Census data support this: it finds that 24 percent of

[34] Page 10 of Comanor's 2017 report to the Task Force.
[35] Computed from the U.S. Department of Health & Human Services Agency for Healthcare Research and Quality 2014 Medical Expenditure Panel Survey. https://meps.ahrq.gov/mepsweb/data_stats/meps_query.jsp .
[36] Minnesota Department of Human Services. (n.d.). *Results of the 2014 Child Care Market Rate Survey*. https://www.leg.state.mn.us/docs/2016/other/160082.pdf .

families with mothers present and children under 15 years made weekly child care payments.[37] Comanor et al. (page 219), however, appeared to limit the estimate to only those with a child care or education expense.

What seems unrealistic is child care and education expenses comprising 36 to 50 percent of the total costs for one child, as deduced from the information from Exhibits 7 and 8, albeit Comanor does not explicitly state that. In contrast, the USDA (2017) study finds child care and education expenses comprise 16 percent of total child-rearing expenditures.[38] This indirectly raises concerns about the results and use of the sum of the Comanor expenditure categories to update the Minnesota guidelines table.

HOUSING

Housing is the second largest expenditure category measured by Comanor using the incremental cost method. The USDA definition of housing includes mortgage payments or rent, utilities, maintenance and repairs, house furnishings and equipment and other expenses. It is not entirely clear that Comanor's definition of housing cost is as comprehensive. Comanor finds housing costs are $1,015 to $2,661 per year for one child and $1,483 to $4,111 per year for two children. The lower amount is the cost to low-income households and the higher is the cost to high-income households. On a monthly basis, this ranges from $85 to $222 for one child and $124 to $343 for two children.

When converted to a monthly amount, Comanor finds the children's housing cost ranges from $85 to $222 per month for one child and $124 to $343 per month for two children.

Comanor postulates that one reason that the monetary cost of the child's housing may be low is because there may be an offset (*i.e.*, opportunity cost) as in the situation where a childless couple with a two-bedroom apartment uses the second bedroom as a den until a child arrives, then the den is transformed into a nursery.[39]

In general, the Comanor amounts for low-income families (*i.e.*, the lower of Comanor's range) appear to be about half as much as the marginal cost of adding an extra bedroom per child using Minnesota Fair Market Rent (FMR) that are representative of lower rents. Tracked by the U.S. Department of Housing and Urban Development and used for housing subsidies, the FMR represents the 40th percentile of gross rents for typical, non-substandard rental units occupied by recent movers in a local housing market. In other words, they reflect housing cost for lower incomes. Exhibit 9 shows the Fair Market Rent (FMR) for 2017. Higher income families may typically spend more than the FMR. The 2015

[37] Laughlin, Lynda. (April 2013.) *Who's Minding the Kids Child Care Arrangements: Spring* 2011, U.S. Census Bureau. P70-135.Table 6.
[38] Lino (2017), page 11.
[39] Comanor, slide 8 of PowerPoint presentation.

American Community Survey reports a median gross rent of $888 per month and median monthly home owner cost is $1,016 in Minnesota in 2015.

Housing is a critical issue for children, especially for low-income families that sometimes do not have the financial means to secure adequate housing. Not only does housing fulfill the basic need of shelter, but where a child lives can affect the quality of education a child receives. The quality of public schools varies among school districts. A family may be willing to pay more for housing for their children to live in an area with a better school district. Another important consideration is appropriate housing for the age and gender of the children. This may mean providing separate bedrooms for the child and the adult(s) living in the household (rather than one "sleeping on the couch"), ensuring that male and female children have separate bedrooms, and meeting other housing standards that often are imposed in family re-unification cases (*e.g.*, a parent must have adequate housing, such as a two-bedroom apartment before a child can be reunified with a parent in a Child Protective Service case) or what housing would be considered adequate and appropriate in a custody determination that sometimes may be subject to a home assessment.

Exhibit 9: 2017 Fair Market Rents (Rents at the 40 Percentile) in Selected Minnesota Areas[40]

	One-Bedroom	Two-Bedroom	Three-Bedroom	Difference between One- and Two-Bedroom	Difference between Two- and Three-Bedroom
Duluth, MN-WI MSA	$603	$771	$1,001	$168	$230
Fargo, ND-MN MSA	$602	$767	$1,117	$165	$350
Minneapolis-St.Paul-Bloomington MN-WI HUD Metro FMR Area	$862	$1,086	$1,538	$224	$452
Wright County	$862	$1,086	$1,538	$224	$452
Yellow Medicine County	$551	$681	$983	$127	$452

FOOD

Comanor's incremental cost method produces a negligible amount for the child's food cost (*i.e.,* $394 to $720 per year for one child depending on whether the household is low, middle or high income.)[41] This amounts to $8 to $14 per week for the child's food. Exhibit 10 shows the cost of USDA food plans. The "thrifty food budget," which is a minimal cost for a nutritious diet, is used to set benefit levels for SNAP (Supplemental Nutrition Program, formerly called

When converted to a weekly amount, Comanor finds the children's food cost ranges $8 to $14 per week for one child.

[40] U.S. Department of Housing and Urban Development (2017). *Final FY 2017 Fair Market Rent Documentation System.* https://www.huduser.gov/portal/datasets/fmr/fmrs/FY2017_code/2017state_summary.odn

[41] Comanor, slides 16, 17, and 18.

"food stamps") and the liberal plan is used by the U.S. Department of Defense to set basic allowance for military personnel.

Exhibit 10: Weekly Cost of Food at Home for Selected Age-Gender Groups[42]

	Individual child: 1 year old	Individual Child: 4-5 year old	Individual Child: 9-11 years old	Male: 12-13 years old	Male 14-18 years old
Thrifty Plan	$21.50	$24.70	$35.50	$38.30	$39.50
Liberal Plan	$39.90	$47.20	$71.20	$79.90	$80.30

Exhibit 11 shows the cost of various food items in Minneapolis from an internet site that provides information about the cost of living in various cities.[43] The internet site does not provide information about the price of peanut butter, hamburger and other food more typical for a child's diet. Further, there may be better prices for some items (*e.g.*, white bread) at discounted grocery stores. Nonetheless, the information in Exhibit 11 illustrates that the child's food cost estimated by Comanor does not go far.

Exhibit 11: Cost of Selected Food Items in Minneapolis

Milk (regular, 1 gallon): $2.81
Eggs (dozen): $2.01
Apples (1 lb): $2.34
Bananas (1 lb): 0.66
Tomatoes (1 lb): $2.29
Potatoes (1 lb): $1.03
Loaf of fresh white bread (1 lb): $2.80
Chicken breasts (boneless, skinless, 1 lb): $4.71

TRANSPORTATION

Child's transportation cost may relate to school, medical visits, and sports and recreation opportunities. Several factors may affect it: availability of public transportation, whether the children live in a rural or urban area, and whether the parents can afford reliable transportation appropriate for family travel. Comanor found that transportation costs among married households averaged $284 to $505 per year for low- and medium-income households, and $922 to $1,608 per year for high-income households. Comanor also found no consistent increase in transportation costs with the number of children. Comanor et al. (page 231) found that the number of children was not a significant factor explaining children's transportation cost with one exception: low-income married households with three or more children.

There is a limited amount of alternative data on the child's transportation cost. What alternatives do exist are not as direct or lucid as the alternatives presented so far for other expenditure categories (*e.g.*,

[42] U.S. Department of Agricultural (2017). *Official USDA Food Plans: cost of Food at Home at Four Levels, U.S. Average, January, 2017.* https://www.cnpp.usda.gov/sites/default/files/CostofFoodJan2017.pdf.
[43] Numbeo.com. https://www.numbeo.com/cost-of-living/in/Minneapolis . The website was developed by Mladen Adamovi, a former Google software engineer.

child care, housing, and food). One source of indirect information is a summary table compiled from the 2015 Consumer Expenditure Survey.[44] It finds that married couples without children spend an average of $10,852 per year on transportation, while married couples with children spend an average of $14,196. Based on the difference ($3,344) and there being an average of 1.5 children in the married family households, the average transportation expense per child is $2,229 per year. The caveat to this is that it is a crude measurement. The married couples without children includes very young and very old couples who may not be of child-rearing age, and have very different transportation needs or wants than a married couple of child-rearing age. Further, using the average number of children to derive a "per child" amount does not capture the marginal cost of transportation associated with more children.

Another piece of information is from the methodology used to develop the Minnesota Cost of Living Study.[45] The researchers found that the vehicle miles traveled increased from one-child families to four-child families, but there was not a linear progression for the two- and three-child families.[46] To compensate for this this, they interpolate the amounts for these steps.

THEORETICAL AND EMPIRICAL ISSUES

The Comanor et al. study was published recently (2015), so there has been little time to substantially review, vet, or critique it. The theoretical issues surrounding the expenditure decisions of the family present challenges to any and all empirical methods used for measuring the cost of raising children. Specifically, the complexities of family consumption decisions do not lend themselves to use of the classical normal linear regression model, a common estimation technique, that can produce biased and inconsistent results due to incorrect mathematical form of the regression equation, incorrect specification of the way in which the disturbance (error term) enters the regression equation, and other reasons.[47]

The estimation model used in Comanor et al. (page 219) appears to produce the results reported in Comanor (PowerPoint slides 16, 17 and 18).

$$E_i = a + b\,Y_i + c_1K_1 + c_2K_2 + c_3K_3 + dCA_i + \sum e_i X_{ij}$$

Where

E_i = category expenditures made by the ith household.

[44] https://www.bls.gov/cex/2015/combined/cucomp.pdf .
[45] Steve Hine, John Clay, and Amanda Rohrer. (2015). *Minnesota Cost of Living Study: Methodology 2015*. Minnesota Department of Employment and Economic Development Labor Market Information Office, St. Paul, MN. https://mn.gov/deed/assets/col-methodology-2015_tcm1045-133025.pdf .
[46] *Ibid*, p. 11.
[47] For example, see Jan Kmenta (1986). *Elements of Econometrics*, Macmillan Publishing Company, NY, NY. On page 208, Kmenta lists the basic assumptions necessary for the classical normal linear regression model: normality, zero mean, homoscedasticity, nonautocorrelation and nonstochastic explanatory variables. On page 443, Kmenta lists and describes errors in specification of a regression model including omission of a relevant explanatory variable, inclusion of an irrelevant explanatory variable, incorrect mathematical form of the regression equation, and incorrect specification of the way in which the disturbance enters the regression equations.

Y_i = is the household's income

Kj = 1 where j children in the ith household and zero otherwise,

CA_j = child age

X_{ij} = dummy variables representing urban/rural and U.S. regions.

It resembles the estimating model in the USDA study (page 4).

$E_i = F(Y, HS, CA)$

Where

E_i = household expenditures on a particular budgetary component (food, transportation, health care, children's clothing, child care and education, and miscellaneous goods and services).

Y = household before-tax income (divided into three categorical variable groups for married couples families)

HS = number of children in the household (divided into three categorical variable groups: 1 child, 2 children, and 3 or more children.

CA= age of youngest child (divided into six categorical variable age groups).

The key difference is that Comanor et al. use the equation to apportion the dollar amount of the expenditure category to the child (*i.e*., determine the child 's share). They do this by applying the estimating equation to a data set that includes ***both*** families with and without children**.** In contrast, the USDA limits the data set to families with children. The USDA does this to adjust its measurements of child-rearing expenditures for each expenditure category (*e.g.,* food and housing) for income level, family size, and age of the youngest child, but, it does not use the equation to determine the child's specific share of that expense. (How the USDA measures the child's share is discussed in the next section.)

Although the difference may appear subtle, the problem is that income is a determinant of the number of children theoretically and empirically, so the use of this equation to determine the child's share is an incorrect mathematical form of the economic model. The relationship between income and number of children dates backs to Thomas Malthus's prediction of overpopulation—that is, fertility is increased by higher incomes— but has also been incorporated in the family economic models developed by Nobel Laureate economist Gary Becker.[48] Becker recognizes the complexities of modern life in a family's decision to have children and more children. Becker also identifies other factors such as the time spent on child care, the opportunity cost of child care, parents' decision to invest in the human capital (education) of their children, wage differentials between men and women, the division of household labor between a husband and wife, and the specialization within a marriage in types of activities that

[48] Gary Becker. (1996) *Accounting for Tastes.* Harvard University Press, Cambridge, Massachusetts. Page 150-51.

benefit the household as well earnings.[49] With this said, Comanor does acknowledge some of these issues in his presentation (see slide 7 of the PowerPoint) by discussing the opportunity cost of the time spent by the children and how time spent raising children detract from their preferred leisure time activities. Another early study of child-rearing expenditures addresses other issues and the difficulty of measuring income consumed by separate family members.[50] For any economist, empirically, it is difficult if not impossible, to develop an estimation model with all of these factors. Called "constrained maximum," a set of equations and its solutions are bounded by the number of constraints and unknown variables for which a solution is sought. A non-mathematical and intuitive explanation of this is to consider a family that may want to have more children because they enjoy their children. When the decision is viewed in isolation of what makes the family happy, the simple solution is to have more children. However, the solution (whether to have more children) becomes less clear when the family also considers their budget (income) constraint, time constraint, child care needs, trade-offs between working outside the home and in the home, and other possible constraints.

In summary, the functional form of the estimating equation of Comanor et al. appears mis-specified. The application to both families with and without children implies that all other explanatory variables are held constant when a childless family has its first child or adds an additional child; that is, income and the existence of children and the number of child is a decision made independent of income and total expenditures. This is a flawed assumption that produces flawed results empirically. A similar issue exists with number of children and child's age. As a family has more children, they are more likely to have older children; hence, there is correlation between the number of children and child's age. Estimates may be biased and inconsistent if the explanatory variables are correlated.

There are other theoretical and empirical issues with Comanor et al. and Comanor. For example, as mentioned earlier, the relationship between consumption and income is non-linear, not linear: that is, the percent of income devoted to consumption changes as income increases. Although Comanor et al, partially deals with this issue by dividing the sample into thirds (*i.e.*, low income, middle income and high income), this could produce biased and inconsistent estimation of the coefficient on income. The bias is likely to understate the importance of income to expenditures. Still another previously identified issue is that the Comanor et al. measurements account for only 72 to 82 percent of total household expenditures.[51] There may be other issues, but an exhaustive critique of the theoretical and empirical issues is beyond the scope of this paper.

With the theoretical and empirical criticisms put aside, it is important to remember that the objective of Comanor's research is to question the studies underlying state child support guidelines. Through

[49] Other seminal research that estimates fertility in the complexities of modern life that also maps out budget constraints and time constraints of a family to develop an optional solution for each family member's devotion to market work and household activity is Richard Easterlin, Robert Pollack, and Michael Wachter. (1980). "Toward a More General Economic Model of Fertility Determination: Endogenous Preferences and Natural Fertility" in *Population and Economic Change in Developing Counties*, Richard Easterlin, University of Chicago Press, Chicago, IL.

[50] Edward Lazaer and Robert T. Michael (1988). *The Allocation of Income within the Household*. University of Chicago Press. Chicago, Illinois. pp. 18–21.

[51] Comanor et al., (p. 239).

empirical analysis, he concludes that the underlying studies may overstate actual child-rearing costs, but Comanor does not specifically suggest his measurements should be used an alternative.

ROTHBARTH AND USDA MEASUREMENTS

In this paper, I take the position that either the Betson-Rothbarth measurement or USDA measurement would be appropriate for updating the Minnesota basic table. They are the most current and credible economic studies available for updating child support basic tables and they yield similar results (see Exhibits 4, 5, and 6). The USDA study is the most widely cited study on child-rearing expenditures, its numbers are frequently reported by major media sources.[52] The Rothbarth measurements form the basis of the child support guidelines in the majority of states.[53]

For over two decades, the Rothbarth and USDA measurements of child-rearing expenditures have been substantially vetted, reviewed, analyzed, and scrutinized for use of state child support guidelines.[54] In fact, Betson has critiqued the USDA method and Lino et al. (the authors of the USDA method) have critiqued the Rothbarth method and other marginal cost methods.[55] One criticism of the marginal cost approach (such as the Rothbarth method)— where the marginal cost approach measures expenditures on children as the differences in expenses between families with children and equivalent families without children–is that there is no generally accepted equivalency measure in the economic literature. Another criticism is marginal cost approaches do not consider substitution effects: that is, families may reduce the number of expensive vacations they take once having children. Historically, the most frequently mentioned criticism of the USDA approach was that it used a per-capita approach to measure the child's housing expenses.[56] As described later, the USDA replaced the per-capita approach for measuring the child's housing expense in 2008 with an improved approach.

1990 STUDIES AND BASIS OF TODAY'S STATE CHILD SUPPORT TABLES/FORMULA

As directed by the Family Support Act of 1988, the U.S. Department of Health and Human Services (DHHS), Office of the Assistant Secretary for Planning and Evaluation sponsored studies aimed at helping states develop and review child support guidelines. DHHS sponsored two studies on child-rearing expenditures that were completed in 1990. Federal regulation required states to have advisory guidelines by 1987 and rebuttable presumptive guidelines by 1989.

DHHS commissioned the University of Wisconsin Institute for Research on Poverty (IRP) and Professor David Betson, University of Notre Dame (who is an affiliate of IRP) to conduct a study of child-rearing

[52] For example, see Lam Thy Vo. (Jun 22, 2016). 'How Much Does It Cost to Raise a Child?" *Wall Street Journal*, and CNN. (n.d.) *How Much Will It Cost to Raise Your Child?* http://money.cnn.com/interactive/pf/cost-of-children/ ,.
[53] Jane C. Venohr. (2013). "Child Support Guidelines and Guidelines Reviews: State Differences and Common Issues," *Family Law Quarterly*, Vol. 43, No. 3 (Fall 2013).
[54] For example, see Rothe, I., J. Cassetty, and E. Boehnen. (2001). *Estimates of Family Expenditures for Children: A Review of the Literature.* Report prepared for the Wisconsin Department of Workforce Development, Institute for Research on Poverty, University of Wisconsin–Madison.
[55] Lino et al. (2017) pp. 16-17.
[56] See Betson (2010), p, 142.

costs.[57] The study fulfilled a Congressional mandate to provide information about child-rearing expenditures for states to develop and revise child support guidelines. For this 1990 study, Betson used and compared five different methodologies for measuring child-rearing expenditures and concluded that the Rothbarth estimator produced the most "robust" (*i.e.*, sound and statistically reliable) results, and recommended its use for state guidelines.

At the time, states that based their table/formula on economic evidence on child-rearing expenditures relied on a 1981 study of child-rearing expenditures[58] (mostly because they adopted the Wisconsin model[59]) or a 1984 study that relied on expenditure data collected in 1972–73.[60] Examining extant studies in which an estimated cost of child rearing could be extracted, van der Gaag (1981) concluded that a couple who adds one child to their household needs 25 percent more income to maintain their standard of living, the second child costs about half as much as the first child, and the third child costs about the same as the second child. The other study relied on the "Espenshade" methodology to separate the child's share of expenditures. Both Espenshade and Rothbarth are named after the economists who developed them, are marginal cost approaches to measuring child-rearing expenditures, and are considered in Betson's 1990 study. The marginal cost is the difference between how much a couple with children spends and how much a childless couple spends assuming that the two couples are equally well off. The Engel methodology uses the percentage of expenditure devoted to food as a proxy for equally well-off households, and the Rothbarth methodology relies on expenditures on adult goods to determine equally well-off households.

The other 1990 study commissioned by DHHS reviewed the results of the first study and other economic evidence relevant to child support guidelines.[61] It found a wide range of estimates of expenditures on children and did not pinpoint one methodology as necessarily being better than another. The study suggests that the Engel approach overstates actual child-rearing expenditures and the Rothbarth approach understates actual child-rearing expenditures.[62] Further, it suggests that the two estimates be used to calculate the likely upper and lower bounds of the true average level of expenditures on children.[63] In other words, state guidelines that provide amounts less than the Rothbarth amounts may provide inadequate amounts for children.

Nonetheless, Betson's 1990 conclusion set the path for the usage of measurements of the Rothbarth estimator to develop and update child support guidelines. Ohio was the first state to adapt the

---

[57] David M. Betson. (1990). *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, University of Wisconsin Institute for Research on Poverty, Madison, Wisconsin.

[58] van der Gaag, Jacques. (1981). *On Measuring the Cost of Children*. Discussion Paper 663-81. University of Wisconsin Institute for Research on Poverty, Madison, Wisconsin.

[59] New York adopted the Wisconsin model and has detailed on both models. See New York State Commission on Child Support and Association of the Bar of the City of New York, *What Are the Child Support Guidelines? The Child Support Standards Act*, presentation to the Association of the Bar of the City of New York on October 21, 1989, New York, New York.

[60] Espenshade, Thomas J. (1984). Investing in Children: New Estimates of Parental Expenditures. Urban Institute Press: Washington, D.C.

[61] Lewin/ICF. (1990). *Estimates of Expenditures on Children and Child Support Guidelines*. Report to U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Fairfax, Virginia.

[62] Lewin (1990) pp. 2-28 and 2-29.

[63] Lewin (1990) p. 7-3.

Rothbarth estimator as the basis of its child support table after extensive analysis of the Rothbarth measurement, and impact compared to the use of other measurements.[64] As identified later, Betson has subsequently updated his Rothbarth measurements thrice: each time using more current expenditure data.

BASIS OF TODAY'S CHILD SUPPORT TABLES/FORMULAS

Venohr (2017 forthcoming) identifies the economic basis of state guidelines.[65] Minnesota is categorized as relying on the USDA although it actually relies on multiple sources. At least twelve states mostly rely on the van der Gaag (1981) or Espenshade (1984) as the basis of their child support guidelines table or formula (*i.e.*, Alaska, California, Florida, Illinois, Indiana, Kentucky, Michigan, New Hampshire, New York, Nevada, Texas, Washington, and Wisconsin). Most (26 states and the District of Columbia and Guam and Indiana partially and Georgia partially) rely on a Betson-Rothbarth (BR) measurement: eight states rely on the two oldest BR measurements, 12 states rely on the third BR measurement, and seven states rely on the fourth BR measurement. A few states (*i.e.*, Delaware, Georgia, Indiana, and Montana) use multiple sources. New Jersey relies on Rothbarth estimates developed by one of its university professor.[66] Kansas has developed its own unique method that is updated by one of its universities.[67] Still, the source is unknown among five states (*i.e.,* Hawaii, Idaho, Mississippi, North Dakota, and Utah).

USDA

The USDA typically updates its measurements annually or bi-annually. The most current USDA study, which was published in January 2017, reflects child-rearing expenditures in 2015.[68] The USDA estimates child-rearing expenditures individually for seven expenditure categories (*e.g.*, food, transportation, housing, clothing, health care, child care and education, and miscellaneous expenses), then adds them to develop a total. Exhibit 12 lists these categories and summarizes the method used to apportion that expense to the child. In the exhibit, CES refers to the Consumer Expenditure Survey conducted by the U.S. Bureau of Labor Statistics, that is the data set that all economists used to measure child-rearing expenditures. Exhibit 12 shows that several expenditure items are estimated using a per-capita approach, which other economists have criticized.

[64] See Policy Studies Inc. (1993). *Updated Economic Tables for the Ohio Child Support Guidelines*. Report to Office of Child Support Enforcement, Ohio Department of Human Services, Columbus, Ohio.
[65] Jane C. Venohr (Forthcoming 2017). "Differences in State Child Support Guidelines Amounts: Guidelines Models, Economic Basis, and Other Issues. *Journal of the American Academy of Matrimonial Lawyers*.
[66] New Jersey Child Support Institute (March 2013). *Quadrennial Review: Final Report*, Institute for Families, Rutgers, the State University of New Jersey, New Brunswick, NJ. Retrieved from: http://www.judiciary.state.nj.us/reports2013/F0_NJ+QuadrennialReview-Final_3.22.13_complete.pdf .
[67] See Kansas Judicial Branch, http://www.kscourts.org/Rules-procedures-forms/Child-Support-Guidelines/archives.asp.
[68] Lino, Mark, et al. (2017). Expenditures on Children by Families: 2015 Annual Report. U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2015, Washington, D.C. Available at http://www.cnpp.usda.gov/publications/crc/crc2015.pdf.

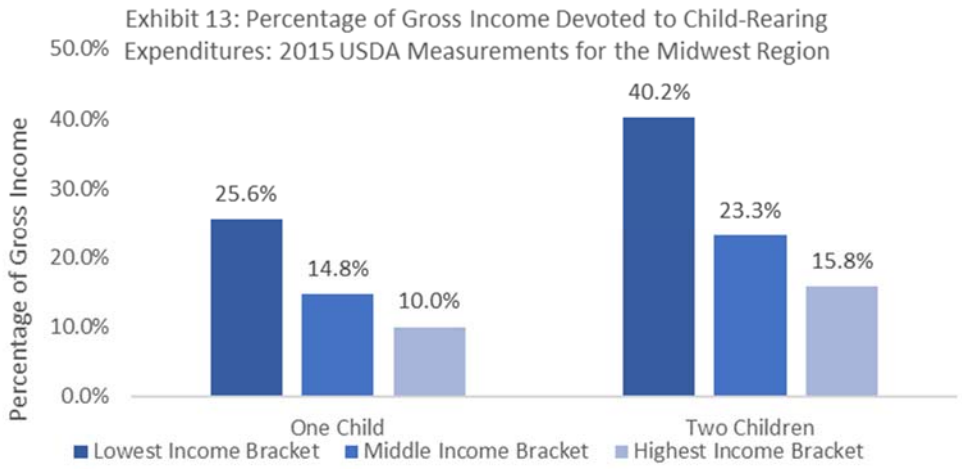
Exhibit 12: List of Expenditure Categories Measured by USDA and Summary of Methodological Methods	
Expenditure Category	Methodology
Food	CES captures food expenditures for the entire household. It is apportioned to the child using the USDA Food Plans by considering the age of the household member, household size and income; specifically, the food shares under the USDA using the USDA Low-Cost Plan for low-income families, the Moderate-Cost Plan for middle-income families, and the Liberal Food Plan for high-income families.
Housing	The cost of an extra bedroom as measured by multivariate analysis that regresses housing expenditures on the number of bedrooms in a home controlling for income level.
Transportation	The CES captures transportation expenses for the entire household. The USDA excludes employment-related expenses, and considers transportation expenses for family-related activities (using an apportionment from a U.S. Department of Transportation study). Family-related transportation is assumed to be shared equally between the parents and the children, then allocated to the children on a per capita basis.
Health care	The CES captures health care expenditures for the entire household. Data from the U.S. Department of Health and Human Services 2012 Medical Expenditure Panel Survey that collects detailed data on health care expenditures on individual household members is used to determine the share of health care expenditures on children.
Clothing	CES captures expenditures on children's clothing for children age 15 and under. USDA assumes that expenditures for older children is similar to those for a 15-year old.
Child care and education	CES captures child care and education expenditures directly. More than half of households reported no child care expenditures.
Miscellaneous xpenses (e.g., personal care products and services and entertainment)	CES captures miscellaneous expenses for the entire household. The USDA uses a per capita method to apportion them to family members.

Using expenditures data from the 2011 through 2015 Consumer Expenditure Survey (CES), the USDA found that average child-rearing expenses are $9,060 to 22,730 per year for the youngest child in a two-child family in the Midwest in 2015.[69] The USDA finds that child-rearing expenditures are more in high-income families and for older children.

The USDA estimates consider three income ranges for the Midwest region. In 2015, they were before-tax income less than $59,200 per year, with an average income of $37,600; before-tax income of $59,200 to $107,400 per year, with an average of $81,700 per year; and before-after tax income more than $107,400 per year, with an average of $186,910 per year. Exhibit 13 compares the percentage of gross income devoted to child-rearing expenditures for each of these income ranges. Specifically, the percentage is calculated by dividing average expenditures (less the child's health care expenses and child care expenses) for each income range by average income of that range. This is done to make the USDA percentages comparable to the Minnesota guidelines. Most state guidelines exclude these expenses from their core formula or schedule because they use the actual amount expended on a case-by-case basis in the child support calculation.

[69] Lino, Mark, et al. (2017). *Expenditures on Children by Families: 2015 Annual Report*. U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2015, Washington, D.C. Available at http://www.cnpp.usda.gov/publications/crc/crc2015.pdf.

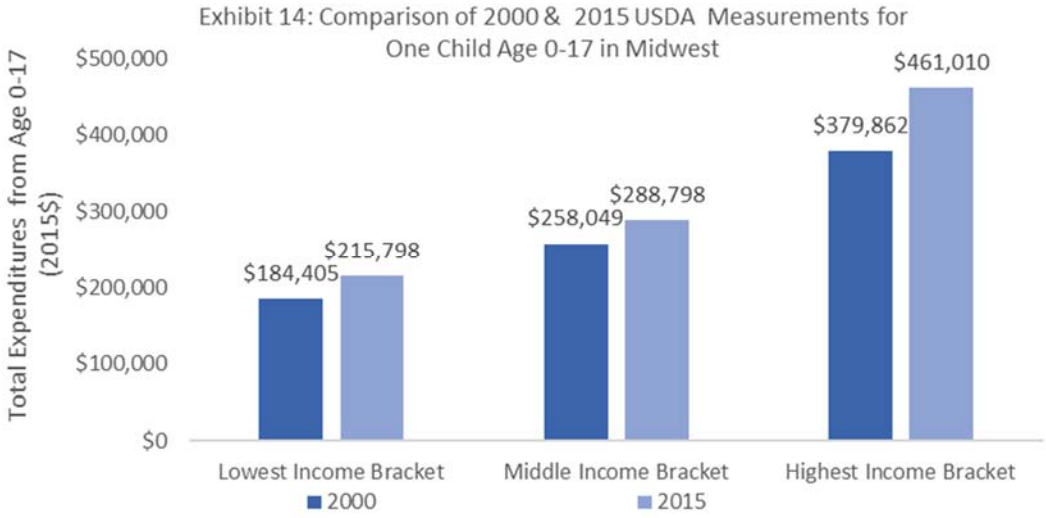
One observation from Exhibit 13 is the percentage of gross income devoted to child-rearing expenditures declines as gross income increases. Progressive federal tax rates contribute to this decline. Spending decisions are made from after-tax income, not gross income.

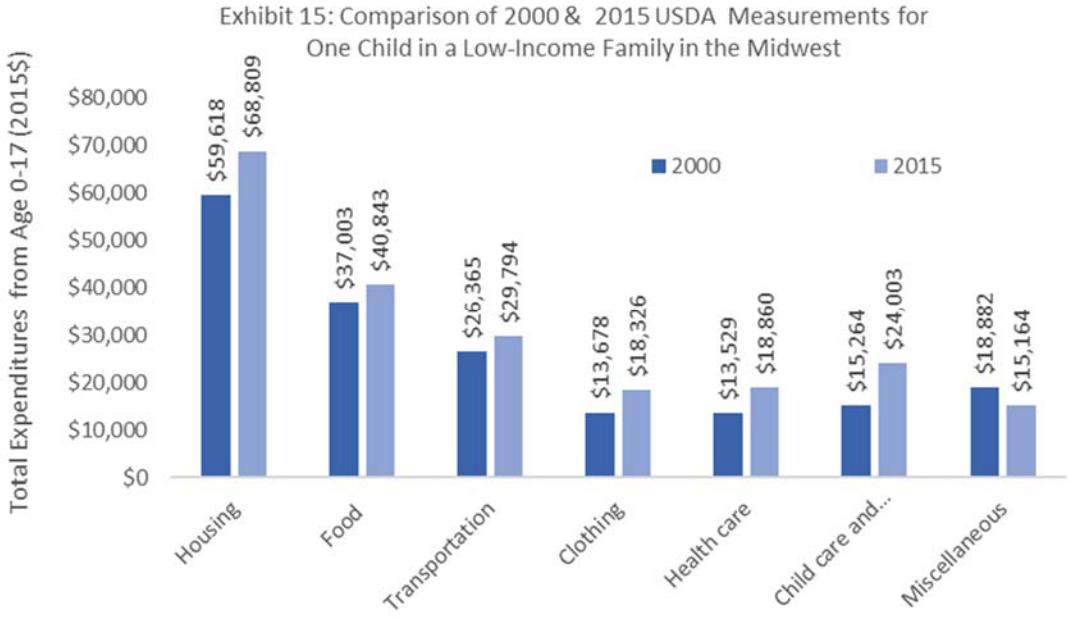


Changes in USDA over Time

The existing Minnesota basic table is based on an older USDA study (2001). Since then, the USDA changed its methodology and uses updated data. The 2015 USDA measurements rely on 2011-2015 Consumer Expenditure Survey data. In 2008, the USDA switched to a marginal cost methodology for measuring housing cost (*i.e.*, the additional cost for an additional bedroom or bedrooms for the child or children). This may have contributed to increases to the USDA measurements. Exhibit 14 shows those increases for the one-child USDA amounts from 2000 to 2015 in 2015 dollars.

As shown in Exhibit 15, which also shows the amounts in 2015 dollars, the increase was not just due to the change in the methodology used to measure the child's housing expenses. The increase was for every expenditure category except miscellaneous. (The reason for the exception is unknown.)





ROTHBARTH STUDIES UNDERYLING STATE CHILD SUPPORT BASIC TABLES

There are five different Rothbarth measurements that form the basis of 29 state guidelines. Four were developed by Professor David Betson, University of Notre Dame. The fifth was developed by a Rutgers University professor for New Jersey, is adjusted for New Jersey's relatively high income, and is used only by New Jersey. Named after the British WWII economist who derived it, the Rothbarth methodology is a marginal cost approach that compares expenditures of two sets of equally well-off households: one set consists of two-parent families with children, and the other consists of couples without children. The difference in their expenditures is presumed to be spent on child rearing. The Rothbarth methodology relies on the percentage of total expenditures devoted to adult goods (*i.e.*, adult clothing in Betson's application) to determine equally well-off families. Betson has conducted sensitivity analysis to determine whether alternative definitions of adult clothes (*i.e.*, those that include expenditures on alcohol and tobacco) produce different results and have concluded that they do not.

In viewing the Rothbarth measurements for use of state child support guidelines, it is important to note that:

- Studies using the Rothbarth methodology measure how much of total household expenditures are spent on children;
- To this end, they typically measure child-rearing expenditures as a percentage of total expenditures (*e.g.*, 20 percent of all family expenditures are devoted to one child);
- They do not separate child-rearing expenditures by expenditure category (*e.g.*, food and housing); and

- They do not typically relate to income. Instead, expenditures must be converted to income for use of a child support guidelines. (This is the reason behind assumptions about tax rates and addressing families that spend more or less than their income, as shown in Exhibit 2. These assumptions can impact a state child support basic table just as much as which economic study is used to develop the table.)

BETSON-ROTHBARTH

Over time, four sets of Betson-Rothbarth (BR) measurements have been produced. For Betson's first study,[70] he used 1980–1986 CES data. For his second study,[71] he initially used 1996–1998 CES data, but later expanded it to encompass 1996–1999 CES data. For his third study[72] and fourth study,[73] respectively, he used data from the 1998–2004 and 2004–2009 CES. Exhibit 16 and Exhibit 17 illustrate the differences in BR over time for one child and two children, respectively. The percentages exclude child care, the child's health insurance, and the child's extraordinary medical expenses and are converted from expenditures to after-tax income by using average expenditures to after-tax income ratios calculated from the same subset of data used to develop the BR measurements.

The first three sets of BR measurements (BR1, BR2, and BR3) rely on the same assumptions and methodologies, but different data years. The most recent BR measurements (BR4) included two changes in data assumptions. Earlier BR measurements consider "expenditures," while BR4 considers "expenditures-outlays." Expenditures include the purchase price (and sales tax) on any item purchased within the survey year regardless whether the item was purchased through installments. In contrast, outlays only capture what was actually paid toward that item during the survey period. So, if there were only four out of 20 installment payments made during the survey period, only those four payments are captured.

Unlike expenditures, outlays also capture mortgage principal payments, payments on second mortgages, and payments on home equity loans. Both expenditures and outlays capture interest on the first mortgage among homeowners and rent, utilities, and other housing expenses among renters. The merit of expenditures for use of state guidelines is that it excludes mortgage principal payments. This is consistent with property settlements that have historically addressed equity in the home as part of the divorce settlement. The merit of outlays for use in state guidelines is it is a better reflection of the monthly budget cycle; that is, household spending in consideration of monthly bills and expenses.

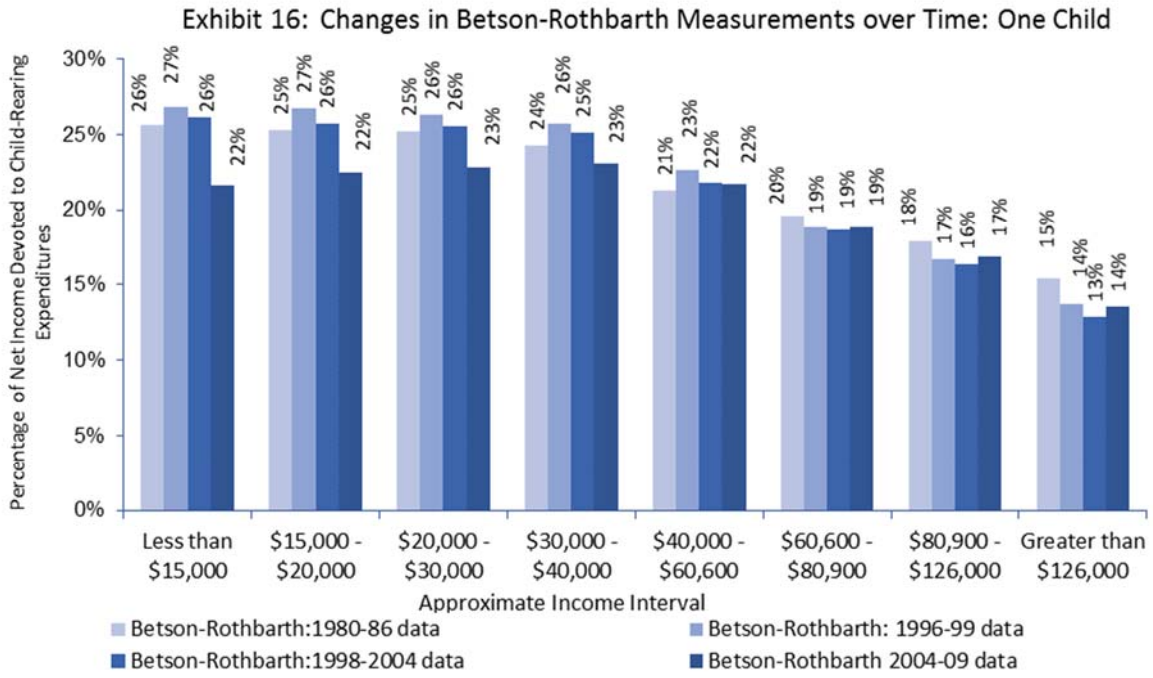
---

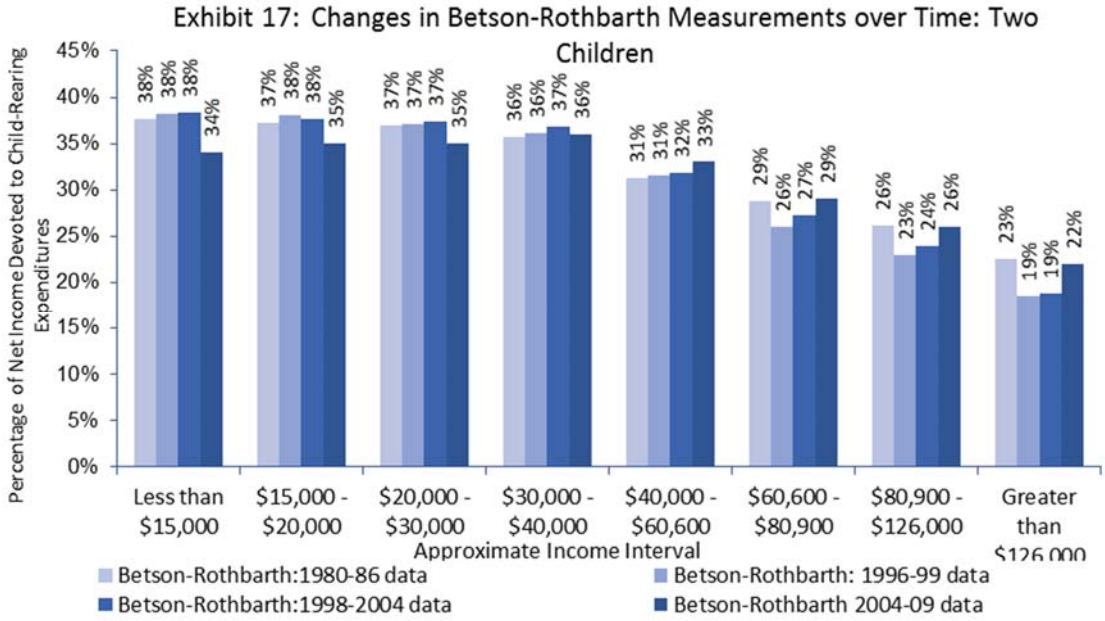
[70] Betson, David M. (1990). *Alternative Estimates of the Cost of Children from the 1980–86 Consumer Expenditure Survey*. Report to U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. University of Wisconsin Institute for Research on Poverty, Madison, Wisconsin.

[71] Betson, David M. (2001). "Chapter 5: Parental Expenditures on Children." In Judicial Council of California, Review of Statewide Uniform Child Support Guideline. San Francisco, California.

[72] 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 Oregon, Prepared by Policy Studies Inc., Denver Colorado.

[73] Betson, David M. (2010). "Appendix A: Parental Expenditures on Children." In Judicial Council of California, Review of Statewide Uniform Child Support Guideline. San Francisco, California.





The second difference is that Betson relied on a newly available measure of income developed by the Bureau of Labor Statistics, the organization that conducts the CES. The underreporting of income is a problem inherent to most surveys. The new measure attempts to correct underreporting, particularly at low incomes. The problem was identified from findings from analysis of earlier CES that revealed that many low-income families spend considerably more than what they report as income. The new

measurement essentially bumps income for some families—hence, reducing the percentage of their income spent on child rearing.

In general, the BR4 measurements are less than the BR3 measurements at lower incomes, which may be due to the correction of the underreporting of income, as described above, and the BR4 measurements are more than the BR3 measurements at higher income, which may be due to the change to outlays. Due to the decreases coupled with the fact that most conventional economists believe that the Rothbarth methodology understates actual child-rearing expenditures, several states (*i.e.*, Arizona, Iowa, and Pennsylvania) have decided to retain the BR3 as their basis but update the BR3 measurements for current price levels and other economic factors (*e.g.*, changes in tax rates). Seven states (*i.e*., Colorado, Connecticut, North Carolina, Rhode Island, Vermont, Virginia, and Wyoming) base their guidelines schedules on BR4.

NEW JERSEY-ROTHBARTH MEASUREMENTS

In 2013, New Jersey updated its guidelines using a study that was conducted by a Rutgers University professor applying the Rothbarth methodology. However, its average results are much less than that of the BR studies. The New Jersey study found that the average percentage of total household expenditures devoted to children in intact families is 20 percent for one child, 23 percent for two children, and 29 percent for three children. In contrast, the average percentage of total household expenditures devoted to children in intact families under the BR measurements range from 24 to 26 percent for one child, 35 to 37 percent for two children, and 40 to 45 percent for three children. The Rutgers study considers expenditures data from a larger time period (2000 through 2011). The Rutgers study also considers single-parent families and families with more than two adults living in the household, while the BR studies consider dual-parent families only. Inclusion of single-parent families may explain some of the differences.

Despite the differing study results, when New Jersey developed a schedule, it adjusted its Rothbarth measurements for New Jersey's above average income. This results in the New Jersey schedule amounts for one child being more than most BR-based schedules. However, the New Jersey schedule amounts are only more than BR-based schedules for one-child amounts, not for two or more children. This is because of an anomalous result of the Rutgers study: it found that two children do not cost much more than one child (*i.e.,* the amount allocated for two children is about 10 percent more than the amount allocated for one child). This finding eclipses any adjustment for New Jersey's higher incomes for comparisons considering two or more children.

TRANSFORMING ROTHBARTH MEASUREMENTS TO CHILD SUPPORT TABLES

As shown in Exhibit 2, several other assumptions must be made to transform the Rothbarth measurements into a gross-income based child support table. The BR measurements of child-rearing expenditures relate to total expenditures, which is equivalent to after-tax income if a family spends all of their income and incurs no savings. In turn, from after-tax income, they must be backed out to a gross-income basis. Exhibit 18 illustrates why this transformation is needed.

Exhibit 18: Family Consumption and Net and Gross Income	
Gross Income:	Federal and State Taxes and FICA
Net Income:	Savings and Other Spending
Family Expenditures:	Total Family Expenditures/Outlays for the Family
	Child's Share of Total Family Expenditures/Outlays

As summarized in Exhibit 2, most gross-income guidelines using the Rothbarth methodology are backed into a gross-income basis using prevailing federal and state income withholding and FICA tax formula. The most common tax rate assumptions are (a) a single individual (which is the same tax rate for head-of-household in the withholding formula); and (b) two federal withholding allowances (one for a single exemption and one to simulate the standard deduction), based on IRS instructions. One alternative, which is used by the District of Columbia, is to assume tax rates for a married couple claiming the same number of children for whom support is being determined. This results in a lower effective tax rates, more spendable income available for child-rearing expenditures, and higher child support table amounts.

Before the BR measurements can be backed out to gross income, they must also be backed out to after-tax income. Various assumptions can be made to back out the measurements to a net-income base. One assumption is that families spend all of their after-tax income. Under this assumption, family expenditures and after-tax income are equal and no additional adjustment is necessary. The District of Columbia is the only state using the BR estimates to make this assumption. Instead, most BR states consider the expenditures to consumption ratios observed in the same subset of CES data used to measure child-rearing expenditures. For incomes in which families spend more than their incomes on average (*i.e.*, typically below $3,000 net per month), many states cap income so families never spend more than their after-tax income.

SECTION III: GUIDELINES MODELS

Most states including Minnesota relate their child support table to a study of child-rearing expenditures. The guidelines model is a policy decision and should be made before selecting the economic measurement of child-rearing expenditures because it can affect what type of measurement of child-rearing expenditures are needed. Most state guideline models are based on what University of Wisconsin researchers call "continuity of expenditures model"—that is, the child support award should allow the children to benefit from the same level of expenditures had the children and both parents lived together.[74] There are two types of continuity of expenditures models used by states: the income shares model and the percentage-of-obligor income guidelines. However, a few states use the Melson formula which considers the basic needs of the child as well as a "standard of living adjustment" to ensure that the child shares in the standard of living of the obligated parent if the obligated parent can afford a higher standard of living. In addition, there are some alternative guidelines, that are not used in any state, that rely on expenditures in single-parent families. However, no states use them.

INCOME SHARES MODEL

Most states (39 states), including Minnesota and many Midwestern states (*i.e.*, Iowa, Indiana, Missouri, Michigan, Nebraska, and South Dakota), rely on the income shares model. Beginning in 2017, Illinois will also begin using the income shares model. The switch in Illinois comes after five years of deliberation, planning, and policy making. The income shares model considers both parents' incomes in the calculation of support, so it is generally perceived to be more fair. Each parent is responsible for his or her share of the prorated expense of raising the child in the income shares model. The income shares model was developed through the 1983–1987 National Child Support Guidelines, which was convened by the Federal Office of Child Support Enforcement (OCSE) to fulfill a congressional request.[75] At the time, most states did not have statewide child support guidelines, while the federal time line was initially 1987 for advisory statewide guidelines, then extended to 1989 when the requirement was expanded to presumptive statewide guidelines. The architect of the income shares model designed it to fulfill the guidelines principles identified by the project's oversight committee, which included a wide range of stakeholders. Examples of some of the principles are: the financial responsibility of the children should be shared by the parents who have legal responsibility for the children, child support guidelines should at least cover a child's basic needs (but the child should also share a higher standard of living enjoyed by a parent); the subsistence needs of each parent should be taken into consideration; and each child of a given parent should have a right to that parent's income.

[74] Ingrid Rothe and Lawrence Berger, "Estimating the Costs of Children: Theoretical Considerations Related to Transitions to Adulthood and the Valuation of Parental Time for Developing Child Support Guidelines" (April 2007), *IRP Working Paper*, University of Wisconsin: Institute for Research on Poverty, Madison, Wisconsin.

[75] National Center for State Courts. (1987). *Development of Guidelines for Child Support Orders*, Final Report. Report to U.S. Department of Health and Human Services, Office of Child Support Enforcement, Williamsburg, Virginia.

PERCENTAGE-OF-OBLIGOR INCOME MODEL

There are nine states (including North Dakota and Wisconsin that border Minnesota) that rely on a percentage-of-obligor income guidelines model. None of these nine states rely on identical percentages. One variation is some states rely on flat percentages while other states rely on a sliding-scale percentage. The major difference between the income shares model and the percentage-of-obligor income guidelines model is the former includes the custodial parent's income in the guidelines calculation; specifically, the more income the custodial parent has, the lower is the guidelines-determined award amount. Although the amount of the custodial parent's income has no bearing on the guidelines-determined award amount in the percentage-of-obligor income guidelines model, the explicit or implicit premise is that the custodial parent contributes the same percentage of income or dollar amount to the children as the amount of the child support award owed by the obligated parent.

MELSON FORMULA

Delaware, Montana, and Hawaii rely on the Melson formula. Mechanically, the Melson formula blends elements of both the income shares model and the percentage-of-obligor income model. It first prorates a basic needs level for the child between the parents, then if the obligated parent has any income remaining after meeting his or her own basic needs as well as his or her prorated share of the child's basic needs, an additional percentage of the remaining income is assigned to child support.

ALTERNATIVE GUIDELINES MODELS

Besides the three guidelines models currently used by states, there are many other guidelines models that are not in use. Many are premised on equalizing income or closing the gap in after-tax, after-child support payment/receipt incomes of the two households. When state guidelines were first federally mandated, one frequently mentioned alternative was the income equalization model.[76] These alternative models vary in tax assumptions, the amount of time the child spends with each parent, and other factors. Most states find that changing child support guidelines models takes several years to develop and vet among guidelines users and stakeholders. All states that have successfully changed guidelines models in the last 15 years have switched to the income shares model.

Massachusetts and the District of Columbia initially used the "hybrid" model but both states switched to income shares in the late 2000's. The hybrid model relied on a percentage-of-obligor income guidelines model until the custodial parent's income reached a certain threshold (*e.g.,* $20,000 per year in Massachusetts) then switched to an income shares approach. The premise was that custodial-parent households need a larger income disregard to raise them out of poverty. The premise became outdated as shared custody became more prevalent and there was not clearly just one custodial parent. The hybrid model is not in use by any state currently.

[76] National Center for State Courts (1987). *Development of Guidelines for Child Support Orders, Final Report.* Report to U.S. Department of Health and Human Services, Office of Child Support Enforcement, Williamsburg, Virginia.

A few alternative guidelines models — the cost shares model introduced by the Children's Rights Council —and later modified and promoted by Mark Rogers in several versions including one that amalgamated income shares; the American Law Institute's model (ALI); and Arizona's Child Outcome-Based Support model (COBS) — received significant attention several years ago, but none have been adopted by any state. All of them are alternatives to guidelines models rooted in measurements of child-rearing expenditures in intact families. The original cost shares model considers child-rearing expenditures in single-parent families rather than expenditures in intact families. Advocates of the cost shares model are critical of the income shares model because they believe that the standard of living afforded when the family was intact cannot be maintained when there are now two households to support (*i.e.*, the household that includes the custodial parent and the children and the household that includes the obligor). Further, they believe that if the standard of living of the children and custodial parent is maintained, then the standard of living of the obligor must diminish. This is one reason why the original cost shares model relied on measurements of child-rearing expenditures in single-parent families rather than measurements in intact families. One of the criticisms of using expenditures in single-parent families is that it sets a basic needs or poverty-level guidelines because many single-parent families live in poverty and few have high incomes.[77] For instance, in Minnesota, 38 percent of female-headed families with children under age 18 live in poverty and only 26 percent of female-headed families with children under age 18 have annual incomes of $50,000 or more.[78] In contrast, 51 percent of two-parent families with children under age 18 have annual incomes of $100,000 or more. This creates a problem for informing guidelines amounts at high incomes. The cost shares model generally produces lower support orders than other guidelines models. Another criticism of the cost shares model is that it considered the tax benefits associated with the children, which not all families receive, and when they receive it is at year-end rather than on a monthly basis. Instead, many families live paycheck to paycheck. In earlier years, the Earned Income Tax Credit (EITC) was advanced to eligible families in their paycheck, but it is no longer advanced. Instead, families must wait for their year-end tax filing to receive it, assuming that they do receive it and file for it. About three out of four individuals eligible for EITC actually receive it, and just under two-thirds of Minnesota welfare recipients eligible for the working family credit (WFC) actually received it.[79]

Both the ALI and COBS models are "forward-looking methods" of calculating support in that they consider the living standard of each parent and the children after the transfer of child support.[80] This contrasts vastly from the income shares model, which "looks backward" toward what is spent on child-rearing expenditures in intact families. No state has seriously considered the ALI model. One reason is that the ALI exists in concept, but has not been developed into an actual set of working guidelines.

---

[77] A more thorough critique of the cost shares guidelines is provided by Jo Michelle Beld and Len Biernat, "Federal Intent for State Child Support Guidelines, Income shares, Cost Shares, and the Realities of Shared Parenting." *37 Family Law Quarterly* 165 (2003).

[78] Calculated from 2015 American Community Survey. http://census.gov .

[79] Donald, Hirsuna. (July 2010). *Research Examines the Receipt of Earned Income Tax Credits among Welfare Recipients*. Federal Reserve of Minneapolis. https://www.minneapolisfed.org/publications/community-dividend/research-examines-the-receipt-of-earned-income-tax-credits-among-welfare-recipients

[80] More information about COBS can be found in Arizona Child Support Guidelines Review Committee*, Interim Report of the Committee*, Submitted to Arizona Judicial Council, Phoenix, Arizona on October 21, 2009. More information about the ALI can found in the *1999 Child Support Symposium* published by *Family Law Quarterly* (Spring 1999).

Although the architects of the COBS model insist it is not an ALI model, it is a close cousin. Arizona, a state where the guidelines are promulgated through judicial rule, is the only state to have seriously considered the COBS. In fact, COBS was developed by Ira Ellman, an Arizona child support guidelines review committee member and legal scholar, who was involved in the development of the ALI model. One principle objective of the COBS is to narrow the income gap between the households of the obligee and obligor when the obligor has considerably more income than the obligee. Another principle of COBS is that the guidelines-determined amounts should not impoverish very low-income obligors. In 2010, the Arizona child support guidelines review committee recommended that Arizona adopt COBS,[81] but the Arizona Judicial Council decided it needed further study and referred the issue to a legislative committee. As part of its decision, the Arizona Judicial Council also updated its income shares table.

Relative to Arizona's version of income shares, COBS generally decreases the guidelines amounts for low-income obligors, increases the guidelines amounts for middle to high-income obligors, and decreases thd guidelines amounts in cases where the obligor has less income than the obligee. Arizona's version of income shares produces amounts that are generally less than many income shares guidelines because Arizona includes a relatively generous timesharing adjustment that is applicable when the child spends at least four overnights per year with the obligated parent.

COMPARISONS OF GUIDELINES MODELS AND OTHER GUIDELINES MODELS

Two states using the same guidelines model rarely yield the same guidelines amounts. This is because there are numerous other assumptions and data considered in the guidelines award.[82] For example, two income shares may use a different economic study on the cost of raising children as the basis of their guidelines calculation. Further, guidelines amounts vary depending on the case scenario considered. One state may yield a higher amount for a low-income, obligated parent because it uses an updated self-support reserve while another state has no self-support reserve. Yet, when the guidelines amounts are considered from two states for the same high-income scenario, the other state may yield a higher amount.

In general, percentage-of-obligor income guidelines yield lower amounts at low-middle incomes than income shares guidelines and higher amounts at high incomes than income shares guidelines.[83] Melson guidelines generally yield amounts similar to income shares states guidelines at very high incomes, at which Melson states generally yield more than income shares guidelines.

[81] Honorable Bruce Cohen, Chair of the Arizona Child Support Guidelines Review Committee, *Request for Arizona Judicial Council Action*, October 21, 2010. Downloaded from http://www.azcourts.gov/Portals/74/CSGRC/1%20AJC%20cover%20sheet%20for%20the%20GRC.pdf on November 4, 2010.
[82] More information about state guidelines differences can be found at: Jane C. Venohr. (2013). "Child Support Guidelines and Guidelines Reviews: State Differences and Common Issues," *Family Law Quarterly*, Vol. 43, No. 3 (Fall 2013).
[83] See Jane C. Venohr (Forthcoming). "Differences in State Child Support Guidelines Amounts: Guidelines Models, Economic Basis, and Other Issues. *Journal of the American Academy of Matrimonial Lawyers*.

SECTION IV: CONCLUSIONS AND RECOMMENDED NEXT STEPS

Minnesota is reviewing its child support guidelines. At the core of its guidelines is a table of basic support obligations that is used to calculate child support. The table reflects economic data on the cost of raising children dating back to 2001. Minnesota has contracted with two separate economists to

> "summarize the commonly used methods for determining base child support in the United States, as well as methods used by R. Mark Rogers and William Comanor."

It is not clear whether "methods" refers to the economic studies of child-rearing expenditures that underlie state child support guidelines or child support guidelines models used by states. Nonetheless, this study summarizes both. The vast majority of states' guidelines, including Minnesota's, are based on the income shares model. In turn, the income shares model is based on the principle that both parents are financially responsible for the children and the children should receive the same amount of expenditures that the children would receive had the parents lived together and shared financial resources. The premise applies to all children regardless whether their parents married, separated, divorced, or never lived together because most states believe that children should be treated equally regardless of their parents' decisions. If unmarried parents have the same financial resources as divorced parents and other circumstances are similar, the amount of the child support should be the same.

Because of the income shares premise of parents living together and sharing financial resources, most income shares guidelines base their core table on measurements of child-rearing expenditures in intact families. There are nine different studies of child-rearing expenditures underlying state guidelines. The studies vary in age and methodology used to separate the child's share of expenditures from total family expenditures. The most frequently used studies rely on the Rothbarth methodology to measure child-rearing expenditures and are conducted by Dr. David Betson, University of Notre Dame. The Rothbarth methodology is a specific marginal cost approach in which expenditures on children are measured by comparing expenditures between two equally well-off families: one with children and one without children. The difference in their expenditures is deemed to be child-rearing expenditures.

The United States Department of Agriculture (USDA) has also developed measurements of child-rearing expenditures that are updated at least bi-annually. The existing Minnesota table is based on 2001 USDA measurements. The USDA measures child-rearing expenditure for seven categories (*i.e.*, housing, transportation, food, clothing, health care, child care and education, and miscellaneous expenses) separately and then uses the sum to arrive at a total.

In this report, updated child support tables are developed from the most Betson-Rothbarth (BR) study (2010)[84] and USDA study (2017)[85] and a new method developed by Comanor, Sarro, and Rogers.[86] All of the studies are updated to reflect 2017 price levels; then, they are compared to the existing Minnesota child support amounts using five case scenarios. The comparisons to the BR and USDA study suggest that increases to the Minnesota child support table are warranted. The comparisons to the Comanor amounts do not support that. Instead, the Comanor amounts yield amounts that are often half as much as the current Minnesota guidelines yields. The Comanor amounts are less than poverty amounts.

The Comanor amounts are analyzed in greater detail due to their anomalous results. The Comanor study also essentially measures child expenditures for separate categories of expenditures that are almost identical to the USDA categories. The Comanor amounts are generally significantly less than the USDA. Some of the Comanor results do not appear plausible (*i.e.*, $8 to $14 per week for the food cost for one child). Further, there is concern that the Comanor regression model is mis-specified.

There are also limitations to the USDA and BR studies. However, the USDA and BR studies yield similar amounts, and have been reviewed, and critiqued several times in the past 25 years. Either study would be appropriate for updating the Minnesota child support table.

RECOMMENDED NEXT STEPS

Which study of child-rearing expenditures to use is just one consideration in the update and development of a child support guidelines table. Exhibit 2 lists other data and assumptions that states often consider in the development of a child support schedule. Minnesota should review all of these factors first, starting with reviewing which guidelines model is most appropriate for the state before considering which study of child-rearing expenditures to use. Then, Minnesota should review the other factors listed in Exhibit 2 to ensure that there is the appropriate consideration of each factor that goes into a child support table.

[84] Betson, David M. (2010). "Appendix A: Parental Expenditures on Children." In Judicial Council of California, *Review of Statewide Uniform Child Support Guideline*. San Francisco, California. Retrieved from: http://www.courts.ca.gov/partners/documents/2011SRL6aGuidelineReview.pdf.

[85] Lino, Mark, et al. (2017). Expenditures on Children by Families: 2015 Annual Report. U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2015, Washington, D.C. Available at http://www.cnpp.usda.gov/publications/crc/crc2015.pdf.

[86] Comanor, William S., Sarro, Mark, and Rogers, R. Mark. (2015). "The Monetary Cost of Raising Children." *Economic and Legal Issues in Competition,* in James Langenfeld (ed.) *Economic and Legal Issues in Competition, Intellectual Property, Bankruptcy, and the Cost of Raising Children (Research in Law and Economics, Volume 27)* Emerald Group Publishing Limited, pp.209 http://www.emeraldinsight.com/doi/abs/10.1108/S0193-589520150000027008 .

Appendix F

Dr. Venohr's Report, July 2017

Appendix F

Review of the Minnesota Child Support Guidelines: Economic Basis of Current Table and Potential Updates

Submitted to:
State of Minnesota Department of Human Services

Submitted by:
Jane Venohr, Ph.D.
CPR center for policy research
1570 N Emerson St., Denver, CO 80218 | Tel: (303)837-1555 |centerforpolicyresearch.org

July 17, 2017

Points of view expressed in this document are those of the author and do not necessarily represent the official position of the Task Force, State or Court. The author is responsible for any errors and omissions.

CONTENTS

SECTION I: PURPOSE OF REPORT AND BACKGROUND INFORMATION

The existing Minnesota child support guidelines date back to 2005 and the underlying economic data date back to 2001 and earlier. By passing HF 2749, the 2016 Minnesota Legislature created an opportunity to review, update, modernize, and improve the Minnesota Child Support Guidelines using evidence-based research and input from a wide range of stakeholders. One avenue for accomplishing this is the formation of a task force to advise the commissioner on the child support guidelines. The legislation also identified several issues to be addressed in the guidelines review. One consists of preparing for and advising the commissioner[1] on the development of a report for the federally required quadrennial review. Federal regulation (Title 45 of the Code of Federal Regulations, C.F.R. § 302.56) requires that states review their guidelines at least once every four years and, as part of that review, a state consider economic evidence on the cost of raising children.

CHILD SUPPORT TABLE

Most states, including Minnesota, relate their guidelines to economic evidence of cost of raising children. Minnesota relates its table of basic support obligations owed by both parents (Minnesota Statutes 2016 Section 518A.35 subdivision 2) to economic data on what families spend to raise their children. (An excerpt of the table is shown in Exhibit 1.) The obligated parent's prorated share of the basic support obligation forms the guidelines-calculated order amount. Additional adjustments are made for actual child care expenses, the actual cost of health insurance for the children, parenting-time expense, and other factors when calculating the child support order. The table considers a range of incomes and number of children.

Exhibit 1: Excerpt from Existing Minnesota Child Support Basic Table

Combined Parental Income for Determining Support			One Child	Two Children	Three Children
2500.00	-	2599.00	560	903	1040
2600.00	-	2699.00	570	920	1060
2700.00	-	2799.00	580	936	1078
2800.00	-	2899.00	589	950	1094
2900.00	-	2999.00	596	963	1109
3000.00	-	3099.00	603	975	1122
3100.00	-	3199.00	613	991	1141
3200.00	-	3299.00	623	1007	1158
3300.00	-	3399.00	636	1021	1175
3400.00	-	3499.00	650	1034	1190
3500.00	-	3599.00	664	1047	1204
3600.00	-	3699.00	677	1062	1223
3700.00	-	3799.00	691	1077	1240

ECONOMIC BASIS OF CHILD SUPPORT TABLE

There are several studies measuring the cost of raising children. Most state guidelines rely on studies of child-rearing expenditures across a range of incomes rather than studies that examine the minimum and

[1] Minnesota Department of Human Services (DHS) is administering the review. The Center for Policy Research (CPR) is providing technical assistance. CPR is a non-profit organization that provides evaluation, research services, and technical assistance on health and human service issues affecting families and children to federal, state, and local governments; courts; and private foundations. CPR has assisted about 30 states in the last 10 years with guidelines reviews.

basic needs of children. This is because the premise of most state guidelines is that children should share in the lifestyle afforded by their parents.

The studies of child-rearing expenditures underlying state guidelines vary in the age of the data used to measure child-rearing expenditures and the economic methodologies used to separate the child's share of expenditures from total expenditures of a household. Economists do not agree on which methodology best measures actual child-rearing expenditures. Nonetheless, many economists and policymakers agree that any guidelines amount between the lower and upper bounds of credible measurements of child-rearing expenditures are appropriate guidelines amounts.[2] Guidelines amounts below the lower bound are generally deemed to be inadequate for the support of children.

DHS has contracted individually with two economists to provide separate reports "summarizing the commonly used methods for determining base child support in the United States, as well as the methods used by R. Mark Rogers and William Comanor."[3] Comanor is critical of the United States Department of Agriculture (USDA) methodology and the Rothbarth methodology, which form the basis of most state guidelines. USDA measurements form the basis of the bulk of the Minnesota table.

A summary of each of these methodologies is provided below, as well as the major strengths and weaknesses as identified by the two economists.[4] Each of the methodologies uses expenditures data collected from the Consumer Expenditure Survey (CES) conducted by the U.S. Bureau of Labor Statistics,[5] albeit that economists use different data years of the CES and select different household types for its analysis (*e.g.,* some economists limit the household type to married couples of child-rearing age with no additional adults in the household, while other economists consider any married and single-parent households and those with additional adults).

USDA Method

The USDA typically updates its measurements annually or biannually. The most current USDA study, which was published in January 2017, reflects child-rearing expenditures in 2015.[6] The USDA estimates child-rearing expenditures individually for seven expenditure categories (*e.g.*, food, transportation, housing, clothing, health care, child care and education, and miscellaneous expenses), then adds them

[2] For example, see Lewin/ICF. (1990). *Estimates of Expenditures on Children and Child Support Guidelines*. Report to U.S. Dept. of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Fairfax, Virginia.
[3] Department contract.
[4] There are three documents from the two economists. Comanor, William. (February 22, 2017.) *Presentation to the Minnesota Child Support Task Force*, Minnesota Department of Human Services, St. Paul, MN. https://mn.gov/dhs/assets/2017-02-22-Dr-Comanor-Report-to-the-Minnesota-Child-Support-Task-Force_tcm1053-280776.pdf . Venohr, Jane. (March 31, 2017 revised). *Review of the Minnesota Basic Child Support Table: Economic Data on the Cost of Raising Children and Other Considerations.* Retrieved from https://mn.gov/dhs/assets/2017-03-31-Revised-Dr-Venohr-Report-to-MN-Child-Support-Task-Force_tcm1053-286690.pdf . Comanor, William. S (April 7, 2017). *Dr. Venohr's Minnesota Report: A Brief Response.* Retrieved from: mn.gov/dhs/assets/2017-04-07-Comanor-response-to-Venohr_tcm1053-293396.pdf.
[5] More information about the CES can be found at https://www.bls.gov/cex/.
[6] Lino, Mark, et al. (2017). Expenditures on Children by Families: 2015 Annual Report. U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2015, Washington, D.C. Available at http://www.cnpp.usda.gov/publications/crc/crc2015.pdf.

to develop a total. The USDA uses a different approach to measure expenditures for each category. The child's clothing and child care and education expenses are identifiable from the CES so the USDA measures them the CES. Food is measured using the USDA food plans that are developed from the National Health and Nutrition Examination Survey, which provides a wealth of information on the dietary intake, medical history, and current health status of its respondents.[7] The child's transportation expense is based on an apportionment of family-related transportation identified by the U.S. Department of Transportation applied to CES data. The child's housing expense is measured by identifying the extra cost of bedroom controlling for income level. The child's health care expenses are measured from the U.S. Department of Health and Human Services Medical Expenditure Panel Survey that collects detailed data on health care expenditures on individual household members is used to determine the share of health care expenditures on children. The child's miscellaneous expenses (e.g., personal care products and services) is measured using a per capita approach.

The USDA improved its methodology for measuring the child's housing expenses in 2008. Before then, it used a per capita approach to arrive at the child's housing cost. Many economists believed this overstated the child's actual housing expense. To this end, as discussed later, USDA measurements of child-rearing expenditures that form the basis of the existing Minnesota table were adjusted to negate the overstated housing expenses.[8]

ROTHBARTH METHOD

Most states base their guidelines table or formula on measurements of child-rearing expenditures measured byProfessor David Betson, University of Notre Dame, using the Rothbarth methodology.[9] Rothbarth methodology is a marginal cost approach that compares expenditures of two sets of equally well-off households: one set consists of two-parent families with children, and the other consists of couples without children. The difference in their expenditures is presumed to be spent on child rearing. The Rothbarth methodology relies on the percentage of total expenditures devoted to adult goods (*i.e.*, adult clothing in most applications) to determine equally well-off families. Conventional economists generally believe the Rothbarth estimator understates actual child-rearing expenditures.[10]

Comanor states that:

> Rothbarth method does not reflect the additional expenditures actually made to support a child nor does it offer the flexibility present in distinguishing expenditures by their individual categories.[11]

---

[7] United States Department of Agriculture Center for Nutrition Policy and Promotion. (May 2008). *Development of the CNPP Prices Database.* Retrieved from https://www.cnpp.usda.gov/sites/default/files/usda_food_plans_cost_of_food/PricesDatabaseReport.pdf .

[8] Venohr, Jane. (Dec. 2005). *Evaluation of the New (2007) Minnesota Child Support Guidelines Basic Support Schedule*. Report to the State of Minnesota Child Support Enforcement Division. Retrieved from https://www.leg.state.mn.us/docs/2006/Mandated/060064.pdf . Page 4.

[9] Jane C. Venohr (April 2017). "Differences in State Child Support Guidelines Amounts: Guidelines Models, Economic Basis, and Other Issues. *Journal of the American Academy of Matrimonial Lawyers*.

[10] LEWIN/ICF, *supra* note 22, at 2–29.

[11] Comanor (April 2017). Page 2.

The counter-argument to the first criticism of Comanor is that it is not just "additional expenditures," rather the amount of income must be considered in measuring expenditures. In contrast, Comanor assumes that income is "fixed" in his model, which means that income of the household is unaffected by the presence of children. There is no counterargument to the fact that the Rothbarth measurements do capture expenditures for individual categories (*e.g.*, the child's housing expenses and the child's food expenses).

Comanor Method

Comanor purports that his methodology of measuring the actual incremental (or marginal) cost methods shows that other methodologies overstate actual child-rearing expenditures. Rather than starting from a preconceived set of plausible outcomes, Comanor argues for the consideration of the economic constructs of cost and value in which economic cost refers to, "household expenditures needed for a particular purpose, such as supporting a child, plus the cost of any opportunities forgone to achieve that result,"[12] and economic value reflects the utility (or welfare) gained from achieved from the child.

Venohr (and others[13]) are critical of Comanor's approach for theoretical and empirical reasons.[14] Although Comanor suggests opportunity cost should be considered, his methodology does not actually consider them.[15] The model specification assumes income is constant, rather than that income may differ between childless couples and couples with children. (This assumption is not inconsequential to the estimating equation, hence likely to produce biased results.) Betson also implies that a third of aggregate quarterly expenditures could be missing in the estimation due to some survey households entering the survey in the second or third month of a quarter. Moreover, the empirical results are implausibly low, often below or near poverty amounts or the child's basic needs. In contrast, most state guidelines are premised on the concept that the child support guidelines should provide for an amount more than the child's basic needs if the obligated parent can afford to enjoy a higher standard of living. In other words, the child should share in the standard of living afforded by the obligated parent if the obligated parent can live above poverty.

Section II: Economic Basis of Current Child Support Table

The existing table is spliced together from five differences sources.[16] Exhibit A shows the areas of the schedule with each source.

[12] Comanor (April 2017). Page 4.
[13] For example, see Betson (forthcoming) and Robert Plotnick and Elaine Sorensen. (May 8, 2015). *Things to Consider when Moving Away from Income Imputation. Presentation to the National Council of Child Support Directors*. Seattle, WA.
[14] Betson (forthcoming).
[15] The inclusion in an estimating equation is difficult for any economist due to principles of statistics alone that deal with identification and whether the model can be estimated given the number of unknown variables and model equations.
[16] Venohr, Jane. (Sept. 16, 2015). *Economic Basis of Minnesota Basic Schedule and Parenting-Time Expense Adjustment.* Report to the Child Support Work Group, Minnesota Department of Human Services, St. Paul, MN.

- The 2001 USDA measurement of child-rearing expenditures form the bulk of the schedule.[17] The housing expenses for that child were based on a per capita approach. Based on discussions between Lino (the USDA economist) and Venohr, as recalled by Venohr, the housing expenses were reduced by allocating the child's share using results from an Engel estimator to the total housing expenses.[18]

- Rothbarth measurements of child-rearing expenditures produced by Professor David Betson, University of Notre Dame in the late 1990s are the source for the one-child amounts for gross incomes between $3,300 and $7,299 per month.[19]

- Engel measurements of child-rearing expenditures produced by Professor David Betson, University of Notre Dame in the late 1990s is the source for gross incomes above $14,700 per month and less depending on the number of children.[20]

- An unknown source at incomes below $2,000 gross per month. These appear to be adjusted for low-incomes, which is a common adjustment in state guidelines tables.

- Amounts above $8,500 gross per month appear to be an extrapolation from measurements of child-rearing expenditures.

An earlier version of the existing table was based on the USDA measurements only and did not include the Rothbarth and Engel measurements. The splicing in of the Rothbarth and Engel measurements appear to result from an examination of whether the proposed USDA table was too low or too high.[21] At the time, the Rothbarth methodology was considered the lower bound of measurements of child-rearing expenditures and was thus used to assess whether the USDA earlier were too high, and the Engel methodology was considered the upper bound of measurements of child-rearing expenditures and was thus used to assess the earlier USDA amounts were too low. The consequence was that the Rothbarth measurements were used for a small pocket of incomes for which the one-child amounts

[17] Lino, Mark (2002) *Expenditures on Children by Families: 2001 Annual Report*. U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2001, Washington, D.C.

[18] The Engel estimator is similar to the Rothbarth estimator in that it is a marginal cost approach. However, it uses food shares to identify equally well-off families. Economists believe it understates actual child-rearing expenditures. Unfortunately, documentation of how the housing expenses were adjusted is not readily available, but both Lino and Venohr remember it being adjusted.

[19] The original Betson-Rothbarth study was conducted in 1990. It has been updated using more current CES data three times. The Minnesota table is based on the second study, which is based on 1996–99 CES data. The source are Betson, David M. (2001). "Chapter 5: Parental Expenditures on Children." in Judicial Council of California, *Review of Statewide Uniform Child Support Guideline*. San Francisco, California. This study initially included data from 1996-98 but was expanded to include 1996–99 in Jane C. Venohr and Tracy E. Griffith, *Report on the Michigan Child Support Formula* (April 2002), Report to the Michigan Supreme Court, Policy Studies Inc., Denver, CO. The most recent Betson-Rothbarth study is based on 1998 –2004 CES data. The source is Betson, David M. (2010). "Appendix A: Parental Expenditures on Children." in Judicial Council of California, *Review of Statewide Uniform Child Support Guideline*. San Fran-cisco, California. Retrieved from http://www.courts.ca.gov/partners/documents/2011SRL6aGuidelineReview.pdf .

[20] Betson's second study (Ibid) also contained Engel measurements.

[21] Venohr, Jane. (Dec. 2005). *Evaluation of the New (2007) Minnesota Child Support Guidelines Basic Support Schedule*. Report to the State of Minnesota Child Support Enforcement Division.

inadequately provided for one child and the Engel measurements were substituted at higher incomes that were inappropriate for all number of children.

Section III: Updating the Tables

Besides the economic measurements of child-rearing expenditures, there are other data, considerations, and assumptions underlying most child support tables. Exhibit 2[22] summarizes them and alternative assumptions that could be made to develop an updated child support table for Minnesota. Exhibit 2 also summarizes what is used to develop three alternative, updated tables presented in Appendix B:

- Updated table using the most current USDA measurements;
- Updated table using the most current Betson-Rothbarth measurements; and
- Updated table using Comanor's measurements.

Exhibits 3, 4, and 5 compare the existing and updated table amounts for one, two, and three children. They also compare amounts from the neighboring states of Iowa, Nebraska, and South Dakota.[23] These neighboring states all rely on the income shares model and older measurements of child-rearing expenditures developed by Betson using the Rothbarth methodology. The most recent Betson-Rothbarth measurements rely on an improved measure of income, which essentially results in the most recent BR measurements being less than older BR measurements at low incomes.

In general, the existing Minnesota table amounts are between the USDA and BR amounts except at high incomes (*i.e*, above about $8,500 gross per month). This is where the existing table was based on an extrapolation and the higher Betson-Engel measurements were used.

Section V: Recommended Next Steps

The last column of the Exhibit 2 lists alternative assumptions and how it would impact the updated tables when known. The Task Force should review the alternative updates and the information in Exhibit 2 in the context of the legislated state goal of "maintaining effective and efficient child support guidelines that will best serve the children of Minnesota and take into account the changing dynamics of families." This can be used to direct an alternative update of the schedule. The technical consultant has also obtained case file data on order amounts, the number of children, and incomes of the parent that could also inform the impact of any table changes. The analysis of the case file data will be shared with the Task Force to help inform their recommendations. The technical consultant just received some of the data last week,.

[22] The exhibit is adapted from Venohr, Jane. (March 31, 2017 revised). *Review of the Minnesota Basic Child Support Table: Economic Data on the Cost of Raising Children and Other Considerations.* Retrieved from https://mn.gov/dhs/assets/2017-03-31-Revised-Dr-Venohr-Report-to-MN-Child-Support-Task-Force_tcm1053-286690.pdf .

[23] North Dakota and Wisconsin rely on percentage-of-obligor income. Montana relies on the Melson formula.

Exhibit 2: Major Factors and Assumptions Underlying Minnesota Child Support Guidelines Table and Updated Tables						
	Basis of Existing Minnesota Table	Summary of Basis of Other States	Updated Option A (USDA)	Updated Option B (Betson)	Updated Option C (Comanor)	Impact of Alternative Assumptions
1. Measurement of child-rearing expenditures	Mostly USDA (2001) for gross incomes of $2,000 - $8,500/mo for 2+ children.[24] Other sources include Betson-Rothbarth (BR)[25] measurements (for 1 child for $3,300-$7,299 and Betson-Engel (BE) for very high incomes.	29 states rely on Betson-Rothbarth (BR) measurements.	USDA 2017 study	Betson-Rothbarth 2010 study	Table 10 of Comanor slides	Few alternatives, could use rural USDA (but not justifiable), could also use another table of Comanor.
2. Guidelines model	Income shares	39 states rely on the income shares model. The other two models used by states are the percentage-obligor income model and the Melson formula.	Income shares	Income shares	Income shares	Several alternatives
3. Adjustments for state cost of living	Housing expense in USDA (2001) were adjusted because the USDA methodology used at the time was believed to overstate housing expenditures.	States with extraordinary high or low incomes or cost of living often adjust BR measurements, which reflect national data	None (USDA changed its methodology for measuring housing expenditures)	None	None	MN is close to average so no adjustment is probably warranted (*e.g.*, MN price parity is 97.6% while US prices are on average 100%)[26]
4. Tax assumptions	No tax assumption needed for USDA measurements because USDA measurements are gross-income based	BR measurements, based on expenditures/after-tax income, must be backed in to gross income. Most states doing so use federal and state income tax and FICA withholding formula and in prevailing year	Not applicable	Use income withholding formula for single/head-of-household tax-payer	Not applicable	2017 tax rates, different tax assumptions (*e.g.*, married couple with same number of children for whom support is being determined), base guidelines would increase BR table amounts

[24] Based on analysis documented in Venohr, Jane. (Sept. 16, 2015). *Economic Basis of Minnesota Basic Schedule and Parenting-Time Expense Adjustment.* Report to the Child Support Work Group, Minnesota Department of Human Services, St. Paul, MN.

[25] Betson is the economist (Professor David Betson, University of Notre Dame) preparing the estimates. "Rothbarth" is the economic method for determining the child's share of total expenditures.

[26] U.S. Bureau of Economic Analysis. (2016). Real Personal Income for States and Metropolitan Areas, 2014. http://www.bea.gov/newsreleases/regional/rpp/rpp_newsrelease.htm .

		and use the tax schedule for single/head-of-household				
5. Price levels	Appears to be based on 2002 price levels	Most states use the Consumer Price Index (CPI) from the year in which they updated their schedule	June 2017	June 2017	June 2017	No known alternatives
6. Adjustments for more than 3 children (and possibly amounts between 1, 2 & 3 children)	Appears to use USDA multipliers	Most states use equivalence scales developed by the National Academy of Science	USDA equivalence scales	National Academy of Science Equivalence Scales	Comanor's measurements up to 3 children, an alternative method would need to be used to extend to 4 or more children	National Academy of Science Equivalence Scales could be applied to the USDA measurements. (This would reduce the USDA amounts for more children.) The USDA equivalence scales could be applied to the BR measurements or Comanor. This would increase the amounts for more children.
7. Exclude highly variable child-rearing expenses	Appears to be excluded, specifics unknown	Most states exclude all but $250 per child per year to account for ordinary, out-of-pocket medical expenses. This approximates the average amount from a national survey.	Excluded all but $250 per child per year to account for ordinary, out-of-pocket medical expenses	Excluded all but $250 per child per year to account for ordinary, out-of-pocket medical expenses	Childcare expenses were not excluded	Comanor amounts would be less if childcare expenses were excluded. Adding more or less ordinary medical expenses would increase or decrease the table amounts. Including none is technically feasible. Adding more may not be technically feasible.
8. Families that spend more/less of their Income	USDA does not make an adjustment for families that spend more than their expenditures	Most states cap expenditures so they don't exceed after-tax income, then use the actual expenditures to income ratio for the remainder of the schedule	USDA does not adjust for families that spend more than their income, that is why the amounts are higher at very low incomes	Capped expenditures so they don't exceed income. The cap lowers amounts at incomes below about $4,000 gross per month	Unknown	One alternative is to eliminate the cap; this would increase the amounts at lower incomes. DC assumes families have no savings. This would increase the BR amounts at all incomes, particularly higher incomes. Nebraska also makes alternative assumptions about expenditures to income ratio that result in the Nebraska amounts being higher.
10. Low-income adjustment and minimum order	Included	Most states include	Not addressed	Not addressed	Not addressed	More efficient to decide table and layer on low-income adjustment later

11. Adjustment at high incomes	Extrapolated amounts above $8,500	Most states stop schedule at $20,000 to $30,000 per month, where economic data is no longer reliable	Reliable to about $20,000 gross per month	Reliable to about $25,00 gross per month	Not clear how high could go	See specific options

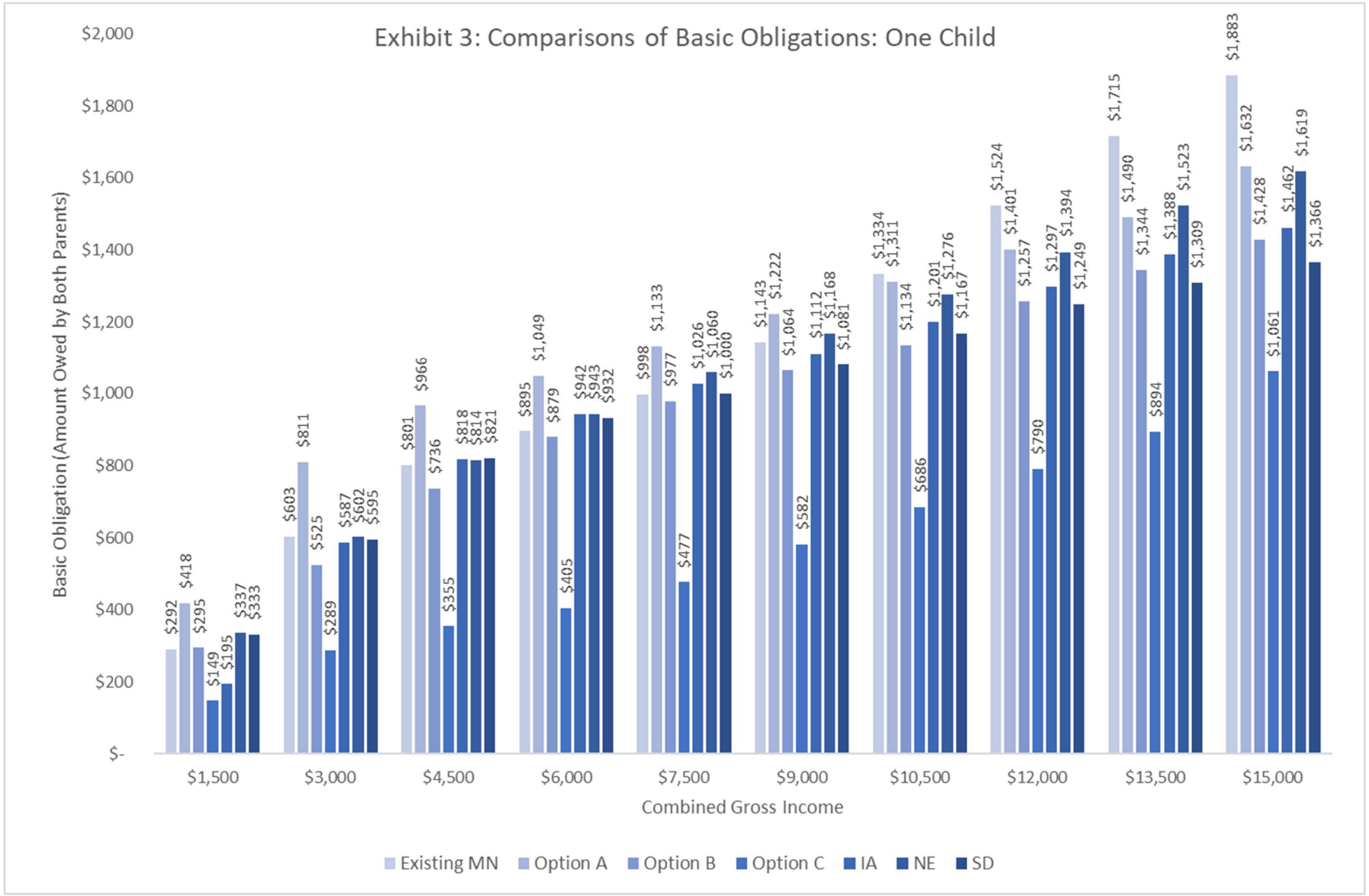


Exhibit 3: Comparisons of Basic Obligations: One Child
Basic Obligation (Amount Owed by Both Parents)
$2,000
$1,800
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$-
$292 $418 $295 $149 $195 $337 $333
$603 $811 $525 $289 $587 $602 $595
$801 $966 $736 $355 $818 $814 $821
$895 $1,049 $879 $405 $942 $943 $932
$998 $1,133 $977 $477 $1,026 $1,060 $1,000
$1,143 $1,222 $1,064 $582 $1,112 $1,168 $1,081
$1,334 $1,311 $1,134 $686 $1,201 $1,276 $1,167
$1,524 $1,401 $1,257 $790 $1,297 $1,394 $1,249
$1,715 $1,490 $1,344 $894 $1,388 $1,523 $1,309
$1,883 $1,632 $1,428 $1,061 $1,462 $1,619 $1,366
$1,500
$3,000
$4,500
$6,000
$7,500
$9,000
$10,500
$12,000
$13,500
$15,000
Combined Gross Income
Existing MN
Option A
Option B
Option C
IA
NE
SD

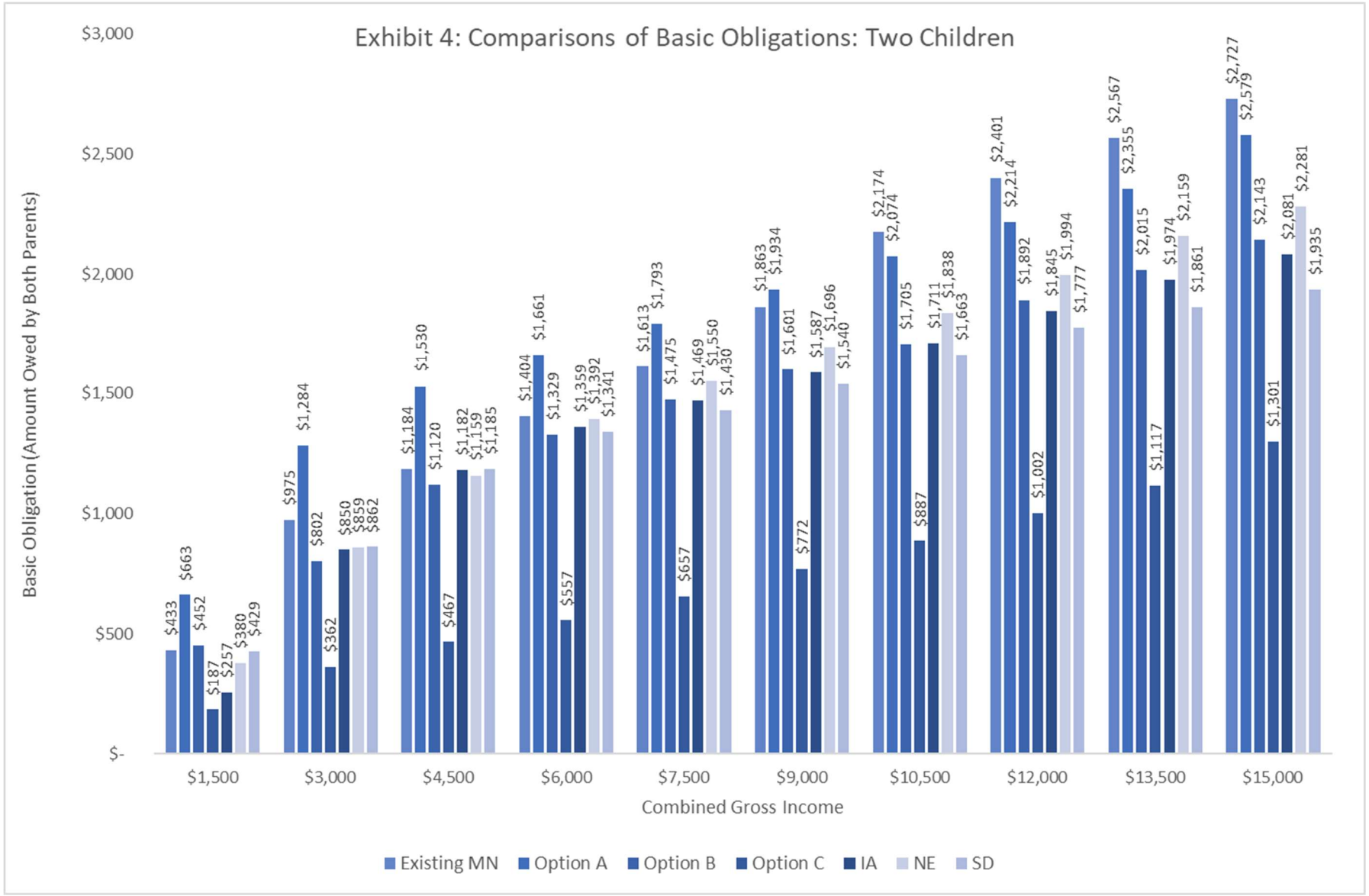


Exhibit 4: Comparisons of Basic Obligations: Two Children
Basic Obligation (Amount Owed by Both Parents)
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$-
$433 $663 $452 $187 $257 $380 $429
$975 $1,284 $802 $362 $850 $859 $862
$1,184 $1,530 $1,120 $467 $1,182 $1,159 $1,185
$1,404 $1,661 $1,329 $557 $1,359 $1,392 $1,341
$1,613 $1,793 $1,475 $657 $1,469 $1,550 $1,430
$1,863 $1,934 $1,601 $772 $1,587 $1,696 $1,540
$2,174 $2,074 $1,705 $887 $1,711 $1,838 $1,663
$2,401 $2,214 $1,892 $1,002 $1,845 $1,994 $1,777
$2,567 $2,355 $2,015 $1,117 $1,974 $2,159 $1,861
$2,727 $2,579 $2,143 $1,301 $2,081 $2,281 $1,935
$1,500
$3,000
$4,500
$6,000
$7,500
$9,000
$10,500
$12,000
$13,500
$15,000
Combined Gross Income
Existing MN
Option A
Option B
Option C
IA
NE
SD

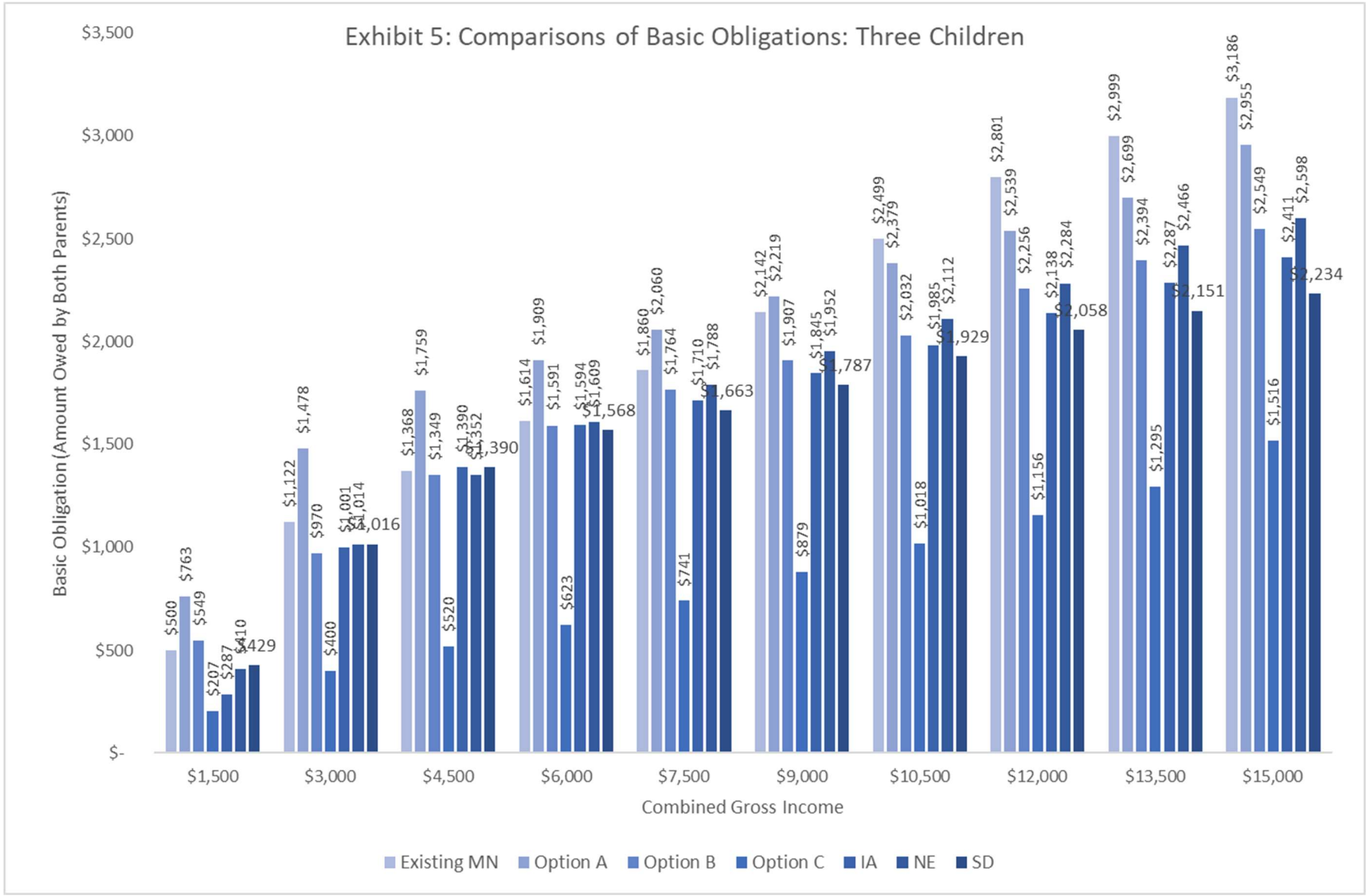


Exhibit 5: Comparisons of Basic Obligations: Three Children
Basic Obligation (Amount Owed by Both Parents)
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$-
$1,500
$3,000
$4,500
$6,000
$7,500
$9,000
$10,500
$12,000
$13,500
$15,000
Combined Gross Income
Existing MN
Option A
Option B
Option C
IA
NE
SD

Appendix A: Basis of Existing Schedule

Data Source of Existing Minnesota Table

- Original schedule based on adjusted USDA
- Original schedule, but adjusted for low incomes
- Original schedule, but amounts are extrapolated from USDA
- Betson-Rothbarth 2
- Betson-Engel 2

Combined Parental Income for Determining Child Support	Number of Children					
	One	Two	Three	Four	Five	Six
$0 - $799	50	50	75	75	100	100
800 - 899	80	129	149	173	201	233
900 - 999	90	145	167	194	226	262
1000 - 1099	116	161	186	216	251	291
1100 - 1199	145	205	237	275	320	370
1200 - 1299	177	254	294	341	396	459
1300 - 1399	212	309	356	414	480	557
1400 - 1499	251	368	425	493	573	664
1500 - 1599	292	433	500	580	673	780
1600 - 1699	337	502	580	673	781	905
1700 - 1799	385	577	666	773	897	1040
1800 - 1899	436	657	758	880	1021	1183
1900 - 1999	490	742	856	994	1152	1336
2000 - 2099	516	832	960	1114	1292	1498
2100 - 2199	528	851	981	1139	1320	1531
2200 - 2299	538	867	1000	1160	1346	1561
2300 - 2399	546	881	1016	1179	1367	1586
2400 - 2499	554	893	1029	1195	1385	1608
2500 - 2599	560	903	1040	1208	1400	1625
2600 - 2699	570	920	1060	1230	1426	1655
2700 - 2799	580	936	1078	1251	1450	1683
2800 - 2899	589	950	1094	1270	1472	1707
2900 - 2999	596	963	1109	1287	1492	1730
3000 - 3099	603	975	1122	1302	1509	1749
3100 - 3199	613	991	1141	1324	1535	1779
3200 - 3299	623	1007	1158	1344	1558	1807
3300 - 3399	**636**	1021	1175	1363	1581	1833
3400 - 3499	**650**	1034	1190	1380	1601	1857
3500 - 3599	**664**	1047	1204	1397	1621	1880

Data Source of Existing Minnesota Table

Original schedule based on adjusted USDA

Original schedule, but adjusted for low incomes

Original schedule, but amounts are extrapolated from USDA

Betson-Rothbarth 2

Betson-Engel 2

Combined Parental Income for Determining Child Support	Number of Children					
	One	Two	Three	Four	Five	Six
3600 - 3699	**677**	1062	1223	1418	1646	1909
3700 - 3799	**691**	1077	1240	1439	1670	1937
3800 - 3899	**705**	1081	1257	1459	1693	1963
3900 - 3999	**719**	1104	1273	1478	1715	1988
4000 - 4099	**732**	1116	1288	1496	1736	2012
4100 - 4199	**746**	1132	1305	1516	1759	2039
4200 - 4299	**760**	1147	1322	1536	1781	2064
4300 - 4399	**774**	1161	1338	1554	1802	2088
4400 - 4499	**787**	1175	1353	1572	1822	2111
4500 - 4599	**801**	1184	1368	1589	1841	2133
4600 - 4699	**808**	1200	1386	1608	1864	2160
4700 - 4799	**814**	1215	1402	1627	1887	2186
4800 - 4899	**820**	1231	1419	1645	1908	2212
4900 - 4999	**825**	1246	1435	1663	1930	2236
5000 - 5099	**831**	1260	1450	1680	1950	2260
5100 - 5199	**837**	1275	1468	1701	1975	2289
5200 - 5299	**843**	1290	1485	1722	1999	2317
5300 - 5399	**849**	1304	1502	1743	2022	2345
5400 - 5499	**854**	1318	1518	1763	2046	2372
5500 - 5599	**860**	1331	1535	1782	2068	2398
5600 - 5699	**866**	1346	1551	1801	2090	2424
5700 - 5799	**873**	1357	1568	1819	2111	2449
5800 - 5899	**881**	1376	1583	1837	2132	2473
5900 - 5999	**888**	1390	1599	1855	2152	2497
6000 - 6099	**895**	1404	1614	1872	2172	2520
6100 - 6199	**902**	1419	1631	1892	2195	2546
6200 - 6299	**909**	1433	1645	1912	2217	2572
6300 - 6399	**916**	1448	1664	1932	2239	2597
6400 - 6499	**923**	1462	1682	1951	2260	2621
6500 - 6599	**930**	1476	1697	1970	2282	2646
6600 - 6699	**936**	1490	1713	1989	2305	2673
6700 - 6799	**943**	1505	1730	2009	2328	2700

Data Source of Existing Minnesota Table

Original schedule based on adjusted USDA

Original schedule, but adjusted for low incomes

Original schedule, but amounts are extrapolated from USDA

Betson-Rothbarth 2

Betson-Engel 2

Combined Parental Income for Determining Child Support	Number of Children					
	One	Two	Three	Four	Five	Six
6800 - 6899	**950**	1519	1746	2028	2350	2727
6900 - 6999	**957**	1533	1762	2047	2379	2747
7000 - 7099	**963**	1547	1778	2065	2394	2753
7100 - 7199	**970**	1561	1795	2085	2417	2758
7200 - 7299	**974**	1574	1812	2104	2439	2764
7300 - 7399	980	1587	1828	2123	2462	2769
7400 - 7499	989	1600	1844	2142	2483	2775
7500 - 7599	998	1613	1860	2160	2505	2781
7600 - 7699	1006	1628	1877	2180	2528	2803
7700 - 7799	1015	1643	1894	2199	2550	2833
7800 - 7899	1023	1658	1911	2218	2572	2864
7900 - 7999	1032	1673	1928	2237	2594	2894
8000 - 8099	1040	1688	1944	2256	2616	2925
8100 - 8199	1048	1703	1960	2274	2637	2955
8200 - 8299	1056	1717	1976	2293	2658	2985
8300 - 8399	1064	1731	1992	2311	2679	3016
8400 - 8499	1072	1746	2008	2328	2700	3046
8500 - 8599	1080	1760	2023	2346	2720	3077
8600 - 8699	1092	1780	2047	2374	2752	3107
8700 - 8799	1105	1801	2071	2401	2784	3138
8800 - 8899	1118	1822	2094	2429	2816	3168
8900 - 8999	1130	1842	2118	2456	2848	3199
9000 - 9099	1143	1863	2142	2484	2880	3223
9100 - 9199	1156	1884	2166	2512	2912	3243
9200 - 9299	1168	1904	2190	2539	2944	3263
9300 - 9399	1181	1925	2213	2567	2976	3284
9400 - 9499	1194	1946	2237	2594	3008	3304
9500 - 9599	1207	1967	2261	2622	3031	3324
9600 - 9699	1219	1987	2285	2650	3050	3345
9700 - 9799	1232	2008	2309	2677	3069	3365
9800 - 9899	1245	2029	2332	2705	3087	3385
9900 - 9999	1257	2049	2356	2732	3106	3406

Data Source of Existing Minnesota Table

Original schedule based on adjusted USDA

Original schedule, but adjusted for low incomes

Original schedule, but amounts are extrapolated from USDA

Betson-Rothbarth 2

Betson-Engel 2

Combined Parental Income for Determining Child Support	Number of Children					
	One	Two	Three	Four	Five	Six
10000 - 10099	1270	2070	2380	2760	3125	3426
10100 - 10199	1283	2091	2404	2788	3144	3446
10200 - 10299	1295	2111	2428	2815	3162	3467
10300 - 10399	1308	2132	2451	2843	3181	3487
10400 - 10499	1321	2153	2475	2870	3200	3507
10500 - 10599	1334	2174	2499	2898	3218	3528
10600 - 10699	1346	2194	2523	2921	3237	3548
10700 - 10799	1359	2215	2547	2938	3256	3568
10800 - 10899	1372	2236	2570	2955	3274	3589
10900 - 10999	1384	2256	2594	2972	3293	3609
11000 - 11099	1397	2277	2618	2989	3312	3629
11100 - 11199	1410	2294	2642	3006	3331	3649
11200 - 11299	1422	2306	2666	3023	3349	3667
11300 - 11399	1435	2319	2689	3040	3366	3686
11400 - 11499	1448	2331	2713	3055	3383	3705
11500 - 11599	1461	2344	2735	3071	3400	3723
11600 - 11699	1473	2356	2748	3087	3417	3742
11700 - 11799	1486	2367	2762	3102	3435	3761
11800 - 11899	1499	2378	2775	3116	3452	3780
11900 - 11999	1511	2389	2788	3131	3469	3798
12000 - 12099	1524	2401	2801	3146	3485	3817
12100 - 12199	1537	2412	2814	3160	3501	3836
12200 - 12299	1549	2423	2828	3175	3517	3854
12300 - 12399	1562	2434	2841	3190	3534	3871
12400 - 12499	1575	2445	2854	3205	3550	3889
12500 - 12599	1588	2456	2867	3219	3566	3907
12600 - 12699	1600	2467	2880	3234	3582	3924
12700 - 12799	1613	2478	2894	3249	3598	3942
12800 - 12899	1626	2489	2907	3264	3615	3960
12900 - 12999	1638	2500	2920	3278	3631	3977
13000 - 13099	1651	2512	2933	3293	3647	3995
13100 - 13199	1664	2523	2946	3308	3663	4012

Data Source of Existing Minnesota Table

Original schedule based on adjusted USDA

Original schedule, but adjusted for low incomes

Original schedule, but amounts are extrapolated from USDA

Betson-Rothbarth 2

Betson-Engel 2

Combined Parental Income for Determining Child Support	Number of Children					
	One	Two	Three	Four	Five	Six
13200 - 13299	1676	2534	2960	3322	3679	4030
13300 - 13399	1689	2545	2973	3337	3696	4048
13400 - 13499	1702	2556	2986	3352	3712	4065
13500 - 13599	1715	2567	2999	3367	3728	4083
13600 - 13699	1727	2578	3012	3381	3744	4100
13700 - 13799	1740	2589	3026	3396	3760	4118
13800 - 13899	1753	2600	3039	3411	3777	4136
13900 - 13999	1765	2611	3052	3425	3793	4153
14000 - 14099	1778	2623	3065	3440	3809	4171
14100 - 14199	1791	2634	3078	3455	3825	4189
14200 - 14299	1803	2645	3092	3470	3841	4206
14300 - 14399	1816	2656	3105	3484	3858	4224
14400 - 14499	1829	2667	3118	3499	3874	4239
14500 - 14599	1842	2678	3131	3514	3889	4253
14600 - 14699	1854	2689	3144	3529	3902	4268
14700 - 14799	1864	2700	3158	3541	3916	4282
14800 - 14899	1872	2711	3170	3553	3929	4297
14900 - 14999	1879	2722	3181	3565	3942	4311
15000 -	1883	2727	3186	3571	3949	4319

Appendix B: Comparison of Updated Table Amounts

Comparisons for One Child

Note that only the Existing table is adjusted for low incomes below $2,000 gross per month. There is no low-income adjustment yet incorporated into the updated tables.

Comparisons for One Child											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
0	- 799	50	209	160	74	159	110	24	318.0%	219.3%	48.9%
800	- 899	80	235	179	84	155	99	4	193.9%	123.2%	4.7%
900	- 999	90	261	195	93	171	105	3	190.3%	116.9%	3.4%
1000	- 1099	116	287	212	102	171	96	-14	147.8%	82.7%	-11.7%
1100	- 1199	145	314	229	112	169	84	-33	116.3%	57.6%	-23.0%
1200	- 1299	177	340	245	121	163	68	-56	92.0%	38.5%	-31.6%
1300	- 1399	212	366	262	130	154	50	-82	72.6%	23.5%	-38.5%
1400	- 1499	251	392	279	140	141	28	-111	56.2%	11.0%	-44.4%
1500	- 1599	292	418	295	149	126	3	-143	43.2%	1.1%	-49.0%
1600	- 1699	337	444	311	158	107	-26	-179	31.9%	-7.6%	-53.0%
1700	- 1799	385	471	327	168	86	-58	-217	22.2%	-15.1%	-56.5%
1800	- 1899	436	497	342	177	61	-94	-259	13.9%	-21.5%	-59.4%
1900	- 1999	490	523	358	186	33	-132	-304	6.7%	-26.9%	-62.0%
2000	- 2099	516	549	374	196	33	-142	-320	6.4%	-27.6%	-62.1%
2100	- 2199	528	575	389	205	47	-139	-323	8.9%	-26.3%	-61.2%
2200	- 2299	538	601	404	214	63	-134	-324	11.8%	-24.8%	-60.2%
2300	- 2399	546	627	420	223	81	-126	-323	14.9%	-23.2%	-59.1%
2400	- 2499	554	654	435	233	100	-119	-321	18.0%	-21.5%	-58.0%
2500	- 2599	560	680	450	242	120	-110	-318	21.4%	-19.7%	-56.8%
2600	- 2699	570	706	465	251	136	-105	-319	23.9%	-18.4%	-55.9%

Comparisons for One Child												
Combined Parental Income			Basic Obligation				$ Change			% Change		
			Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
2700	-	2799	580	732	480	261	152	-100	-319	26.2%	-17.2%	-55.0%
2800	-	2899	589	758	495	270	169	-94	-319	28.7%	-15.9%	-54.2%
2900	-	2999	596	784	511	279	188	-85	-317	31.6%	-14.3%	-53.1%
3000	-	3099	603	811	525	289	208	-78	-314	34.4%	-12.9%	-52.1%
3100	-	3199	613	837	540	298	224	-73	-315	36.5%	-11.9%	-51.4%
3200	-	3299	623	863	555	307	240	-68	-316	38.5%	-10.9%	-50.7%
3300	-	3399	636	889	570	315	253	-66	-322	39.7%	-10.4%	-50.5%
3400	-	3499	650	904	585	318	254	-65	-332	39.1%	-10.0%	-51.1%
3500	-	3599	664	910	600	321	246	-64	-342	37.1%	-9.7%	-51.6%
3600	-	3699	677	915	614	325	238	-63	-353	35.1%	-9.3%	-52.1%
3700	-	3799	691	921	629	328	230	-62	-363	33.3%	-9.0%	-52.5%
3800	-	3899	705	927	644	331	222	-61	-373	31.5%	-8.6%	-53.0%
3900	-	3999	719	932	659	335	214	-60	-384	29.7%	-8.3%	-53.4%
4000	-	4099	732	938	672	338	205	-60	-394	28.0%	-8.2%	-53.8%
4100	-	4199	746	943	685	341	197	-61	-405	26.4%	-8.2%	-54.2%
4200	-	4299	760	949	698	345	189	-62	-415	24.9%	-8.2%	-54.6%
4300	-	4399	774	954	710	348	181	-63	-425	23.4%	-8.2%	-55.0%
4400	-	4499	787	960	723	352	173	-64	-436	21.9%	-8.2%	-55.4%
4500	-	4599	801	966	736	355	164	-65	-446	20.5%	-8.2%	-55.7%
4600	-	4699	808	971	749	358	163	-59	-450	20.2%	-7.3%	-55.7%
4700	-	4799	814	977	761	362	163	-52	-452	20.0%	-6.4%	-55.6%
4800	-	4899	820	982	774	365	163	-46	-455	19.9%	-5.6%	-55.5%
4900	-	4999	825	988	787	368	163	-39	-457	19.7%	-4.7%	-55.4%
5000	-	5099	831	993	799	372	162	-32	-460	19.5%	-3.8%	-55.3%
5100	-	5199	837	999	812	375	162	-25	-462	19.4%	-3.0%	-55.2%
5200	-	5299	843	1005	822	378	162	-21	-464	19.2%	-2.5%	-55.1%

Comparisons for One Child											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
5300	- 5399	849	1010	829	382	162	-20	-467	19.0%	-2.3%	-55.0%
5400	- 5499	854	1016	836	385	161	-18	-469	18.9%	-2.1%	-54.9%
5500	- 5599	860	1021	844	388	161	-17	-472	18.7%	-1.9%	-54.8%
5600	- 5699	866	1027	851	392	161	-15	-474	18.6%	-1.7%	-54.8%
5700	- 5799	873	1032	858	395	159	-15	-478	18.2%	-1.7%	-54.8%
5800	- 5899	881	1038	866	399	158	-15	-482	17.9%	-1.7%	-54.7%
5900	- 5999	888	1044	873	402	156	-15	-486	17.6%	-1.7%	-54.7%
6000	- 6099	895	1049	879	405	154	-16	-490	17.2%	-1.8%	-54.7%
6100	- 6199	902	1055	885	409	153	-17	-493	16.9%	-1.9%	-54.7%
6200	- 6299	909	1060	891	412	151	-18	-497	16.6%	-2.0%	-54.7%
6300	- 6399	916	1066	897	415	150	-20	-501	16.3%	-2.1%	-54.7%
6400	- 6499	923	1072	903	419	149	-20	-504	16.1%	-2.2%	-54.6%
6500	- 6599	930	1077	908	422	147	-21	-508	15.9%	-2.3%	-54.6%
6600	- 6699	936	1083	914	425	146	-22	-511	15.6%	-2.4%	-54.6%
6700	- 6799	943	1088	920	429	145	-23	-514	15.4%	-2.4%	-54.5%
6800	- 6899	950	1094	926	432	144	-24	-518	15.1%	-2.5%	-54.5%
6900	- 6999	957	1099	932	436	143	-24	-521	14.9%	-2.6%	-54.5%
7000	- 7099	963	1105	938	443	142	-25	-521	14.7%	-2.6%	-54.1%
7100	- 7199	970	1111	946	450	140	-24	-521	14.5%	-2.5%	-53.7%
7200	- 7299	974	1116	954	456	142	-20	-518	14.6%	-2.1%	-53.1%
7300	- 7399	980	1122	961	463	142	-19	-517	14.5%	-1.9%	-52.7%
7400	- 7499	989	1127	969	470	138	-20	-519	14.0%	-2.0%	-52.4%
7500	- 7599	998	1133	977	477	135	-21	-521	13.5%	-2.1%	-52.2%
7600	- 7699	1006	1139	984	484	133	-22	-522	13.2%	-2.1%	-51.9%
7700	- 7799	1015	1145	992	491	130	-23	-524	12.8%	-2.2%	-51.6%
7800	- 7899	1023	1151	1000	498	128	-23	-525	12.5%	-2.3%	-51.3%

Comparisons for One Child												
Combined Parental Income		Basic Obligation				$ Change			% Change			
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
7900	- 7999	1032	1157	1008	505	125	-24	-527	12.1%	-2.4%	-51.1%
8000	- 8099	1040	1163	1015	512	123	-25	-528	11.8%	-2.4%	-50.8%
8100	- 8199	1048	1169	1023	519	121	-25	-529	11.5%	-2.4%	-50.5%
8200	- 8299	1056	1175	1029	526	119	-27	-530	11.2%	-2.6%	-50.2%
8300	- 8399	1064	1181	1034	533	117	-30	-531	11.0%	-2.9%	-49.9%
8400	- 8499	1072	1187	1038	540	115	-34	-532	10.7%	-3.1%	-49.6%
8500	- 8599	1080	1193	1043	547	113	-37	-533	10.4%	-3.4%	-49.4%
8600	- 8699	1092	1199	1048	554	107	-44	-538	9.8%	-4.0%	-49.3%
8700	- 8799	1105	1204	1053	561	99	-52	-544	9.0%	-4.7%	-49.3%
8800	- 8899	1118	1210	1057	568	92	-61	-550	8.3%	-5.4%	-49.2%
8900	- 8999	1130	1216	1062	575	86	-68	-555	7.6%	-6.0%	-49.1%
9000	- 9099	1143	1222	1064	582	79	-79	-561	6.9%	-6.9%	-49.1%
9100	- 9199	1156	1228	1066	589	72	-90	-567	6.3%	-7.8%	-49.1%
9200	- 9299	1168	1234	1068	595	66	-100	-573	5.7%	-8.6%	-49.0%
9300	- 9399	1181	1240	1070	602	59	-111	-579	5.0%	-9.4%	-49.0%
9400	- 9499	1194	1246	1071	609	52	-123	-585	4.4%	-10.3%	-49.0%
9500	- 9599	1207	1252	1073	616	45	-134	-591	3.7%	-11.1%	-48.9%
9600	- 9699	1219	1258	1075	623	39	-144	-596	3.2%	-11.8%	-48.9%
9700	- 9799	1232	1264	1077	630	32	-155	-602	2.6%	-12.6%	-48.8%
9800	- 9899	1245	1270	1083	637	25	-162	-608	2.0%	-13.0%	-48.8%
9900	- 9999	1257	1276	1091	644	19	-166	-613	1.5%	-13.2%	-48.8%
10000	- 10099	1270	1282	1098	651	12	-172	-619	0.9%	-13.6%	-48.7%
10100	- 10199	1283	1288	1105	658	5	-178	-625	0.4%	-13.9%	-48.7%
10200	- 10299	1295	1294	1112	665	-1	-183	-630	-0.1%	-14.1%	-48.6%
10300	- 10399	1308	1300	1119	672	-8	-189	-636	-0.6%	-14.4%	-48.6%
10400	- 10499	1321	1305	1127	679	-16	-194	-642	-1.2%	-14.7%	-48.6%

Comparisons for One Child												
Combined Parental Income		Basic Obligation				$ Change			% Change			
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
10500	- 10599	1334	1311	1134	686	-23	-200	-648	-1.7%	-15.0%	-48.6%
10600	- 10699	1346	1317	1142	693	-29	-204	-653	-2.1%	-15.2%	-48.5%
10700	- 10799	1359	1323	1150	700	-36	-209	-659	-2.6%	-15.4%	-48.5%
10800	- 10899	1372	1329	1158	707	-43	-214	-665	-3.1%	-15.6%	-48.5%
10900	- 10999	1384	1335	1166	714	-49	-218	-670	-3.5%	-15.8%	-48.4%
11000	- 11099	1397	1341	1174	721	-56	-223	-676	-4.0%	-15.9%	-48.4%
11100	- 11199	1410	1347	1183	728	-63	-227	-682	-4.5%	-16.1%	-48.4%
11200	- 11299	1422	1353	1191	735	-69	-231	-687	-4.9%	-16.2%	-48.3%
11300	- 11399	1435	1359	1199	741	-76	-236	-694	-5.3%	-16.4%	-48.3%
11400	- 11499	1448	1365	1208	748	-83	-240	-700	-5.7%	-16.6%	-48.3%
11500	- 11599	1461	1371	1216	755	-90	-245	-706	-6.2%	-16.8%	-48.3%
11600	- 11699	1473	1377	1225	762	-96	-248	-711	-6.5%	-16.9%	-48.2%
11700	- 11799	1486	1383	1233	769	-103	-253	-717	-7.0%	-17.0%	-48.2%
11800	- 11899	1499	1389	1241	776	-110	-258	-723	-7.4%	-17.2%	-48.2%
11900	- 11999	1511	1395	1250	783	-116	-261	-728	-7.7%	-17.3%	-48.2%
12000	- 12099	1524	1401	1257	790	-123	-267	-734	-8.1%	-17.5%	-48.2%
12100	- 12199	1537	1406	1262	797	-131	-275	-740	-8.5%	-17.9%	-48.1%
12200	- 12299	1549	1412	1268	804	-137	-281	-745	-8.8%	-18.1%	-48.1%
12300	- 12399	1562	1418	1274	811	-144	-288	-751	-9.2%	-18.4%	-48.1%
12400	- 12499	1575	1424	1280	818	-151	-295	-757	-9.6%	-18.7%	-48.1%
12500	- 12599	1588	1430	1286	825	-158	-302	-763	-9.9%	-19.0%	-48.1%
12600	- 12699	1600	1436	1291	832	-164	-309	-768	-10.2%	-19.3%	-48.0%
12700	- 12799	1613	1442	1297	839	-171	-316	-774	-10.6%	-19.6%	-48.0%
12800	- 12899	1626	1448	1303	846	-178	-323	-780	-10.9%	-19.9%	-48.0%
12900	- 12999	1638	1454	1309	853	-184	-329	-785	-11.2%	-20.1%	-47.9%
13000	- 13099	1651	1460	1315	860	-191	-336	-791	-11.6%	-20.4%	-47.9%

Comparisons for One Child											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
13100	- 13199	1664	1466	1321	867	-198	-343	-797	-11.9%	-20.6%	-47.9%
13200	- 13299	1676	1472	1326	874	-204	-350	-802	-12.2%	-20.9%	-47.9%
13300	- 13399	1689	1478	1332	880	-211	-357	-809	-12.5%	-21.1%	-47.9%
13400	- 13499	1702	1484	1338	887	-218	-364	-815	-12.8%	-21.4%	-47.9%
13500	- 13599	1715	1490	1344	894	-225	-371	-821	-13.1%	-21.6%	-47.8%
13600	- 13699	1727	1496	1350	901	-231	-377	-826	-13.4%	-21.8%	-47.8%
13700	- 13799	1740	1502	1356	908	-238	-384	-832	-13.7%	-22.1%	-47.8%
13800	- 13899	1753	1507	1361	915	-246	-392	-838	-14.0%	-22.3%	-47.8%
13900	- 13999	1765	1513	1367	922	-252	-398	-843	-14.3%	-22.5%	-47.8%
14000	- 14099	1778	1519	1373	929	-259	-405	-849	-14.5%	-22.8%	-47.7%
14100	- 14199	1791	1525	1378	936	-266	-413	-855	-14.8%	-23.0%	-47.7%
14200	- 14299	1803	1531	1384	943	-272	-419	-860	-15.1%	-23.2%	-47.7%
14300	- 14399	1816	1537	1390	950	-279	-426	-866	-15.4%	-23.5%	-47.7%
14400	- 14499	1829	1543	1395	957	-286	-434	-872	-15.6%	-23.7%	-47.7%
14500	- 14599	1842	1549	1401	964	-293	-441	-878	-15.9%	-23.9%	-47.7%
14600	- 14699	1854	1555	1406	971	-299	-448	-883	-16.1%	-24.2%	-47.6%
14700	- 14799	1864	1561	1412	978	-303	-453	-886	-16.3%	-24.3%	-47.5%
14800	- 14899	1872	1567	1417	985	-305	-455	-887	-16.3%	-24.3%	-47.4%
14900	- 14999	1879	1573	1422	992	-306	-457	-887	-16.3%	-24.3%	-47.2%
15000	-	1883	1632	1428	1061	-251	-455	-822	-13.3%	-24.2%	-43.6%

Comparisons for Two Children												
Combined Parental Income			Basic Obligation				$ Change			% Change		
			Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
0	-	799	50	331	245	93	281	195	43	562.3%	389.4%	86.7%
800	-	899	129	373	274	105	244	145	-24	188.9%	112.2%	-18.6%
900	-	999	145	414	299	117	269	154	-28	185.6%	106.4%	-19.5%
1000	-	1099	161	456	325	128	295	164	-33	182.9%	101.7%	-20.2%
1100	-	1199	205	497	350	140	292	145	-65	142.4%	70.9%	-31.7%
1200	-	1299	254	538	376	152	284	122	-102	112.0%	48.0%	-40.2%
1300	-	1399	309	580	401	163	271	92	-146	87.7%	29.9%	-47.1%
1400	-	1499	368	621	427	175	253	59	-193	68.8%	16.0%	-52.4%
1500	-	1599	433	663	452	187	230	19	-246	53.1%	4.5%	-56.9%
1600	-	1699	502	704	477	199	202	-25	-303	40.3%	-5.0%	-60.5%
1700	-	1799	577	746	501	210	169	-76	-367	29.2%	-13.2%	-63.6%
1800	-	1899	657	787	525	222	130	-132	-435	19.8%	-20.1%	-66.2%
1900	-	1999	742	829	549	234	87	-193	-508	11.7%	-26.1%	-68.5%
2000	-	2099	832	870	573	245	38	-259	-587	4.6%	-31.2%	-70.5%
2100	-	2199	851	911	596	257	60	-255	-594	7.1%	-29.9%	-69.8%
2200	-	2299	867	953	619	269	86	-248	-598	9.9%	-28.6%	-69.0%
2300	-	2399	881	994	642	280	113	-239	-601	12.9%	-27.1%	-68.2%
2400	-	2499	893	1036	665	292	143	-228	-601	16.0%	-25.5%	-67.3%
2500	-	2599	903	1077	688	304	174	-215	-599	19.3%	-23.8%	-66.4%
2600	-	2699	920	1119	711	315	199	-209	-605	21.6%	-22.7%	-65.7%
2700	-	2799	936	1160	734	327	224	-202	-609	23.9%	-21.6%	-65.1%
2800	-	2899	950	1202	757	339	252	-193	-611	26.5%	-20.3%	-64.3%
2900	-	2999	963	1243	780	350	280	-183	-613	29.1%	-19.0%	-63.6%
3000	-	3099	975	1284	802	362	309	-173	-613	31.7%	-17.7%	-62.9%
3100	-	3199	991	1326	824	374	335	-167	-617	33.8%	-16.8%	-62.3%

Amounts below $2,000 are adjusted for low-income for existing but not the options

Comparisons for Two Children											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
3200	- 3299	1007	1367	847	385	360	-160	-622	35.8%	-15.9%	-61.7%
3300	- 3399	1021	1409	869	395	388	-152	-626	38.0%	-14.9%	-61.3%
3400	- 3499	1034	1433	892	401	399	-142	-633	38.6%	-13.8%	-61.2%
3500	- 3599	1047	1442	914	407	395	-133	-640	37.7%	-12.7%	-61.1%
3600	- 3699	1062	1451	936	413	389	-126	-649	36.6%	-11.8%	-61.1%
3700	- 3799	1077	1459	959	419	382	-118	-658	35.5%	-11.0%	-61.1%
3800	- 3899	1081	1468	981	425	387	-100	-656	35.8%	-9.2%	-60.7%
3900	- 3999	1104	1477	1003	431	373	-101	-673	33.8%	-9.1%	-60.9%
4000	- 4099	1116	1486	1024	437	370	-92	-679	33.1%	-8.3%	-60.8%
4100	- 4199	1132	1494	1043	443	362	-89	-689	32.0%	-7.9%	-60.8%
4200	- 4299	1147	1503	1062	449	356	-85	-698	31.1%	-7.4%	-60.8%
4300	- 4399	1161	1512	1081	455	351	-80	-706	30.2%	-6.9%	-60.8%
4400	- 4499	1175	1521	1100	461	346	-75	-714	29.4%	-6.4%	-60.8%
4500	- 4599	1184	1530	1120	467	346	-64	-717	29.2%	-5.4%	-60.5%
4600	- 4699	1200	1538	1139	473	338	-61	-727	28.2%	-5.1%	-60.6%
4700	- 4799	1215	1547	1158	479	332	-57	-736	27.3%	-4.7%	-60.6%
4800	- 4899	1231	1556	1177	485	325	-54	-746	26.4%	-4.4%	-60.6%
4900	- 4999	1246	1565	1196	491	319	-50	-755	25.6%	-4.0%	-60.6%
5000	- 5099	1260	1573	1215	497	313	-45	-763	24.9%	-3.5%	-60.5%
5100	- 5199	1275	1582	1235	503	307	-40	-772	24.1%	-3.2%	-60.5%
5200	- 5299	1290	1591	1248	509	301	-42	-781	23.3%	-3.2%	-60.5%
5300	- 5399	1304	1600	1259	515	296	-45	-789	22.7%	-3.5%	-60.5%
5400	- 5499	1318	1609	1269	521	291	-49	-797	22.0%	-3.7%	-60.5%
5500	- 5599	1331	1617	1279	527	286	-52	-804	21.5%	-3.9%	-60.4%
5600	- 5699	1346	1626	1289	533	280	-57	-813	20.8%	-4.2%	-60.4%
5700	- 5799	1357	1635	1300	539	278	-57	-818	20.5%	-4.2%	-60.3%

Comparisons for Two Children											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
5800	- 5899	1376	1644	1310	545	268	-66	-831	19.4%	-4.8%	-60.4%
5900	- 5999	1390	1652	1320	551	262	-70	-839	18.9%	-5.1%	-60.4%
6000	- 6099	1404	1661	1329	557	257	-75	-847	18.3%	-5.4%	-60.3%
6100	- 6199	1419	1670	1337	563	251	-82	-856	17.7%	-5.8%	-60.3%
6200	- 6299	1433	1679	1346	569	246	-87	-864	17.1%	-6.1%	-60.3%
6300	- 6399	1448	1687	1355	575	239	-93	-873	16.5%	-6.4%	-60.3%
6400	- 6499	1462	1696	1363	581	234	-99	-881	16.0%	-6.7%	-60.3%
6500	- 6599	1476	1705	1372	587	229	-104	-889	15.5%	-7.0%	-60.2%
6600	- 6699	1490	1714	1381	593	224	-109	-897	15.0%	-7.3%	-60.2%
6700	- 6799	1505	1723	1390	599	218	-115	-906	14.5%	-7.7%	-60.2%
6800	- 6899	1519	1731	1398	605	212	-121	-914	14.0%	-7.9%	-60.2%
6900	- 6999	1533	1740	1407	611	207	-126	-922	13.5%	-8.2%	-60.1%
7000	- 7099	1547	1749	1416	619	202	-131	-928	13.1%	-8.5%	-60.0%
7100	- 7199	1561	1758	1428	626	197	-133	-935	12.6%	-8.6%	-59.9%
7200	- 7299	1574	1766	1439	634	192	-135	-940	12.2%	-8.6%	-59.7%
7300	- 7399	1587	1775	1451	642	188	-136	-945	11.9%	-8.6%	-59.6%
7400	- 7499	1600	1784	1463	649	184	-137	-951	11.5%	-8.6%	-59.4%
7500	- 7599	1613	1793	1475	657	180	-138	-956	11.2%	-8.6%	-59.3%
7600	- 7699	1628	1803	1487	665	175	-141	-963	10.7%	-8.7%	-59.2%
7700	- 7799	1643	1812	1498	672	169	-145	-971	10.3%	-8.8%	-59.1%
7800	- 7899	1658	1822	1510	680	164	-148	-978	9.9%	-8.9%	-59.0%
7900	- 7999	1673	1831	1522	688	158	-151	-985	9.4%	-9.0%	-58.9%
8000	- 8099	1688	1840	1534	695	152	-154	-993	9.0%	-9.2%	-58.8%
8100	- 8199	1703	1850	1545	703	147	-158	-1000	8.6%	-9.3%	-58.7%
8200	- 8299	1717	1859	1553	711	142	-164	-1006	8.3%	-9.5%	-58.6%
8300	- 8399	1731	1868	1560	718	137	-171	-1013	7.9%	-9.9%	-58.5%

Comparisons for Two Children											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
8400	- 8499	1746	1878	1567	726	132	-179	-1020	7.5%	-10.3%	-58.4%
8500	- 8599	1760	1887	1573	734	127	-187	-1026	7.2%	-10.6%	-58.3%
8600	- 8699	1780	1896	1579	741	116	-201	-1039	6.5%	-11.3%	-58.4%
8700	- 8799	1801	1906	1585	749	105	-216	-1052	5.8%	-12.0%	-58.4%
8800	- 8899	1822	1915	1592	757	93	-230	-1065	5.1%	-12.7%	-58.5%
8900	- 8999	1842	1924	1598	764	82	-244	-1078	4.5%	-13.3%	-58.5%
9000	- 9099	1863	1934	1601	772	71	-262	-1091	3.8%	-14.1%	-58.6%
9100	- 9199	1884	1943	1603	780	59	-281	-1104	3.1%	-14.9%	-58.6%
9200	- 9299	1904	1952	1606	787	48	-298	-1117	2.5%	-15.7%	-58.6%
9300	- 9399	1925	1962	1608	795	37	-317	-1130	1.9%	-16.5%	-58.7%
9400	- 9499	1946	1971	1611	803	25	-335	-1143	1.3%	-17.2%	-58.8%
9500	- 9599	1967	1981	1613	810	14	-354	-1157	0.7%	-18.0%	-58.8%
9600	- 9699	1987	1990	1616	818	3	-371	-1169	0.1%	-18.7%	-58.8%
9700	- 9799	2008	1999	1618	826	-9	-390	-1182	-0.4%	-19.4%	-58.9%
9800	- 9899	2029	2009	1629	833	-20	-400	-1196	-1.0%	-19.7%	-58.9%
9900	- 9999	2049	2018	1639	841	-31	-410	-1208	-1.5%	-20.0%	-59.0%
10000	- 10099	2070	2027	1650	849	-43	-420	-1221	-2.1%	-20.3%	-59.0%
10100	- 10199	2091	2037	1661	856	-54	-430	-1235	-2.6%	-20.5%	-59.0%
10200	- 10299	2111	2046	1672	864	-65	-439	-1247	-3.1%	-20.8%	-59.1%
10300	- 10399	2132	2055	1683	872	-77	-449	-1260	-3.6%	-21.0%	-59.1%
10400	- 10499	2153	2065	1694	879	-88	-459	-1274	-4.1%	-21.3%	-59.2%
10500	- 10599	2174	2074	1705	887	-100	-469	-1287	-4.6%	-21.6%	-59.2%
10600	- 10699	2194	2083	1718	895	-111	-476	-1299	-5.0%	-21.7%	-59.2%
10700	- 10799	2215	2093	1730	902	-122	-485	-1313	-5.5%	-21.9%	-59.3%
10800	- 10899	2236	2102	1742	910	-134	-494	-1326	-6.0%	-22.1%	-59.3%
10900	- 10999	2256	2112	1754	918	-144	-502	-1338	-6.4%	-22.2%	-59.3%

Comparisons for Two Children											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
11000	- 11099	2277	2121	1767	925	-156	-510	-1352	-6.9%	-22.4%	-59.4%
11100	- 11199	2294	2130	1780	933	-164	-514	-1361	-7.1%	-22.4%	-59.3%
11200	- 11299	2306	2140	1793	941	-167	-514	-1366	-7.2%	-22.3%	-59.2%
11300	- 11399	2319	2149	1805	948	-170	-514	-1371	-7.3%	-22.2%	-59.1%
11400	- 11499	2331	2158	1818	956	-173	-513	-1376	-7.4%	-22.0%	-59.0%
11500	- 11599	2344	2168	1831	964	-176	-513	-1380	-7.5%	-21.9%	-58.9%
11600	- 11699	2356	2177	1843	971	-179	-513	-1385	-7.6%	-21.8%	-58.8%
11700	- 11799	2367	2186	1856	979	-181	-511	-1388	-7.6%	-21.6%	-58.6%
11800	- 11899	2378	2196	1869	987	-183	-509	-1392	-7.7%	-21.4%	-58.5%
11900	- 11999	2389	2205	1882	994	-184	-508	-1395	-7.7%	-21.2%	-58.4%
12000	- 12099	2401	2214	1892	1002	-186	-509	-1399	-7.8%	-21.2%	-58.3%
12100	- 12199	2412	2224	1900	1010	-188	-512	-1402	-7.8%	-21.2%	-58.1%
12200	- 12299	2423	2233	1908	1017	-190	-515	-1406	-7.8%	-21.2%	-58.0%
12300	- 12399	2434	2242	1916	1025	-191	-518	-1409	-7.9%	-21.3%	-57.9%
12400	- 12499	2445	2252	1924	1033	-193	-521	-1412	-7.9%	-21.3%	-57.8%
12500	- 12599	2456	2261	1932	1040	-195	-524	-1416	-7.9%	-21.3%	-57.6%
12600	- 12699	2467	2271	1940	1048	-197	-527	-1419	-8.0%	-21.3%	-57.5%
12700	- 12799	2478	2280	1949	1056	-198	-530	-1423	-8.0%	-21.4%	-57.4%
12800	- 12899	2489	2289	1957	1063	-200	-533	-1426	-8.0%	-21.4%	-57.3%
12900	- 12999	2500	2299	1965	1071	-202	-536	-1430	-8.1%	-21.4%	-57.2%
13000	- 13099	2512	2308	1973	1079	-204	-539	-1433	-8.1%	-21.4%	-57.1%
13100	- 13199	2523	2317	1981	1086	-205	-541	-1436	-8.1%	-21.5%	-56.9%
13200	- 13299	2534	2327	1990	1094	-207	-544	-1440	-8.2%	-21.5%	-56.8%
13300	- 13399	2545	2336	1998	1101	-209	-546	-1443	-8.2%	-21.5%	-56.7%
13400	- 13499	2556	2345	2007	1109	-211	-549	-1447	-8.2%	-21.5%	-56.6%
13500	- 13599	2567	2355	2015	1117	-212	-552	-1450	-8.3%	-21.5%	-56.5%

Comparisons for Two Children											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
13600	- 13699	2578	2364	2024	1124	-214	-554	-1454	-8.3%	-21.5%	-56.4%
13700	- 13799	2589	2373	2032	1132	-216	-557	-1457	-8.3%	-21.5%	-56.3%
13800	- 13899	2600	2383	2041	1140	-218	-559	-1461	-8.4%	-21.5%	-56.2%
13900	- 13999	2611	2392	2049	1147	-219	-562	-1464	-8.4%	-21.5%	-56.1%
14000	- 14099	2623	2402	2057	1155	-221	-565	-1467	-8.4%	-21.5%	-56.0%
14100	- 14199	2634	2411	2066	1163	-223	-568	-1471	-8.5%	-21.6%	-55.8%
14200	- 14299	2645	2420	2074	1170	-224	-571	-1474	-8.5%	-21.6%	-55.7%
14300	- 14399	2656	2430	2082	1178	-226	-574	-1478	-8.5%	-21.6%	-55.6%
14400	- 14499	2667	2439	2090	1186	-228	-577	-1481	-8.5%	-21.6%	-55.5%
14500	- 14599	2678	2448	2099	1193	-230	-579	-1485	-8.6%	-21.6%	-55.4%
14600	- 14699	2689	2458	2108	1201	-231	-581	-1488	-8.6%	-21.6%	-55.3%
14700	- 14799	2700	2467	2117	1209	-233	-584	-1491	-8.6%	-21.6%	-55.2%
14800	- 14899	2711	2476	2126	1216	-235	-586	-1495	-8.7%	-21.6%	-55.1%
14900	- 14999	2722	2486	2134	1224	-237	-588	-1498	-8.7%	-21.6%	-55.0%
15000	-	2727	2579	2143	1301	-148	-584	-1427	-5.4%	-21.4%	-52.3%

Comparisons for Three Children												
Combined Parental Income			Basic Obligation				$ Change			% Change		
			Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
0	-	799	75	381	297	103	306	222	28	408.0%	296.1%	37.6%
800	-	899	149	429	332	116	280	183	-33	187.7%	123.0%	-22.0%
900	-	999	167	476	363	129	309	196	-38	185.3%	117.5%	-22.7%
1000	-	1099	186	524	394	142	338	208	-44	181.8%	112.0%	-23.7%
1100	-	1199	237	572	425	155	335	188	-82	141.2%	79.4%	-34.6%
1200	-	1299	294	619	456	168	325	162	-126	110.7%	55.2%	-42.9%
1300	-	1399	356	667	487	181	311	131	-175	87.4%	36.9%	-49.2%
1400	-	1499	425	715	518	194	290	93	-231	68.2%	22.0%	-54.4%
1500	-	1599	500	763	549	207	263	49	-293	52.5%	9.9%	-58.7%
1600	-	1699	580	810	579	220	230	-1	-360	39.7%	-0.1%	-62.2%
1700	-	1799	666	858	608	232	192	-58	-434	28.8%	-8.7%	-65.1%
1800	-	1899	758	906	637	245	148	-121	-513	19.5%	-15.9%	-67.6%
1900	-	1999	856	953	666	258	97	-190	-598	11.4%	-22.2%	-69.8%
2000	-	2099	960	1001	695	271	41	-265	-689	4.3%	-27.6%	-71.8%
2100	-	2199	981	1049	724	284	68	-257	-697	6.9%	-26.2%	-71.0%
2200	-	2299	1000	1096	752	297	96	-248	-703	9.6%	-24.8%	-70.3%
2300	-	2399	1016	1144	779	310	128	-237	-706	12.6%	-23.3%	-69.5%
2400	-	2499	1029	1192	806	323	163	-223	-706	15.8%	-21.6%	-68.6%
2500	-	2599	1040	1239	834	336	199	-206	-704	19.2%	-19.8%	-67.7%
2600	-	2699	1060	1287	861	349	227	-199	-711	21.4%	-18.8%	-67.1%
2700	-	2799	1078	1335	889	362	257	-189	-716	23.8%	-17.6%	-66.5%
2800	-	2899	1094	1382	916	375	288	-178	-719	26.4%	-16.3%	-65.8%
2900	-	2999	1109	1430	943	387	321	-166	-722	29.0%	-15.0%	-65.1%
3000	-	3099	1122	1478	970	400	356	-152	-722	31.7%	-13.6%	-64.3%

Amounts below $2,000 are adjusted for low-income for existing but not the options

Comparisons for Three Children												
Combined Parental Income		Basic Obligation				$ Change			% Change			
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
3100	- 3199	1141	1525	997	413	384	-144	-728	33.7%	-12.7%	-63.8%
3200	- 3299	1158	1573	1023	426	415	-135	-732	35.9%	-11.6%	-63.2%
3300	- 3399	1175	1621	1050	437	446	-125	-738	37.9%	-10.6%	-62.8%
3400	- 3499	1190	1649	1077	444	459	-113	-746	38.5%	-9.5%	-62.7%
3500	- 3599	1204	1659	1104	451	455	-100	-753	37.8%	-8.3%	-62.5%
3600	- 3699	1223	1669	1130	458	446	-93	-765	36.4%	-7.6%	-62.6%
3700	- 3799	1240	1679	1157	465	439	-83	-775	35.4%	-6.7%	-62.5%
3800	- 3899	1257	1689	1184	472	432	-73	-785	34.3%	-5.8%	-62.5%
3900	- 3999	1273	1699	1211	479	426	-62	-794	33.4%	-4.9%	-62.4%
4000	- 4099	1288	1709	1235	485	421	-53	-803	32.7%	-4.1%	-62.3%
4100	- 4199	1305	1719	1258	492	414	-47	-813	31.7%	-3.6%	-62.3%
4200	- 4299	1322	1729	1281	499	407	-41	-823	30.8%	-3.1%	-62.2%
4300	- 4399	1338	1739	1303	506	401	-35	-832	29.9%	-2.6%	-62.2%
4400	- 4499	1353	1749	1326	513	396	-27	-840	29.2%	-2.0%	-62.1%
4500	- 4599	1368	1759	1349	520	391	-19	-848	28.6%	-1.4%	-62.0%
4600	- 4699	1386	1769	1372	527	383	-14	-859	27.6%	-1.0%	-62.0%
4700	- 4799	1402	1779	1395	534	377	-7	-868	26.9%	-0.5%	-61.9%
4800	- 4899	1419	1789	1418	541	370	-1	-878	26.1%	-0.1%	-61.9%
4900	- 4999	1435	1799	1441	548	364	6	-887	25.3%	0.4%	-61.8%
5000	- 5099	1450	1809	1464	554	359	14	-896	24.7%	1.0%	-61.8%
5100	- 5199	1468	1819	1487	561	351	19	-907	23.9%	1.3%	-61.8%
5200	- 5299	1485	1829	1503	568	344	18	-917	23.1%	1.2%	-61.7%
5300	- 5399	1502	1839	1514	575	337	12	-927	22.4%	0.8%	-61.7%
5400	- 5499	1518	1849	1525	582	331	7	-936	21.8%	0.5%	-61.7%
5500	- 5599	1535	1859	1536	589	324	1	-946	21.1%	0.1%	-61.6%
5600	- 5699	1551	1869	1547	596	318	-4	-955	20.5%	-0.2%	-61.6%

Comparisons for Three Children												
Combined Parental Income		Basic Obligation				$ Change			% Change			
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
5700	- 5799	1568	1879	1559	603	311	-9	-965	19.8%	-0.6%	-61.6%
5800	- 5899	1583	1889	1570	610	306	-13	-973	19.3%	-0.8%	-61.5%
5900	- 5999	1599	1899	1581	616	300	-18	-983	18.7%	-1.1%	-61.4%
6000	- 6099	1614	1909	1591	623	295	-23	-991	18.3%	-1.4%	-61.4%
6100	- 6199	1631	1919	1601	630	288	-30	-1001	17.6%	-1.8%	-61.4%
6200	- 6299	1645	1929	1611	637	284	-34	-1008	17.2%	-2.1%	-61.3%
6300	- 6399	1664	1939	1621	644	275	-43	-1020	16.5%	-2.6%	-61.3%
6400	- 6499	1682	1949	1632	651	267	-50	-1031	15.9%	-3.0%	-61.3%
6500	- 6599	1697	1959	1642	658	262	-55	-1039	15.4%	-3.3%	-61.2%
6600	- 6699	1713	1969	1652	665	256	-61	-1048	14.9%	-3.6%	-61.2%
6700	- 6799	1730	1979	1662	672	249	-68	-1058	14.4%	-3.9%	-61.2%
6800	- 6899	1746	1989	1672	679	243	-74	-1067	13.9%	-4.2%	-61.1%
6900	- 6999	1762	1999	1682	686	237	-80	-1076	13.4%	-4.5%	-61.1%
7000	- 7099	1778	2009	1693	695	231	-85	-1083	13.0%	-4.8%	-60.9%
7100	- 7199	1795	2019	1707	704	224	-88	-1091	12.5%	-4.9%	-60.8%
7200	- 7299	1812	2029	1721	713	217	-91	-1099	12.0%	-5.0%	-60.6%
7300	- 7399	1828	2039	1735	723	211	-93	-1105	11.5%	-5.1%	-60.5%
7400	- 7499	1844	2049	1750	732	205	-94	-1112	11.1%	-5.1%	-60.3%
7500	- 7599	1860	2060	1764	741	200	-96	-1119	10.7%	-5.2%	-60.2%
7600	- 7699	1877	2070	1778	750	193	-99	-1127	10.3%	-5.3%	-60.0%
7700	- 7799	1894	2081	1793	759	187	-101	-1135	9.9%	-5.3%	-59.9%
7800	- 7899	1911	2092	1807	769	181	-104	-1142	9.4%	-5.4%	-59.8%
7900	- 7999	1928	2102	1821	778	174	-107	-1150	9.0%	-5.5%	-59.7%
8000	- 8099	1944	2113	1835	787	169	-109	-1157	8.7%	-5.6%	-59.5%
8100	- 8199	1960	2124	1849	796	164	-111	-1164	8.3%	-5.6%	-59.4%
8200	- 8299	1976	2134	1858	806	158	-118	-1170	8.0%	-6.0%	-59.2%

Comparisons for Three Children											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
8300	- 8399	1992	2145	1865	815	153	-127	-1177	7.7%	-6.4%	-59.1%
8400	- 8499	2008	2156	1872	824	148	-136	-1184	7.3%	-6.8%	-59.0%
8500	- 8599	2023	2166	1878	833	143	-145	-1190	7.1%	-7.1%	-58.8%
8600	- 8699	2047	2177	1885	842	130	-162	-1205	6.3%	-7.9%	-58.8%
8700	- 8799	2071	2187	1891	852	116	-180	-1219	5.6%	-8.7%	-58.9%
8800	- 8899	2094	2198	1898	861	104	-196	-1233	5.0%	-9.4%	-58.9%
8900	- 8999	2118	2209	1904	870	91	-214	-1248	4.3%	-10.1%	-58.9%
9000	- 9099	2142	2219	1907	879	77	-235	-1263	3.6%	-11.0%	-58.9%
9100	- 9199	2166	2230	1910	889	64	-256	-1277	3.0%	-11.8%	-59.0%
9200	- 9299	2190	2241	1913	898	51	-277	-1292	2.3%	-12.7%	-59.0%
9300	- 9399	2213	2251	1915	907	38	-298	-1306	1.7%	-13.4%	-59.0%
9400	- 9499	2237	2262	1918	916	25	-319	-1321	1.1%	-14.3%	-59.0%
9500	- 9599	2261	2273	1921	926	12	-340	-1335	0.5%	-15.0%	-59.1%
9600	- 9699	2285	2283	1924	935	-2	-361	-1350	-0.1%	-15.8%	-59.1%
9700	- 9799	2309	2294	1926	944	-15	-383	-1365	-0.6%	-16.6%	-59.1%
9800	- 9899	2332	2305	1939	953	-27	-393	-1379	-1.2%	-16.9%	-59.1%
9900	- 9999	2356	2315	1952	962	-41	-404	-1394	-1.7%	-17.1%	-59.1%
10000	- 10099	2380	2326	1965	972	-54	-415	-1408	-2.3%	-17.4%	-59.2%
10100	- 10199	2404	2337	1979	981	-67	-425	-1423	-2.8%	-17.7%	-59.2%
10200	- 10299	2428	2347	1992	990	-81	-436	-1438	-3.3%	-18.0%	-59.2%
10300	- 10399	2451	2358	2005	999	-93	-446	-1452	-3.8%	-18.2%	-59.2%
10400	- 10499	2475	2369	2018	1009	-106	-457	-1466	-4.3%	-18.4%	-59.2%
10500	- 10599	2499	2379	2032	1018	-120	-467	-1481	-4.8%	-18.7%	-59.3%
10600	- 10699	2523	2390	2046	1027	-133	-477	-1496	-5.3%	-18.9%	-59.3%
10700	- 10799	2547	2401	2061	1036	-146	-486	-1511	-5.7%	-19.1%	-59.3%
10800	- 10899	2570	2411	2076	1045	-159	-494	-1525	-6.2%	-19.2%	-59.3%

Comparisons for Three Children												
Combined Parental Income		Basic Obligation				$ Change			% Change			
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
10900	- 10999	2594	2422	2091	1055	-172	-503	-1539	-6.6%	-19.4%	-59.3%
11000	- 11099	2618	2433	2106	1064	-185	-512	-1554	-7.1%	-19.6%	-59.4%
11100	- 11199	2642	2443	2122	1073	-199	-520	-1569	-7.5%	-19.7%	-59.4%
11200	- 11299	2666	2454	2137	1082	-212	-529	-1584	-7.9%	-19.8%	-59.4%
11300	- 11399	2689	2465	2152	1092	-224	-537	-1597	-8.3%	-20.0%	-59.4%
11400	- 11499	2713	2475	2168	1101	-238	-545	-1612	-8.8%	-20.1%	-59.4%
11500	- 11599	2735	2486	2183	1110	-249	-552	-1625	-9.1%	-20.2%	-59.4%
11600	- 11699	2748	2497	2198	1119	-252	-550	-1629	-9.2%	-20.0%	-59.3%
11700	- 11799	2762	2507	2214	1129	-254	-548	-1633	-9.2%	-19.8%	-59.1%
11800	- 11899	2775	2518	2229	1138	-257	-546	-1637	-9.2%	-19.7%	-59.0%
11900	- 11999	2788	2529	2245	1147	-259	-543	-1641	-9.3%	-19.5%	-58.9%
12000	- 12099	2801	2539	2256	1156	-262	-545	-1645	-9.3%	-19.5%	-58.7%
12100	- 12199	2814	2550	2265	1165	-264	-549	-1649	-9.4%	-19.5%	-58.6%
12200	- 12299	2828	2561	2274	1175	-267	-554	-1653	-9.4%	-19.6%	-58.5%
12300	- 12399	2841	2571	2283	1184	-269	-558	-1657	-9.5%	-19.6%	-58.3%
12400	- 12499	2854	2582	2292	1193	-272	-562	-1661	-9.5%	-19.7%	-58.2%
12500	- 12599	2867	2593	2301	1202	-274	-567	-1665	-9.6%	-19.8%	-58.1%
12600	- 12699	2880	2603	2309	1212	-277	-571	-1669	-9.6%	-19.8%	-57.9%
12700	- 12799	2894	2614	2318	1221	-280	-575	-1673	-9.7%	-19.9%	-57.8%
12800	- 12899	2907	2625	2327	1230	-282	-580	-1677	-9.7%	-19.9%	-57.7%
12900	- 12999	2920	2635	2336	1239	-285	-584	-1681	-9.7%	-20.0%	-57.6%
13000	- 13099	2933	2646	2345	1249	-287	-588	-1685	-9.8%	-20.1%	-57.4%
13100	- 13199	2946	2657	2355	1258	-290	-592	-1689	-9.8%	-20.1%	-57.3%
13200	- 13299	2960	2667	2364	1267	-292	-595	-1693	-9.9%	-20.1%	-57.2%
13300	- 13399	2973	2678	2374	1276	-295	-599	-1697	-9.9%	-20.1%	-57.1%
13400	- 13499	2986	2689	2384	1285	-297	-602	-1701	-10.0%	-20.2%	-57.0%

Comparisons for Three Children											
Combined Parental Income		Basic Obligation				$ Change			% Change		
		Existing	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor	Option A: USDA	Option B: BR4	Option C: Comanor
13500	- 13599	2999	2699	2394	1295	-300	-605	-1705	-10.0%	-20.2%	-56.8%
13600	- 13699	3012	2710	2404	1304	-302	-609	-1709	-10.0%	-20.2%	-56.7%
13700	- 13799	3026	2721	2413	1313	-305	-612	-1713	-10.1%	-20.2%	-56.6%
13800	- 13899	3039	2731	2423	1322	-307	-616	-1717	-10.1%	-20.3%	-56.5%
13900	- 13999	3052	2742	2433	1332	-310	-619	-1720	-10.2%	-20.3%	-56.4%
14000	- 14099	3065	2753	2442	1341	-313	-623	-1724	-10.2%	-20.3%	-56.3%
14100	- 14199	3078	2763	2452	1350	-315	-627	-1728	-10.2%	-20.4%	-56.1%
14200	- 14299	3092	2774	2461	1359	-318	-630	-1732	-10.3%	-20.4%	-56.0%
14300	- 14399	3105	2785	2471	1368	-320	-634	-1736	-10.3%	-20.4%	-55.9%
14400	- 14499	3118	2795	2480	1378	-323	-638	-1740	-10.3%	-20.5%	-55.8%
14500	- 14599	3131	2806	2490	1387	-325	-641	-1744	-10.4%	-20.5%	-55.7%
14600	- 14699	3144	2817	2502	1396	-328	-642	-1748	-10.4%	-20.4%	-55.6%
14700	- 14799	3158	2827	2514	1405	-330	-644	-1752	-10.5%	-20.4%	-55.5%
14800	- 14899	3170	2838	2525	1415	-332	-645	-1755	-10.5%	-20.3%	-55.4%
14900	- 14999	3181	2849	2537	1424	-332	-644	-1757	-10.4%	-20.2%	-55.2%
15000	-	3186	2955	2549	1516	-231	-638	-1670	-7.3%	-20.0%	-52.4%

Appendix G

Child Support Work Group Report, January 2017

Minnesota Department of Human Services

Child Support Work Group Final Report

Updated January 29, 2016

Prepared by the Child Support Work Group and

Minnesota Department of Human Services

Child Support Division

For further information, contact:

Jeffrey Jorgenson, Director
Child Support Division
Minnesota Department of Human Services
P.O. Box 64946
St. Paul, MN 55164-0946
651-431-4400

Minnesota Department of **Human Services**

January 21, 2016

To: The Honorable Senator Tony Lourey, The Honorable Senator Julie Rosen, The Honorable Senator Ron Latz, The Honorable Senator Warren Limmer, The Honorable Senator Kathy Sheran, The Honorable Senator Michelle Benson, The Honorable Representative Peggy Scott, The Honorable Representative John Lesch, The Honorable Representative Tara Mack, The Honorable Representative Joe Mullery, The Honorable Representative Matt Dean, and The Honorable Representative Tina Liebling

From: Julie Erickson, Child Support Work Group Chair

RE: Report from Child Support Work Group on parenting expense adjustment and composition of permanent child support task force

Dear Legislators:

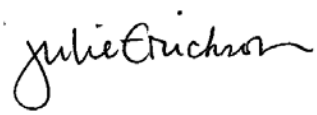
Enclosed you will find the recommendations of the Child Support Work Group, authorized and governed by Minnesota Session Laws 2015, Chapter 71, Article I, Section 121.

The group met six times between August and December 2015 to develop the enclosed recommendations. As per the authorizing session law, the work group engaged an economist to provide technical assistance on the parenting expense adjustment. Dr. Jane Venohr from the Center for Policy Research provided research and analysis. Her work is cited throughout the report.

In addition to the recommendations on changing the parenting expense adjustment and the composition of a permanent child support task force, the report also includes a list of topics the group believes should be addressed by the permanent task force.

The work group fulfills its mission, as defined by the legislature in the session law, by submitting this report to the chairs and ranking minority members of the committees with jurisdiction over civil law, judiciary, and health and human services.

Sincerely,



Julie A. Erickson
Child Support Work Group Chair
CC: Legislative Reference Library

Table of Contents

Executive Summary

Introduction

The 2015 Minnesota Legislature created, under the responsibility of the Minnesota Department of Human Services (department), the Child Support Work Group (work group). The enacted legislation, [Laws of Minnesota 2015, chapter 71, section 121] states that the work group was established to "review the parenting expense adjustment in Minnesota Statutes, section 518A.36, and to identify and recommend changes to the parenting expense adjustment and…include recommendations on the composition of a permanent child support task force."(See legislation in Appendix A.)

Definition of Problem

The work group was created to review and recommend changes to the parenting expense adjustment currently used in the formula for calculating child support payments in Minnesota. Minnesota's current child support guidelines provide for an adjustment in the basic support portion of a child support order based on the amount of parenting time spent with the child. The primary issue with the current parenting expense adjustment is that it creates two large "cliffs" where the change in the child support obligation hinges on one overnight equivalent—especially when a parent changes from 45 to 45.1 percent parenting time. The cliff also occurs when going from 10 to 9.9 percent parenting time. For example, if a parent has:

- Less than 10 percent of parenting time, no adjustment is given;
- 10 to 45 percent parenting time, a flat adjustment of 12 percent is given;
- 45.1 percent parenting time or more, an alternative formula is used when parenting time is presumed equal.

These cliffs often cause conflict among parents during custody hearings because one or two overnight equivalents per year will initiate a significant change in the child support obligation amount. Parental conflict over child support amounts tied to these cliffs diminishes the best interests of the child from the center of custody and parenting time discussions, and shifts to conflict over child support payments.

Another issue with the current parenting expense adjustment is that it assumes that parenting expenses are the same for parents with 10 percent parenting time (or 36.5 overnight equivalents per year) and 45 percent parenting time (or 164.25 overnight equivalents per year).

To fulfill the legislative requirement, the Child Support Work Group was convened six times between Aug. 31, 2015 and Dec. 1, 2015, and reviewed five alternative parenting expense adjustment formulas presented to them by Dr. Jane Venohr, Ph.D., an economist from the Center for Policy Studies in Colorado.

Parenting Expense Adjustment Formulas Reviewed

The five parenting expense adjustment formulas the work group reviewed and analyzed were:

- Cross-credit
- Oregon (applied to current Minnesota guidelines)
- Oregon alternative A
- Michigan
- Michigan alternative A

The models are briefly summarized on pages 13 to 16 in this report; they are described in more detail in the attached reports written by Dr. Jane Venohr (see Appendix E). Overall, the work group acknowledged that none of the formulas are perfect. However, after considering the strengths and weaknesses of each model in conjunction with the outcomes at various income and parenting time levels, work group members agreed on a parenting expense adjustment that will alleviate the cliff effects and minimize associated parental conflict. The custodial parent representative to the work group raised concerns in a Minority Report (see Appendix G).

Analysis

The Michigan formula offers a theoretical framework that recognizes incremental increases in expenses with increases in parenting time, eliminates the cliffs, and will theoretically reduce conflicts. The Michigan formula provides a more grounded theoretical framework than Oregon or Oregon A, and was viewed by the group as more realistic than Michigan A.

Michigan's weaknesses—complexity, reliance on a calculator, and lower adjustments under 30 percent parenting time—can all be addressed, or were considered to be more manageable than the other formulas reviewed.

Recommendation: Parenting Expense Adjustment Formula

The work group recommends the Michigan model:

$$\frac{(A_o)^3(B_s) - (B_o)^3(A_s)}{(A_o)^3 + (B_o)^3}$$

Where:

A_0 – Approximate annual number of overnight equivalents the children will spend with parent A
B_0 – Approximate annual number of overnight equivalents the children will spend with parent B
A_s –Parent A's base support obligation
B_s –Parent B's base support obligation

The Michigan model was selected because it:

- Alleviates cliff effects
- Reflects both parents' expenses fairly
- Produces gradual changes to the order amount as time with the child increases
- Recognizes increasingly duplicated costs that occur with increased parenting time
- Accommodates both parenting time and parents' incomes as part of the formula
- Reduces conflict over parenting time

While the Michigan model does have noted weaknesses, the work group determined that those could be mitigated with a statutory adjustment or by applying a deviation factor.

Recommendation: Composition of Permanent Child Support Task Force

The work group recommends that the permanent Child Support Task Force be composed of the following appointed members:

- Representatives from organizations currently on the Child Support Work Group (12 organizations listed in Appendix B)
- Two additional parents (one representing custodial parents and one representing noncustodial parents[1])
- Representative from the court
- Representative from a tribe with an approved IV-D program
- Child advocate representing the economic security of children
- Representative from the Office of Ombudsperson for Families

Work group members recommend that task force members be appointed to serve in an individual advisory capacity, as opposed to representing their respective organizations.

The work group also identified activities members thought were within scope for the permanent task force to study (see page 22), with the primary function identified as assisting the department in creating the quadrennial child support report. Additional topics for the task force to address include:

- Self-support reserve for custodial and noncustodial parents
- Simultaneous orders (two orders that do not recognize each other)
- Children born prior to child support order
- Multiple counties that have the same child support obligor
- Parents with multiple families
- Non-nuclear families (e.g., caretakers such as grandparents and extended relatives, foster care children)
- Standards to apply for modifications

Next steps

If legislation moves forward from this report, the department will evaluate the fiscal impact to the agency and provide other technical assistance.

[1] Equal representation of custodial and noncustodial parents must be achieved to ensure that each perspective is equally voiced.

Introduction

Child Support Work Group

Purpose and scope

The 2015 Minnesota Legislature created, under the responsibility of the Minnesota Department of Human Services (department), the Child Support Work Group (work group). The enacted legislation, [Laws of Minnesota 2015, chapter 71, section 121] states that the work group was established to "review the parenting expense adjustment in Minnesota Statutes, section 518A.36, and to identify and recommend changes to the parenting expense adjustment and…include recommendations on the composition of a permanent child support task force."(See legislation in Appendix A.)

The work group used the guiding legislation as the scope for their work. However, members expanded beyond the legislative charge and made additional recommendations on a few longstanding issues that were closely linked to the parenting expense adjustment. (See work group charter in Appendix D.)

Members and process

The legislation creating the work group also identified its membership as:

- Two members from the House of Representatives
- Two members from the Senate
- Minnesota Department of Human Services Commissioner (or designee)
- Staff member from the department's Child Support Division
- Representative from the Minnesota State Bar Association, Family Law section
- Representative from the Minnesota County Attorney's Association
- Representative from the Minnesota Legal Services Coalition
- Representative from the Minnesota Family Support and Recovery Council
- Two representatives from parent advocacy groups (one representing custodial parents and one representing noncustodial parents)

See Appendix B for a list of the work group members.

The Minnesota Department of Human Services Commissioner's designee, Julie Erickson, the department's Child Support Division supervisor, served as the work group chair. Neutral third-party consultants from Minnesota Management & Budget's Management Analysis & Development (MAD) facilitated and documented work group meetings and assisted in writing sections of this report. The legislation authorized the department to contract with an economist to develop the parenting expense adjustment. The department contracted with Jane Venohr, Ph.D., Center for Policy Research, Denver, Colo. Six work group meetings were held between Aug. 31, 2015, and Dec. 1, 2015. (See Appendix C for meeting schedule.) The work group members approved the proposed charter and created ground rules as a newly formed group. Members agreed they would use a consensus decision-making process, and a super-majority vote would only be used if consensus were not feasible. The meetings were open to the

public, and at each meeting, time was dedicated for the public to provide comments. Each person was allowed five minutes to speak. Examples of recommendations from public comments include:

- Focus on children versus the parents' needs
- Make a change that would encourage co-parenting
- Make a change that would take the price tag off children
- Reduce litigation by eliminating the tie between parenting time and money
- Make a change so that child support better reflects the true costs of raising children

Context and history[2]

Minnesota's child support laws and guidelines have evolved and changed over time in an effort to create an equitable system that best meets the needs of children. In 2005, the Minnesota Legislature passed a bill that made significant changes to the child support guidelines. Notably, this legislation changed the way child support payments were calculated by including the gross income of both parents and the parenting time of each (i.e., an "income shares" approach), rather than using the net income of only one parent. Another key component of the 2005 law was that it allowed a percentage reduction in the child support payment based on the amount of time the parent (without custody of the child) spent with the child in a month. This is called the "parenting expense adjustment." The parenting expense adjustment allowed the child support payment to be reduced by 12 percent if the parent spent 10 to 45 percent of the parenting time with the child. Minnesota law defines the parenting expense adjustment to reflect the presumption that during parenting time, a parent is responsible for and incurs costs for the child.[3] Other changes made in 2005 included modifying family court fees, allowing deductions to gross income for non-joint children in the household, and requiring the department to develop a web-based child support calculator.

In 2012, Governor Mark Dayton pocket vetoed HF 322, a bill increasing Minnesota's parenting time presumption, and called stakeholders to convene to agree on legislation to address parenting time. In response, the Minnesota Custody Dialogue Group was created by a small group of interested stakeholders and legislators.[4] This group drafted legislation as several separate bills. Several of these bills passed as a family law omnibus bill.[5] Part of the original 2015 family law legislative package included HF 512, which revised the statutory parenting expense adjustment. Under existing law, the flat 12 percent parenting expense adjustment that applies to parenting time from 10 to 45 percent results in drastic reductions in child support orders from 45 to 45.1 percent parenting time. This cliff, occurring on one overnight equivalent, was recognized as a significant source of conflict that negatively emphasizes the link between parenting time and child support. There is also a cliff that occurs between 10 and 9.9 percent parenting time, which results in no parenting expense adjustment and higher child support obligations. However, the provisions of HF 512 as introduced created unintended

---

[2] Minnesota Legislative Reference Library, http://www.leg.state.mn.us/lrl/issues/issues?issue=childsupport, accessed on Dec. 10, 2015.

[3] Minnesota Statues 2015, section 518A.36, subdivision 1.

[4] The Custody Dialogue Group did not include representation from the department, the county programs, or custodial parent groups. It was not a state created group. The current group is completely independent of the Custody Dialogue Group, although there is an overlapping membership.

[5] Laws of Minnesota 2015, Chapter 30.

consequences when applied across existing law—thus, the legislation was not enacted as introduced. Instead, the 2015 Legislature created this Child Support Work Group to review, identify, and recommend changes to the parenting expense adjustment. This work group is independent of the work of the Custody Dialogue Group.

In the next section, an overview of Minnesota's current child support parenting expense adjustment model is provided with a detailed description of how child support obligations are calculated, and why the cliff effects are the source of so much parental conflict.

Current Minnesota Parenting Expense Adjustment Model

Overview

Minnesota's child support guidelines are a comprehensive system containing formulas to approximate the cost of raising a child in Minnesota based on a combination of economic theories and data from the United States Department of Agriculture on the costs of providing for a family. The system provides for calculating basic support, medical support, and childcare support.[6] Included in the calculation for basic support is the parenting expense adjustment. This adjustment only applies to the basic support provision, and is the only part of the system examined in this report.[7]

Minnesota's current child support guidelines provide for an adjustment in the basic support portion of a child support order in Minnesota Statutes 518A.36. The law provides a flat parenting expense adjustment of 12 percent of the basic support order when a parent has 10 to 45 percent parenting time. If a parent has less than 10 percent parenting time, no adjustment is given. If a parent has 45.1 percent or more parenting time, a different formula is used that assumes the parents have equal parenting time.

In cases where the parent has less than 10 percent parenting time, the basic obligation is calculated according to Minnesota Statute 518A.34: no adjustment is given, so the basic support amount stays the same.

When a parent has 10 to 45 percent parenting time, the basic obligation is calculated. Then the basic obligation amount is multiplied by 0.12 and subtracted from the basic support obligation. The resulting number is the new basic support amount.

When parenting time is considered equal, the combined basic support amount from the guidelines grid in Minnesota Statute 518A.35 is first multiplied by 0.75. Next, the new combined basic support is prorated based on each parent's share of the combined income. Finally, the lower amount is subtracted

---

[6] Basic child support is set by combining both parents' incomes, applying the total to the guidelines, and then applying a parenting time adjustment or self-support reserve adjustment, if applicable. Separate calculations are used to set medical and childcare support. To prevent low-income obligors from falling further into poverty, the self-support reserve acts as a guaranteed amount of income to meet the obligor's needs. The self-support reserve is subtracted from the obligor's income to determine the amount of income available for support. If this amount is less than the combined order amount (basic, medical, and childcare), then the obligations are reduced to match the amount. The medical is reduced first, followed by the childcare, and finally the basic support. Every two years orders are administratively adjusted based on the Consumer Price Index.

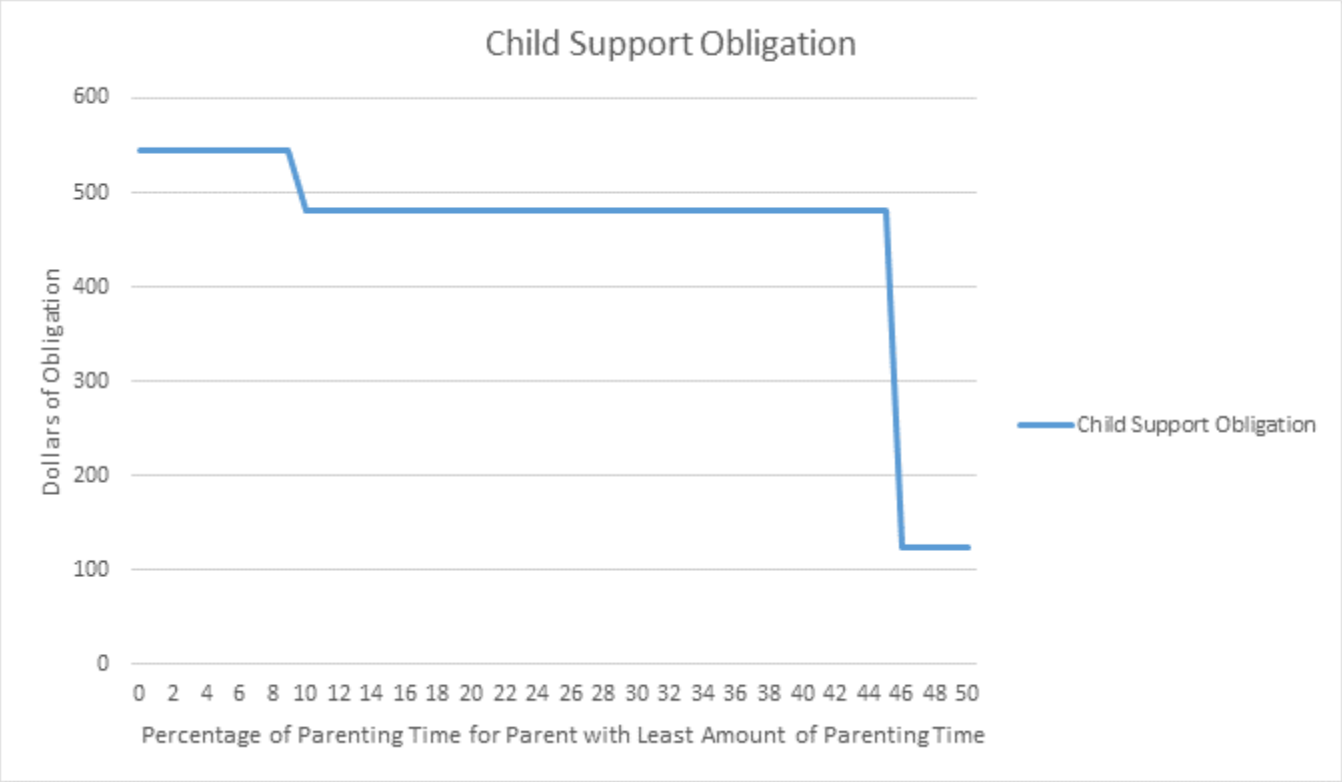
[7] For more information on the overall guidelines, see *2014 Child Support Guidelines Review*, available at the Legislative Reference Library. The review includes information on the economic underpinnings of the entire guidelines system in Minnesota. It should be noted that the scope of this work group and report are limited specifically to the parenting expense adjustment and was not meant to discuss any of the possible problems with the underlying guidelines. The overall guidelines, however, would be part of the scope of a permanent task force mentioned later on in this report.

from the higher amount to reach the new basic support amount for the parent who has a higher income.

Court Ordered Parenting Time	**Deduction: Parenting Expense Adjust or Alternative Formula**	**Basic Support under 518A.34 (Parent A: $3281/mo and Parent B: $2669/mo)**	**Deduction/ Adjustment**	**New Basic Support Order with Parenting Expense Adjustment**
Less than 10%	Nothing	$545	None	$545
10% to 45%	12%	$545	545 x .12 = 65 545 – 65 = 480	$480
45.1% or more	Use alternative formula	(Combined $923; Parent A is 59% and Parent B is 41%)	923 x .75 = 692 692 x .59 = 408 692 x .41 = 284 408 – 284 = 124	$124

Definition of problem: Parenting time adjustment cliff

The primary problem with the current parenting expense adjustment model stems from establishing only three categories: no adjustment, 12 percent adjustment, and the alternative formula. The change among the three categories is as little as one overnight equivalent—meaning a child support obligation could change hundreds of dollars per month based on the difference of one overnight equivalent over an entire year. As demonstrated in the chart below, the three-tiered adjustment creates two large "cliffs" where the change in obligation hinges on one overnight equivalent.



These cliffs become points of high conflict—particularly between 45 and 45.1 percent. Parents and practitioners testified that conflict occurs during custody hearings over one or two overnight equivalents per year that push the obligation over the cliffs. Parental conflict over child support amounts tied to these cliffs diminishes the best interests of the child from the center of custody and parenting time discussions, and shifts to conflict over child support payments. While there is statutory guidance that the best interests of the child should dictate the custody arrangements, there is also a preference for agreements between the parents. The high level of conflict caused by these parenting expense adjustment cliffs undermines both parties' focus on the child's best interest standard and the likelihood for agreement between the parents.

In addition to the conflicts, the current formula assumes that the parenting expense costs for all parents between 10 and 45 percent are the same. The parenting expense adjustment, according to statute, is supposed to recognize the presumption that "while exercising parenting time, a parent is responsible for and incurs costs of caring for the child…"[8] The current formula, however, does not accurately represent the additional costs incurred with additional parenting time. A parent with a child 45 percent of the time spends more on the child than a parent with a child only 10 percent of the time, but both are given the same parenting expense adjustment under the current law.

Desired future parenting expense adjustment model

The work group developed a list of policy goals that should be reflected in a recommended parenting expense adjustment model. The specific direction of the legislature was to recommend changes for an

[8] Minnesota Statues 2015, section 518A.36, subdivision 1.

equitable parenting expense adjustment. The work group adopted this goal by eliminating the cliff effect by creating a model with more than three tiers. The other desired outcomes identified by the work group were:

- A schedule (parenting time adjustment) that allows/maintains the economic dignity of people who are living at the poverty level and below
- A level of support that allows both parents to have resources to parent their children
- A law that changes the guidelines
- The best long-term outcomes for the children so they grow up and become good members of society
- A solution that will help minimize conflict for families in midst of divorce and works for unmarried parents and parents who have never cohabitated
- A solution that doesn't push parents deeper into poverty—i.e., breaks cycles of generational poverty

Parenting Expense Adjustment Formulas Reviewed

Overview

Dr. Jane Venohr, an economist with more than 20 years of experience assessing and researching child support and other health and human services programs across the country, was contracted by the department to create an alternative parenting expense adjustment formula that would address the concerns identified by the work group—particularly, the cliff issue described earlier in the report. Dr. Venohr attended three work group meetings, at which she presented five different parenting expense adjustment formulas for the work group to review and discuss. In preparation for the work group discussions, Dr. Venohr also prepared three briefing papers that included background information, information about where Minnesota's current statute aligns with current data on expenditures for children, and research and comparisons of other states' child support formulas to illustrate the monthly child support payment amounts at various levels of parenting time. (See Appendix E for reports.) The primary goal of the new parenting expense adjustment is to eliminate the cliffs that occur at 9.9 and 45.1 percent parenting time.

The five parenting expense adjustment formulas analyzed were selected because either the formula was considered mathematically intuitive and successfully used in many others states (cross-credit), or because the formula addressed the cliff effect by creating gradual changes in the order amount as one parent has more time with the child (Oregon and Michigan models). The alternative Oregon and Michigan formulas were created by Dr. Venohr in an attempt to address specific issues by slightly adjusting the mathematical calculations or percentages from the original formula. A summary of the five parenting expense adjustment formulas is listed below (the descriptions are based on information in the attached reports written by Dr. Venohr):[9]

- Cross-credit
- Oregon (applied to current Minnesota guidelines)
- Oregon alternative A
- Michigan
- Michigan alternative A

A weakness among all of the models is that they can create a "flip"—meaning that the formula can result in the parent with more parenting time obligated to pay if that parent makes substantially more income than the other parent. While this usually only happens in situations with great income disparities, a rule or deviation factor can be applied where the flipping would conflict with policy goals —such as at low levels of timesharing or low-income levels.

[9] Venohr, Jane, Ph.D., Economic Basis of Minnesota Basic Schedule and Parenting-Time Expense Adjustment, Sept. 16, 2015; Alternative Adjustments for Parenting Expenses, Oct.2, 2015; Alternative Adjustments for Parenting-Time Expenses and Low-Income Adjustments, Nov. 10, 2015.

Cross-credit

Description: The cross-credit is the most commonly used adjustment among states. Minnesota's current model uses a cross-credit formula for situations in which the child's time with each parent exceeds 45 percent. (Note: Minnesota uses two different formulas when applying adjustments depending on the amount of timesharing. A *simple percentage adjustment* is used when the flat 12 percent adjustment is applied at the threshold of 10 percent parenting time. However, the *cross-credit formula* is applied at the threshold of 45 percent parenting time.) Typically, cross-credit formulas weigh the parent's payment orders by each parent's timeshare, but the Minnesota adjustment uses 50 percent for all timesharing arrangements exceeding 45 percent. When the cross-credit formula is used in Minnesota, the basic support obligation is multiplied by 150 percent to account for approximately 50 percent of all child-rearing expenditures that are being duplicated by parents when the child lives in two households (i.e., when the child's housing and transportation costs are duplicated).

Strengths: The formula is intuitive and generally makes mathematical sense to guidelines users. It has a long history of successful use in several states.

Weaknesses: The formula requires the use of a timesharing threshold, which can create some undesired outcomes. For example, the higher the threshold is set, the more likely it will produce a cliff effect. If it set too low, the formula may not work for certain income situations. The adjustment cannot be expressed in a table form (in contrast to Oregon's).

Which states use this adjustment formula? Twenty-one states: AK, CO, DC, FL, ID, KS, LA, ME, MD, MN, NE, NC, NM, OK, SC, SD, VT, VA, WV, WY*, WI. *Wyoming uses a cross-credit formula with no multiplier, while all other states use a 1.5 multiplier.

Oregon (applied to current Minnesota guidelines)

Description: Oregon's adjustment is an advanced math formula that uses exponential powers (squaring or cubing a value) in the formula to allow a gradual adjustment (parenting time credit) for each additional day that is added to the parenting time. The intent of this type of gradual change is to reduce parental conflicts about the timesharing arrangements and cliff effects. The Oregon parenting expense adjustment does not factor the parent's prorated share of the basic obligation into the calculation, whereas the current Minnesota adjustment, the cross-credit, and Michigan do.

Strengths: The formula reflects both parents' expenses fairly, produces gradual changes to the order amount as time with the child increases, reduces conflict over parenting time, has an adjustment amount transparent to the user, and uses a lookup table of percentage adjustments. Note: this formula has been used for two years in Oregon and anecdotal evidence suggests that it reduces parental conflict over the number of overnight equivalents because the adjustment is very gradual.

Weaknesses: The formula is complicated, not intuitive, and difficult to explain. The formula also does not have a strong underlying connection to how parenting time changes expenses. It was not developed from a theory of parenting time expenses, but on observed adjustments. There is a very low adjustment for low levels of parenting time.

Which states use this adjustment formula? Oregon. (Indiana also uses an advanced math formula.)

Oregon alternative A

Description: This adjustment works exactly like the Oregon model above, but uses different percentages. This model generally produces lower payment amounts than both Michigan formulas and the current Minnesota model. The Oregon A adjustments are higher than Minnesota's current model, starting at 20 percent parenting time and higher.

Strengths: Same as the Oregon model above.

Weaknesses: Same as the Oregon model above, but with more of an adjustment at lower parenting time levels.

Which states use this adjustment formula? Oregon.

Michigan

Description: The Michigan adjustment is an advanced math formula that uses exponential powers (squaring or cubing a value) in the formula to allow a gradual adjustment (parenting time credit) for each additional day that is added to the parenting time. The intent of this gradual change is to reduce parental conflicts about the timesharing arrangements and cliff effects. Michigan's formula is similar to the cross-credit, but it takes the function to the third power (cubed) to make the adjustment gradual. This formula results in adjustments that are similar to Minnesota's existing adjustments. This adjustment model generally produces higher payment amounts than Minnesota's current adjustment model in lower parenting time cases, produces generally similar payments between 25 and 30 percent parenting time, then the payments drop lower than the current adjustment. In short, the Michigan adjustment is a curve that begins at a higher point than existing Minnesota law, meets existing law at about 25 to 30 percent parenting time, then gradually decreases toward 50 percent parenting time, rather than a cliff at 45.1 percent.

Strengths: The formula alleviates cliff effects, reflects both parents' expenses fairly, produces gradual changes to the order amount as time with the child increases, recognizes increasingly duplicated costs that occur with increased parenting time, accommodates both parenting time and parents' incomes as part of the formula, and reduces parental disputes about the timesharing arrangement and cliff effects. It takes into account the parents' incomes as well as the parenting time. (A detailed analysis of this model is in the "Analysis of Models" section below.)

Weaknesses: The formula is complicated, not intuitive, and hard to explain. The adjustment amount is less transparent to the user because the formula is difficult. It gives a parenting expense adjustment lower than the current Minnesota adjustment in the 10 to 30 percent parenting time range. The parenting expense adjustment cannot be expressed in a table form (like Oregon and Oregon A). It requires a calculator.

Which states use this adjustment formula? Michigan. (Indiana also uses an advanced math formula.)

Michigan alternative A

Description: This adjustment works exactly like Michigan's adjustment above, but instead of cubing the formula, it takes it to the 2.54^{th} power.

Strengths: Same as Michigan formula above.

Weaknesses: Same as Michigan formula above, but additionally not based on the underlying theory of the Michigan model.

Which states use this? None. Michigan is currently reviewing its guidelines and may adopt this model to adjust to a daily food budget. However, the exact modification, and whether any change will occur, is unclear at this point.

Analysis of Models

The original proposed legislation in the 2015 session was the Oregon model. The group started with a focus on the Oregon model, but moved to an analysis of the Michigan formula.

The Michigan formula offers a theoretical framework that accounts for parenting expenses in two ways: the daily costs of raising a child that increase day by day and the duplicated costs of raising a child in two households when a child is no longer a visitor in the second parent's home. The first type of cost includes, for example, food and transportation costs. These costs are represented in the model by the gradual increase at the beginning of the adjustment. The second type of costs are incurred only after a child is in the second household long enough to require duplication of household living essentials, like a second bedroom in an apartment, furniture, sheets, etc. These costs do not occur at first, but add up quickly once the child is in the household more than 20 to 30 percent of the time. The Michigan model accounts for both types of costs.

Another benefit to the Michigan formula is the recognition that a flat percentage will affect those with lower incomes more than those with higher incomes. The Michigan formula takes this into account and changes the percentage of the parenting expense adjustment not only on the time spent with the parent but also on the combined incomes of the parents.

Weaknesses and ways to address them

The greatest weakness in the Michigan model is "flipping"—i.e., when the parent who has more parenting time is obligated to pay the parent with less parenting time. Currently, Minnesota law only allows this to happen when the parents use the equal parenting time formula (the parent with less parenting time must have at least 45.1 percent).

The work group decided that in most situations the flip should only be allowed where the parents have at least 45.1 percent parenting time, mirroring the current cut off for "equal" parenting time calculations. However, the group also believed that in cases where there is a significant income disparity between the parents that a flip at a lower level of parenting time could be considered in order to increase the likelihood of the child actually spending time with the second parent. The group believed that a rebuttable presumption that a parent with more than 55 percent parenting time would not have a basic support obligation, with a list of factors to consider in overcoming that presumption, addressed this weakness.

Another weakness of the Michigan model is that it is more difficult to understand how the adjustment is calculated. The model is based on an advanced math formula using variables for both parenting time and the parents' incomes, which prevents creation of a lookup table to easily see the applicable percentage adjustment. As a result, a calculator is necessary to determine the applicable parenting time adjustment. By contrast, states such as Oregon only consider the link between parenting time amounts and the adjustment, so once the amount of parenting time is known, the corresponding adjustment can be easily determined by a lookup table.

While some of the other models—such as Oregon and Oregon A—can be reduced to a lookup table, in reality, Oregon and Minnesota already rely heavily on online calculators to determine the adjustment and final obligation. While the lookup tables might offer a more easily understood flat percentage, the entire process of determining a final obligation already has many steps involved. Given the reality that most people already rely on a calculator even if there is a lookup table, the group believed that the more realistic outcomes under the advanced math formula were worth the continued reliance on a calculator.

Recommendations: Child Support Parenting Expense Adjustment and Model

Model

The group recommends the Michigan model:

$$\frac{(A_o)^3(B_s) - (B_o)^3(A_s)}{(A_o)^3 + (B_o)^3}$$

Where

A_0 – Approximate annual number of overnight equivalents the children will spend with parent A
B_0 – Approximate annual number of overnight equivalents the children will spend with parent B
A_s –Parent A's base support obligation
B_s –Parent B's base support obligation

In addition, the group recommends the following to limit the amount of "flipping" that occurs in low parenting time situations:

If a parent has more than 55 percent court-ordered parenting time, there is a rebuttable presumption that the parent shall have a zero dollar basic child support obligation. The court must consider the following to rebut the presumption: (1) significant income disparity, (2) the benefit and detriment to the child and the ability of each parent to meet the needs of the child, (3) voluntary under-employment or unemployment (look to existing statute 518A.32), (4) when the parent with more than 55 percent parenting time owes significant arrears to the other parent, and (5) when it would be unjust or inappropriate to follow the presumption.

If the presumption is rebutted, the presumed basic support would revert to the results of the guidelines and calculator. Rebutting the presumption does not preclude a deviation under existing law.

Implementation considerations

The group also made a series of recommendations, some legislative and some for department and county policy, to ease implementation and clarify how to handle certain types of existing orders.

Modifications

If provisions of the modification statute are met, existing orders may be modified when the new formula is effective. The group relied on the case law in *Rose v. Rose*. This stated that a change to the method under which child support was calculated was enough of a substantial change in circumstances as long as the moving party could prove that the change to the method left the court order unreasonable and unfair. (In all likelihood, no change is needed. However, legislative intent

should be clear that a person must meet the modification of child support factors to bring a motion for modification—a change in the law without meeting that standard is not sufficient.)

Split-custody cases

Use HF 512 bill language on determining basic support for split custody cases (i.e., cases where multiple children have different parenting time arrangements in the same order). Add language that states this is for purposes of calculating **basic support** only. (Legislative change)

New parenting time order modification standard

Amend 518.175 to include a new parenting time order modification standard: "If a parenting plan or an order granting parenting time cannot be used to determine percentages of parenting time for each parent, the court shall modify the parenting plan or order granting parenting time so that the percentages of parenting time for each parent can be determined." The current modification standard is found at Minnesota Statute 518.175, subdivision 5. (Legislative change)

No parenting time order, new order

If there is no parenting order containing specific percentage of time or ability to determine percentages of time, the parenting expense adjustment shall not be awarded. (No change; current law and policy)

Existing order—existing parenting expense adjustment, but no parenting time order

If a current child support order contains a parenting expense adjustment or uses the equal parenting time calculation found at 518A.36, subdivision 2 or 3 but does not have a corresponding parenting time order, there is a rebuttable presumption that the existing adjustment percentage or calculation method shall continue after modification, if the modification is not based on a change in parenting time. (Legislative change)

Existing order—"Reasonable and liberal" parenting time order w/o existing credit

If a parenting time order does not allow the ability to determine percentages of parenting time for each parent, it is grounds for modification of the parenting time order under the new parenting time order modification standard. (County attorney/department policy clarification)

Hardship upon First Modification

On the first modification after the 2016 legislative changes to the parenting expense adjustment under section 518A.36, the modification of basic support may be limited if the full variance solely due to the legislative changes to the parenting expense adjustment would create a hardship for either the obligor or obligee.

Effective date

The latest estimates from the department suggest that it would take 12 to 18 months to implement the new adjustment in the child support computer system, online calculators, county polices/procedures, and state policy/procedures. This would suggest an implementation date between July 2017 and January 2018.

Fiscal impact

The work group wanted to make it clear that there will be a fiscal impact to the state computer programs and online calculator. There will be additional costs to the state, counties, and courts to

implement the change. These costs might be higher if there is an increase in requests for modifications and modification hearings.

Recommendations: Permanent Child Support Task Force

Overview

The second part of the enacted legislation [Laws of Minnesota 2015, chapter 71, section 121] requires that the Child Support Work Group include recommendations in the report on the composition of a permanent child support task force. The work group developed a list of potential members and discussed desired characteristics of the task force. The work group recommended adding six additional members to the composition of the current work group, for a total of 18 members (listed below). The work group recommended the addition of six members because they believe the task force would benefit from the perspectives and voices of people that were not represented in the current membership. In addition, the work group discussed and provided recommendations for the role and scope of the permanent task force.

Member Composition

The work group recommends that the permanent Child Support Task Force be comprised of the following appointed members:

- Representatives from organizations currently represented on the Child Support Work Group (12 member groups listed in Appendix B)
- Two additional parents (one representing custodial parents and one representing noncustodial parents)[10]
- Representative from the court
- Representative from a tribe with an approved IV-D program
- Child advocate representing the economic security of children
- Representative from the Office of Ombudsperson for Families

The work group recommends that the task force have no more than 18 members, and that members be appointed, rather than serving as a representative of their organization. This means that the task force will not be required to gain approval from the members' respective organizations on any work or recommendations resulting from the task force. The work group also wants to ensure the task force is diverse in terms of race/ethnicity, economic status, geography, gender, and gender orientation.

[10] Equal representation of custodial and noncustodial parents must be achieved to ensure that each perspective is equally voiced.

Additionally, the work group would like to make sure that members commit to fully participating in the task force before they are appointed.

Role and Scope

The work group reviewed a handout that Child Support staff compiled listing the composition and role of other states' child support task forces. (See Appendix F.) After members discussed what they liked and disliked about the other states' task forces, members agreed on the role they would like a permanent child support task force to play in Minnesota, and identified activities they considered within scope for the task force.

The work group recommends a permanent child support task force should:

- Serve in an advisory capacity (versus decision-making) to the Department of Human Services.
- Review the effect of implementing the work group's recommendations regarding the parenting expense adjustment.
- Involve ad hoc members with specific content expertise to serve on subcommittees to address topics and issues and make recommendations to the task force.
- Meet as a group a minimum of three times per year and hold at least one of the three meetings for the sole purpose of collecting public input.[11]
- At least every four years, advise the department on the development of the quadrennial review report.
- Collect and study information and data relating to child support awards, conducting a comprehensive review of child support guidelines, economic conditions, and all matters relevant to maintaining effective and efficient child support guidelines that will best serve children of Minnesota and take into account the changing dynamics of family life.
- As Phase I activities, prioritize and address the identified "parking lot" issues the current work group identified but did not discuss at length or provide recommendations for in this report:
    - Self-support reserve for custodial and noncustodial parents
    - Simultaneous orders (two orders that do not recognize each other)
    - Children born prior to child support order
    - Multiple counties that have the same child support obligor
    - Parents with multiple families
    - Non-nuclear families (e.g., caretakers such as grandparents and extended relatives, foster care children)
    - Standards to apply for modifications
- As Phase II activities, prepare for the quadrennial report (e.g., create timeline, set agenda items and meeting schedule).

[11] This recommendation does not suggest that the task force should not collect public input by other means and at different opportunities. This recommendation is a minimum requirement.

- Not be considered a clearinghouse for all problems or issues related to child support. This would create unnecessary barriers for external advocacy and policy organizations. The intent of the permanent task force is to complement rather than supplant the work of other groups.

Additional Notes

- The work group recommends that a fiscal note be requested for the proposed legislation to itemize the required resources necessary to support a permanent child support task force activities. For example, staff resources for overseeing the task force, conducting research, and collecting data for creating the quadrennial review report, and overseeing any vendor contracts. Moreover, the work group recognized that there will be costs borne by county agencies, court system, and other relevant parties involved.
- The work group discussed a number of logistical items that permanent task force members will need to decide when the task force is convened (e.g., member term limits, decision-making protocol, roles for administering, and facilitating the task force).

Appendices

Please note: Not all content in the appendices may be accessible for people who use screen readers. If you need to request any of the content in an alternative format, please contact the Child Support Division directly.

A. Authorizing Legislation

Laws of Minnesota 2015, chapter 71, section 121 CHILD SUPPORT WORK GROUP.

A. Laws of Minnesota 2015, chapter 71, section 121 CHILD SUPPORT WORK GROUP.

B. (a) A child support work group is established to review the parenting expense adjustment in Minnesota Statutes, section 518A.36, and to identify and recommend changes to the parenting expense adjustment.

C. (b) Members of the work group shall include:

D. (1) two members of the house of representatives, one appointed by the speaker of the house and one appointed by the minority leader;

E. (2) two members of the senate, one appointed by the majority leader and one appointed by the minority leader;

F. (3) the commissioner of human services or a designee;

G. (4) one staff member from the Child Support Division of the Department of Human Services, appointed by the commissioner;

H. (5) one representative of the Minnesota State Bar Association, Family Law section, appointed by the section;

I. (6) one representative of the Minnesota County Attorneys Association, appointed by the association;

J. (7) one representative of the Minnesota Legal Services Coalition, appointed by the coalition;

K. (8) one representative of the Minnesota Family Support and Recovery Council, appointed by the council; and

L. (9) two representatives from parent advocacy groups, one representing custodial parents and one representing noncustodial parents, appointed by the commissioner of human services.

M. The commissioner, or the commissioner's designee, shall appoint the work group chair.

N. (c) The work group shall be authorized to retain the services of an economist to help create an equitable parenting expense adjustment formula. The work group may hire an economist by use of a sole-source contract.

O. (d) The work group shall issue a report to the chairs and ranking minority members of the legislative committees with jurisdiction over civil law, judiciary, and health and human services by January 15, 2016. The report must include recommendations for changes to the computation of child support and recommendations on the composition of a permanent child support task force.

P. (e) Terms, compensation, and removal of members and the filling of vacancies are governed by Minnesota Statutes, section 15.059.

Q. (f) The work group expires January 16, 2016.

B. Work Group Members

Required Membership	Work Group Member
Member of the House of Representatives	Kim Norton
Member of the House of Representatives	Peggy Scott
Member of the Senate	Chris Eaton
Member of the Senate	Scott Newman
Department of Human Services Commissioner (or designee)	Julie Erickson
Child Support Division staff member	Alissa Harrington
MN State Bar Association, Family Law section	Pamela Waggoner
MN County Attorney's Association	Kathleen Heaney Melissa Rossow (alternate)
MN Legal Services Association	Melinda Hugdahl
MN Family Support and Recovery Council	Lisa Kontz
Parent advocacy organization – noncustodial parent	Brian Ulrich
Parent advocacy organization – custodial parent	Marie Garza
Economist, Center for Policy Research	Jane Venohr, Ph.D.

C. Work Group Meeting Schedule

Meeting	Date/Time	Location
#1	August 31, 2015 9:00 am – 11:30 am	Department of Human Services, St. Paul
#2	September 12, 2015 8:30 am – 11:30 am	Department of Administration, St. Paul
#3	October 13, 2015 8:30 am – 12:30 pm	Department of Human Services, St. Paul
#4	October 28, 2015 9:00 am – 4:30 pm	Minnesota Counties Intergovernmental Trust Building, St. Paul
#5	November 13, 2015 8:00 am – 12:00 pm	Minnesota Counties Intergovernmental Trust Building, St. Paul
#6	December 1, 2015 8:30 am – 4:30 pm	Minnesota Counties Intergovernmental Trust Building, St. Paul

D. Work Group Charter

Child Support Work Group

2015 – 2016

Purpose

The 2015 Minnesota Legislature established, under the responsibility of the Minnesota Department of Human Services, the Child Support Work Group. The Work Group is charged with reviewing and recommending changes to the parenting expense adjustment in Minnesota Statutes (M.S. 518A.36).

Scope

The scope of the work group is described in the legislation establishing the work group:

> (d) The work group shall issue a report to the chairs and ranking minority members of the legislative committees with jurisdiction over civil law, judiciary, and health and human services by January 15, 2016. The report must include recommendations for changes to the computation of child support and recommendations on the composition of a permanent child support task force.

Report

The work group's report is due to the Legislature on January 15, 2016.

Roles and Responsibilities

DHS: Convene work group; coordinate meetings; chair the work group; provide technical assistance; compile research; deliver the report to the Legislature on behalf of the work group

Other work group members: Provide expertise, opinions, and feedback to the work group.

Management Analysis & Development (MAD): Facilitate meetings; assist in developing meeting process and agendas; document meetings; provide research support; write report.

Duration

August 2015 – January 2016, approximately five work group meetings.

E. Economic Reports

Economic Basis of Minnesota Basic Schedule and Parenting-Time Expense Adjustment

Prepared for:
The Child Support Work Group
Minnesota Department of Human Services
Child Support Division

Prepared by:
Jane Venohr, Ph.D.
Center for Policy Research
Denver, CO 80218
www.centerforpolicyresearch.org
303.837.1555
jvenohr@centerforpolicyresearch.org

September 16, 2015

Points of view expressed in this document are those of the author and do not necessarily represent the official position of the Court or State. The author is responsible for any errors and omissions.

Table of Contents

PURPOSE OF BRIEFING

This briefing has multiple purposes.

- Information about the poverty level and alternatives to the poverty measure as promised in the August 31 workgroup meeting.
- A summary of the economic basis of the Minnesota schedule and a comparison to more current data on child-rearing expenditures. This is important for two reasons.
  - The work group is also charged with making recommendations for a permanent child support task force that may also be charged with the quadrennial review of the guidelines, which is federally required to consider the cost of raising of children.
  - In addition, an alternative parenting-time adjustment may work better for some areas of the schedule (based on income and number of children) than others. If this is the finding, solving it may require changes to the schedule, which is beyond the scope of developing a parenting-time adjustment.

Examples of Parenting-Time Arrangements		
	# of Days	% of 365 days
Every other weekend, every other holiday*	55.5 days	15%
Every other weekend, every other holiday, 2 weeks in summer, 1 week in winter	76.5 days	21%
Every weekend Friday through Sunday, 2 weeks in summer, 1 week in winter, every other holiday	129 days	35%
Every other weekend, one night per week, one month in summer	134.5 days	37%

One weekend is counted as two days.
*Holidays: New Year's Day, Easter, Memorial Day, 4th of July, Labor Day, Thanksgiving & Christmas

- Background information about Minnesota's parenting-time adjustment as well as those of other states, particularly states that have a formula extending to lower levels of parenting time.
- It provides comparisons of preliminary alternative parenting-time expense formula. The comparisons consider Minnesota's existing formula, Michigan's formula, the Oregon's formula, and a variation of the Oregon formula.
- Parenting-time formulas are part economics, part math, and part policy. This briefing concludes with some policy questions for the work group that will help direct the next round of draft parenting-time formulas.

POVERTY MEASURES

The federal poverty threshold was developed in 1963. It is based on three times the cost of a minimum food diet[1] and it is updated annually based on changes in price levels. The

[1] Short, Kathleen (Oct. 2014).*The Supplemental Poverty Measure 2013.* Current Population Reports P60-251, U.S. Department of Commerce, Census Bureau.
Retrieved from: https://www.census.gov/content/dam/Census/library/publications/2014/demo/p60-251.pdf .

concept of three times the cost of minimum food diet dates back to English poor laws when poverty related to three times the cost of a loaf of bread. Exhibit 1shows the federal poverty levels for 2015. In contrast, monthly earnings from 40-hour per week employment at Minnesota minimum wage ($8.00 per hour) is $1,387 gross per month and monthly earnings from 29 hours per week is $1,005 gross per month

Exhibit 1: 2015 Federal Poverty Level (Source: http://aspe.hhs.gov/poverty-guidelines)		
Family Size	**Annual**	**Monthly**
1 person	$11,770	$ 981
2 persons	$15,930	$1,328
3 persons	$20,090	$1,674
4 persons	$24,250	$2,021
Each Additional Person	$ 4,160	$ 347

Many academicians and poverty experts have issues with the federal poverty measure. Some have developed alternatives that they believe better measure poverty. A 1996 study by the National Academy of Science[2] laid the foundation for the supplemental poverty measure (SPM) that was developed in 2010 by a federal inter-agency workgroup.[3] The SPM is complex. It considers basic necessities (i.e., food, shelter, clothing, and utilities), regional differences in the cost of shelter, work expenses, taxes and transfer payments, and other factors. The SPM does not identify incomes threshold, rather poverty rates are determined by examining large data sets of individual and family data that contain information about their childcare cost, work expense, and other data.

According to research conducted by the Census Bureau, Minnesota's official poverty rate did not differ from the SPM in 2011-2013. The three-year weighted average poverty rate in 2011-2013 for Minnesota was 10.8 percent using the official poverty level and 10.5 percent using the SPM.[4] Another national study (not just for Minnesota) found that for an average family with two adults and two children, the SPM was 13 percent more than the official poverty level.[5]

Another popular indicator of poverty is the self-sufficiency standard which was developed through Ford Foundation funding to an organization called "Wider Opportunities for Women (WOW)" in the 1990s. Subsequently, the Center for Women's Welfare (CWW) calculates the self-sufficiency standard for cities, counties and urban areas within a state.[6] It

---

[2] Citro, Constance F. and Robert T. Michael, Editors (1995). *Measuring Poverty: A New Approach.* National Academy Press. Washington, D.C.

[3] For more information see the U.S. Department of Commerce Census Bureau at: http://www.census.gov/hhes/povmeas/methodology/supplemental/overview.html .

[4] Short (2014), *supra note* 1. Table 4.

[5] Renwick, Trudi & Short, Kathleen. (2013). *Comparing Supplemental Poverty Level and Family Budgets,* U.S. Census Bureau Working Paper 2013-28. Retrieved from: http://www.census.gov/hhes/povmeas/publications/SEHSD2013-28.pdf .

[6] More information is available from: http://www.selfsufficiencystandard.org/pubs.html .

does not develop statewide levels and has not developed a self-sufficiency standard for any jurisdiction in Minnesota. For jurisdictions in other states, an annual income of about $17,000 to $30,000 is needed for a single person to be self-sufficient and an annual income of about $26,000 to $60,000 is needed for a household consisting of one adult and a child to be self-sufficient.

More information about how poverty is measured and alternatives, specifically for Minnesota, is contained in a 2009 report by a Minnesota Legislative Commission to End Poverty by 2020.[7]

Economic Basis of Minnesota Schedule of Basic Obligations

The Minnesota schedule is spliced together from five differences. The sources consist of three studies of child-rearing expenditures with the bulk of the schedule being based on the 2001 United States Department of Agriculture (USDA) measurements of child-rearing expenditures,[8] an adjustment at very low incomes that appears not to be based on a measurement of child-rearing expenditures, and an adjustment at very high incomes that is an extrapolation from measurements of child-rearing expenditures. The adjustments for low- and high-incomes were part of the draft schedule proposed in 2005. Subsequently, the 2005 proposed schedule was reviewed by Policy Studies Inc. (PSI)[9] to determine whether it provided adequate amounts for children that were appropriate for the parents' combined incomes. Because PSI concluded that there was a small pocket of incomes for which the one-child amounts inadequately provided for one child and another larger pocket at higher incomes that was inappropriate for all number of children, adjustments to these pockets were made. The adjustment used one measurement of child-rearing expenditures when the proposed Minnesota schedule was deemed to be too low and another measurement when the proposed schedule was deemed to be too high. Nonetheless, both measurements were developed by Professor David Betson, University of Notre Dame from expenditures data collected from families in 1996-99.[10] Both were also updated to 2005 price levels.

Exhibit 2 summarizes the five sources of the schedule and the areas of the schedule that they are applied. A separate document is being provided to the state that shows exactly which areas of the schedule are based on which source.

---

[7] The Commission report is available: http://www.commissions.leg.state.mn.us/lcep/LCEP_Final_Report_SinglePgs.pdf

[8] Lino, Mark (2002) *Expenditures on Children by Families: 2001 Annual Report.* U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2001, Washington, D.C.

[9] Venohr, Jane. (Dec. 2005). *Evaluation of the New (2007) Minnesota Child Support Guidelines Basic Support Schedule.* Report to the State of Minnesota Child Support Enforcement Division.

[10] Betson, David M. (2001). "Chapter 5: Parental Expenditures on Children." in Judicial Council of California, *Review of Statewide Uniform Child Support Guideline.* San Francisco, California. This study initially included data from 1996-98 but was expanded to include 1996-99 in Jane C. Venohr and Tracy E. Griffith, *Report on the Michigan Child Support Formula* (April 2002), Report to the Michigan Supreme Court, Policy Studies Inc., Denver, Colorado.

Exhibit 2: Studies of Child-Rearing Expenditures & Other Sources Underlying the Existing Minnesota Child Support Schedule			
Source	**Part of 2005 Originally Proposed Schedule**	**Areas of Schedule that Source Is Applied**	**Rationale for Not Using USDA Measurements**
USDA 2001 measurements of child-rearing expenditures for the Midwest Region with an adjustment to the USDA's measurement of the child's housing expense[11]	Yes	Originally applied to combined gross incomes between $2,000 - $8,500/mo.	Not Applicable
Unknown	Yes	Below $2,000/mo.	Unstated, but likely to provide an adjustment to low-income nonresidential parents
Unknown: The percentages at $8,500 gross per month are applied to incomes above $8,500.	Yes	Above $8,500/mo.	Unstated, but likely because the USDA had limited data on very high income families or it more closely followed Minnesota's percentages or both
Professor Betson's estimates using the Rothbarth methodology applied to 1996-99 expenditures data	No	1-child amounts in the gross income range of $3,300 to $7,299/mo.	PSI found the originally proposed amounts were below the Betson-Rothbarth measurements, which is/was generally considered the lower bound of credible measurements of child-rearing expenditures
Professor Betson's estimates using the Engel methodology applied to 1996-99 expenditures data	No	• 1-child in the income range of $14,700 to $15,000/mo. • 2-, 3-, 4- & 5-children in the income range of about $10,000 to $15,000/mo. • 6-children in the income range of $6,900 to $15,000/mo.	PSI found the original amounts were above the Betson-Engel measurements, which is/was generally considered the lower bound of credible measurements of child-rearing expenditures

Overview of Economic Studies Underlying State Guidelines

There are several studies measuring the cost of raising children. Most state guidelines rely on studies of child-rearing expenditures across a range of incomes rather than studies that examine the minimum and basic needs of children. This is because the premise of most state guidelines is that children should share in the lifestyle afforded by their parents. The studies typically develop measurements from examining expenditures data from thousands of families participating in the Consumer Expenditure Survey (CES),[12] the nation's largest and most comprehensive survey of household expenditures. The CES is ongoing survey that is used for many purposes including the calibration of the price index used to track inflation.

[11] The documentation of the adjustment is provided in the PSI report.

[12] More information about the CES can be found at the federal Bureau of Labor Statistics website: www.bls.gov .

In all, there are eight studies of child-rearing expenditures that underlie state guidelines schedules and formula. The studies of child-rearing expenditures vary in the age of the data used, the methodology used to separate the child's share of expenditures from total household expenditures, and other data or methodological issues. Three of the most popular methodologies are the "USDA," "Rothbarth" and "Engel." The USDA studies are widely cited and updated annually but only one state (i.e., Minnesota) uses the USDA study as the basis of its child support guidelines. Most states use the "Rothbarth" methodology, but most economists believe it understates actual child-rearing expenditures. The second most commonly used methodology is the "Engel" methodology, but some economists believe it overstates actual child-rearing expenditures.

Economists do not agree on which methodology best measures actual child-rearing expenditures. An economic methodology is necessary to separate the child's share of expenditures from the adults' share of expenditures, particularly for jointly consumed items such as housing and utilities. Most economists believe that any guidelines amount in between a range of credible estimates of child-rearing expenditures (such as the Rothbarth and Engel methodologies that respectively, understate and overstate actual child-rearing expenditures) is an appropriate guidelines amount. This "bracketing" approach – that is, comparing a state guidelines amounts to a low estimate of child-rearing expenditures (e.g., estimates based on the Rothbarth methodology) to determine if the guidelines is sufficiently large enough and to a high estimate (e.g., estimates based on the Engel methodology) to determine if the guidelines is not too high– was initially developed by the Lewin Group. The U.S. Department of Health and Human Services commissioned the Lewin Group to provide technical assistance to states developing and updating their child support guidelines.[13] The same approach was used to assess the proposed Minnesota schedule when Minnesota was about to adopt its income shares guidelines.

Overview of the USDA Measurements. Minnesota is the only state to rely on the USDA measurements of child-rearing expenditures. The USDA updates its measurements annually for changes in price levels. It changed its methodology for measuring housing expenses in 2008. The USDA last updated its measurements in 2014.[14] The USDA estimates child-rearing expenditures individually for several expenditure categories (e.g., food and clothing), then adds them to develop a total. As discussed more in the USDA report, a different methodology is used to measure expenditures for each category. Some categories unique to children can be measured directly (e.g., children clothing, childcare expenses and education expenses). The child's food costs are measured using the food plans developed by the USDA. The child's transportation is measured by only considering family-related activities,

[13] For example, see Lewin/ICF. (1990). *Estimates of Expenditures on Children and Child Support Guidelines.* Report to U.S. Dept. of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Fairfax, Virginia.
[14] Lino, Mark (2014) *Expenditures on Children by Families: 2013 Annual Report.* U.S. Department of Agriculture, Center for Nutrition and Policy Promotion. Miscellaneous Publication No. 1528-2013, Washington, D.C.

which are 59 percent of total transportation according to research findings. The child's housing expenses are measured from estimating the average additional costs of housing given the number of bedrooms in a home assuming more bedrooms are required when there is more than one child and controlling for income level. Food, transportation and housing comprise the vast majority of child-rearing expenditures. Economists generally believed that the USDA's previous approach to measuring child-rearing expenditures overstated actual child-rearing expenditures, but economists have not assessed the USDA methodology since it was changed in 2008.

Overview of the Betson-Rothbarth & Betson-Engel Measurements. In the past two decades, Professor Betson, University of Notre Dame, has conducted four studies estimating child-rearing expenditures. Each study uses expenditures data from the most current CES data available. For Betson's first study, he used CES data from 1980-86. [15] For his second study, he initially used from 1996-98 CES data, but later expanded it to encompass 1996-99.[16] For his third[17] and fourth study, respectively, he used data from the 1998-2004 and 2004-09 CES.

In all of his studies, he has produced Rothbarth estimates. Betson-Rothbarth (BR) measurements form the basis of 30 state guidelines. Both the Rothbarth and Engel methodology are considered "marginal cost" approaches to measuring child-rearing expenditures. The margin is how much more a couple spends when the couple has children. The marginal cost approach compares expenditures between two equally well-off families: (a) married couples with children, and (b) married couples of child-rearing age without children. The difference in expenditures between these two families is deemed to be child-rearing expenditures. The Engel and Rothbarth methodologies, which are named by the economists who developed them, use different indicators of equally well-off families. The Engel methodology uses expenditures on food, while the Rothbarth methodology relies on expenditures for adult goods (specifically, adult clothes in the Rothbarth estimates that form the basis of state guidelines) to determine equally well-off families

Existing Minnesota Schedule Compared to Current Economic Studies

Exhibits 3 and 4 compare the existing Minnesota schedule to the most recent USDA and BR studies updated to 2014 price levels. Both the USDA and BR amounts in the exhibits include low-income adjustments. The amount of the low-income adjustment is a policy decision. In

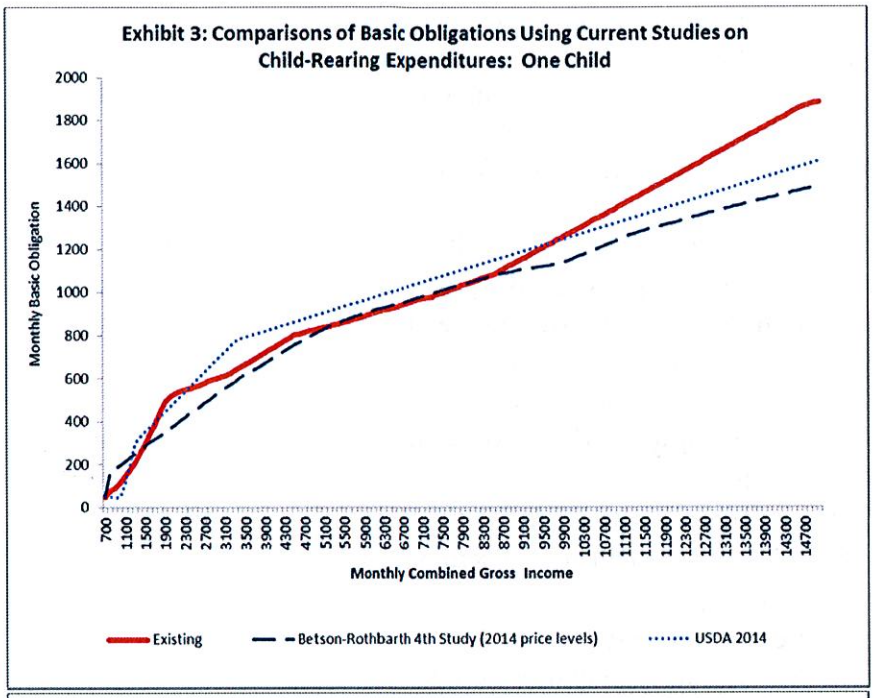
---

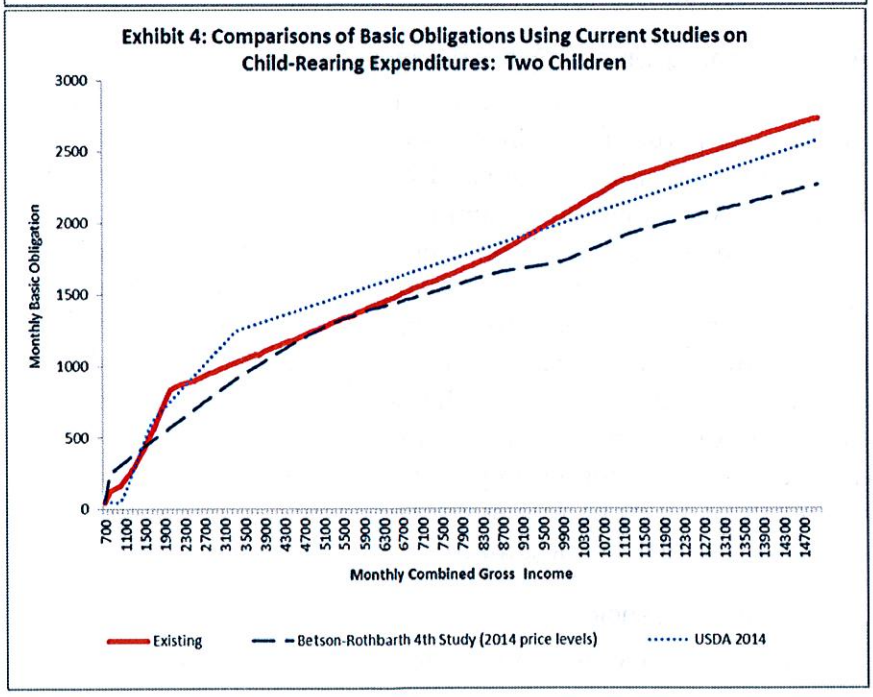
[15] David M. Betson (1990). *Alternative Estimates of the Cost of Children from the 1980-86 Consumer Expenditure Survey*, Report to U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, University of Wisconsin Institute for Research on Poverty, Madison, Wisconsin.

[16] David M. Betson (2001). "Chapter 5: Parental Expenditures on Children," in Judicial Council of California, *Review of Statewide Uniform Child Support Guidelines*, San Francisco, California.

[17] David M. Betson (2006). "Appendix I: New Estimates of Child-Rearing Costs" in PSI, *State of Oregon Child Support Guidelines Review: Updated Obligation Scales and Other Considerations*, Report to the State of Oregon, Policy Studies Inc., Denver, Colorado.

general, the comparisons show that the Minnesota schedule may be too high at low incomes (i.e., about $1,500 to $3,000 per month), about right at middle incomes, and too high at very high incomes.





Economic Basis of Parenting-Time Adjustment

Since most states base their child support schedule or formula on child-rearing expenditures in intact families, the schedule or basic formula tacitly reflects the cost of raising the child in one household. Nonetheless, most state guidelines (37 states) provide a presumptive formula for shared custody or the nonresidential parent's time with the child. The adjustment is typically made in the worksheet after using the schedule/formula to obtain a base amount.[18] Most of the remaining 14 state guidelines provide that a judge or decisionmaker can deviate for timesharing arrangements but do not provide a formula.

The parenting-time formulas vary widely. Four factors distinguish state formulas.

- Whether there is a **criterion requiring a parenting-time (custody/visitation) order or parenting plan or agreement between the parties** to apply the formula or whether the formula can be applied based on the "actual time" the child spends with each parent even if it differs from the custody/visitation order or parenting plan.
- **The timesharing criterion for applying the formula** (e.g., each parent has the child for at least 10 percent of the child's time)
- **Whether there are different formulas for different levels of timesharing** (e.g., Minnesota applies a 12-percent adjustment for 10% to 45% timesharing and the cross-credit formula above 45% timesharing.
- **The structure and parameters of the formula.** The most common adjustment is the cross-credit formula but there are also many other unique formulas.

Criterion for Adjustment: Actual Parenting Time or Ordered Parenting-Time

Minnesota and most state guidelines provide that there must be a court order, parenting plan, and/or agreement between the parties for the parenting-time adjustment to be applied. In addition, some states require that the order be exercised for the parenting-time/custody adjustment to be applied. Nonetheless, a significant number of state guidelines (e.g., Colorado, District of Columbia, and Pennsylvania) apply the adjustment based on "actual custody or timesharing." This provision is helpful in situations when the children change their primary residence from one parent's residence to another parent's residence while the custody order is not changed. Parents often perceive that there are barriers to custody changes (e.g., court filing fees and custody evaluations). In these situations, the courts may look at school records or similar information to verify that the children are indeed living with the other parent. Another unique criterion is imposed by New Jersey. It requires that the income of the primary residential parent be at least 200 percent of the federal poverty level before the parenting-time adjustment can be applied.

Criterion for Adjustment: Timesharing Threshold

States vary widely in the amount/percentage of "days"/ "overnights" the child must spend

[18] Notable exceptions are Kansas, Louisiana, and Pennsylvania. Each of these states incorporate an adjustment for the nonresidential parent's direct expenditures on the children for a standard amount of timesharing. For example, Pennsylvania assumes 30-percent timesharing and that the obligated parent will make direct expenditures on the child for the child's food and entertainment (e.g., movie tickets) during this time.

with the nonresidential parent before the formula applies as well as the formulas they use. As shown in Exhibit 5, Minnesota's threshold of 10-percent timesharing for the 12-percent flat adjustment is on the lower end among states while its threshold for applying the cross-credit (45.01-percent timesharing) is on the higher end among states. A few states guidelines don't specify a numeric threshold. Rather, they provide the adjustment for "essentially equal custody" or provide a formula without a threshold (e.g., Michigan). For the purposes of categorizing states, the former is considered a 46-50 percent timesharing threshold and the latter is considered a 0-5 percent-threshold. Over time, some states have lowered their threshold (i.e., Delaware, Massachusetts, Michigan, Nebraska, and Oregon). No state has increased their threshold.

Exhibit 5: Time-Sharing Thresholds for Presumptive Formulas Adjusting for Parenting-Time/Shared Custody

Threshold for Shared-Parenting Adjustment	States
1-10% parenting time	6 states (AZ, CA, MI, MN*, MO, NJ, OR)
11-15% parenting time	1 state (IN)
16-20% parenting time	1 state (FL)
21-25% parenting time	7 states (CO, DE, ID, TN, VT, VA, WI)
26-30% parenting time	6 states (AK, MT, NE, NM, SC, UT)
31-35% parenting time	7 states (DC, IA, MA, MD, NC, OK, WV)
36-40% parenting time	3 states (HI, PA, WY)
41-45% parenting time	2 states (MN*, ND)
46-50% parenting time	4 states (KS, LA, ME, SD)
States with a Presumptive Formula	37 states
States without a Presumptive Formula	14 states (AL, AR, CT, GA, IL, KY, MS, NV, RI, NH, NY, TX, WA)

*MN is shown as being counted twice to highlight its two-level formula.

Different Formulas for Different Levels of Timesharing

Minnesota is not the only state that provides different formulas for adjusting for timesharing depending on the amount of timesharing. With the exception of states that provide a sliding scale (which are identified in Exhibit 6), New Jersey also provides a different formula for higher levels of timesharing. New Jersey's threshold for applying the other formula is 28 percent and the formula for low-levels for timesharing is presumptive, while the formula for 28-percent is applied at court discretion and requires evidence that each parent actually incurs direct child-rearing expenditures. In addition, a few states (e.g., Missouri) provide a small adjustment at low levels of timesharing but provide that an adjustment (or a larger adjustment) for substantial custody or near-equal custody is a deviation factor.

Pennsylvania and Louisiana effectively provide a different formula for lower levels of timesharing than higher levels of timesharing by adjusting for "standard parenting-time" in their respective schedules. Pennsylvania's adjustment assumes that the obligated parent cares for the child 30 percent of the time and that the obligated parent will be picking up the child's food expense and some of the child's recreational expense at this time. If the child spends 40 percent or more of the time with the obligated parent, Pennsylvania provides another formula.

Overview of Types of Formulaic Adjustments

Minnesota's formula was designed to be simple, recognize the expenses for what was formerly called, "ordinary visitation," and provide the cross-credit formula, which is and was the most popular formula for adjusting for timesharing at nearly equal custody. Minnesota starts with a 12-percent adjustment for when each parent has the child at least 10 percent of the time. The 12-percent amount was a legislative compromise. It was originally slightly higher.

Exhibit 6 classifies the states' timesharing formula into six types. Massachusetts and California's formula are classified as "unique" but may be re-classified as cross-credit or per diem with further analysis. A discussion of each formula type and their strengths and weaknesses follow Exhibit 6.

Exhibit 6: Type of Formula Used for Presumptive Formulas Adjusting for Parenting-Time/Shared Custody

Formula Type	States
Cross-Credit with 1.5 Multiplier	20 states (AK, CO, DC, FL, ID, KS, LA, ME, MD, MN*, NE, NC, NM, OK, SC, SD, VT, VA, WV, WI)
Cross-Credit with No Multiplier	1 state (WY)
Simple Percentage or Sliding Scale Adjustment	8 states (AZ, DE, IA, MN*, MO, NJ, ND, UT)
Advanced Math Formula	3 states (IN, MI, OR)
Per Diem Adjustment	4 states (HI, MT, PA, TN)
Unique Formula	2 states (CA, MA)
States with a Presumptive Formula	37 states
States without a Presumptive Formula	14 states (AL, AR, GA, IL, KY, MS, NV, RI, NH,ND, NY, TX, WA)

*Minnesota is counted twice (as a state with a cross-credit with 1.5 multiplier and a simple percentage adjustment)

Simple Percentage or Sliding Scale Adjustment

Although seven states use a simple percentage or sliding-scale percentage adjustment, no state uses the same percentage or the same sliding scale percentages. Some of these state percentages (e.g., Arizona, Indiana, and New Jersey) are actually rooted in "variable/fixed expense" approach. This approach is premised on a consideration of three types of child-rearing expenditures: variable expenses; duplicated, fixed expenses; and non-duplicated, fixed expenses. At low levels of time-sharing, the adjustment is for variable expenses only. When time-sharing becomes more substantial, the adjustment also considers duplicated, fixed expenses. Variable expenses are those that are transferable between the parents depending on which parent has time with the child. For example, food expenses are typically considered a variable child-rearing expense. If one parent buys the child food, there is no need for the other parent to purchase food also. New Jersey and Arizona, in forming their guidelines, have calculated that variable costs account for 37 and 38 percent, respectively, of total child-rearing expenditures. Duplicated, fixed costs are those child-rearing expenses that both parents incur and the other parent's time with the child does not reduce that expense for the first parent (e.g., the child's housing expense). New Jersey's

guidelines assume duplicated, fixed costs comprise 38 percent of total child-rearing costs. Arizona's assume that percentage is 30 percent. Non-duplicated, fixed costs are child-rearing expenses that are not affected by the parent's time and are not duplicated. For example, the child has one set of clothes that are generally not duplicated. New Jersey's guidelines assume non-duplicated, fixed expenses comprise 25 percent of total child-rearing expenses, whereas Arizona's assume they are 33 percent of total child-rearing expenses.

The major difference between the cross-credit adjustment and the variable/fixed expense adjustment is the difference in their outcomes when the parents have equal income and equal custody. Under these circumstances, the cross-credit will produce a zero order amount while the variable/fixed expense approach will produce an order amount equivalent to non-duplicated, fixed expenses. The reason for this is the variable/fixed expense is premised on the belief that one parent always incurs more child-rearing expenses than the other parent. For example, New Jersey's guidelines are based on the belief that one parent is responsible for purchasing the child's clothes. The guidelines assume that the parent with more time with the child is the parent who incurs the non-duplicated, fixed expenses. The guidelines assume, however, that when the parents have equal custody, the parent living closest to the child's school incurs the non-duplicated, fixed expense.

Exhibit 7: Expenditures Shares On a Child from Birth through Age as a Percentage of Total Child-Rearing Expenditures: 2013 (Source: USDA 2014)

	Percent of **Total** Child-Rearing Expenditures	Reweighted to Exclude Healthcare and Childcare
Food	16%	20%
Transportation	14%	17%
Housing	30%	37%
Clothing	6%	7%
Miscellaneous	8%	10%
Healthcare	8%	Excluded
Childcare & Education	18%	Excluded
TOTAL	100%	100%

There is no definitive research on which child-rearing expenditures are variable, duplicated and fixed, and non-duplicated and fix. Some policymakers deduce it from the USDA or Betson measurements of child-rearing expenditures. For example, Exhibit 7 illustrates that 37% of total child-rearing expenditures, as measured by the USDA, are devoted to food and transportation.

Exhibit 8 shows an anomaly with Minnesota's simple percentage adjustment. Minnesota applies the 12-percent adjustment to the *obligor's share* of the basic obligation from the schedule. Most states (e.g., Missouri and New Jersey) apply it to the *total basic obligation* from the schedule. This makes it relate to standard parenting-time expense more (e.g., if 37 percent of the total child-rearing expenditures are variable and standard-parenting time of nonresidential parents is 25 percent, the percentage adjustment to the basic obligation would be 9.25 percent).

Exhibit 8. Illustration of Minnesota's Anomalous Application of Its Simple Percentage						
		Minnesota			Missouri	New Jersey
		Parent A	Parent B	Combined	Parent A	Parent A
1	Income	$3,000	$2,000	$5,000	$3,000	$3,000
2	Share of Combined Income	60%	40%	100%	60%	60%
3	Basic Obligation for 1 Child			$831	$831	$831
4	Parent's Share of Basic Obligation	$499	$332	100%	$499	$499
5	Number of Overnights	73	292	365	73	73
6	% of Parenting Time	20%	80%	100%	20%	20%
7	Parenting-Time Adjustment	*12% of Parent's A Line 4* = $60			*9% of Combined Line 3* = $75	*Line 6 times 37% times Combined Line 3 = 7.4% of $831* = $61
8	Monthly Support Order Owed by Parent A (Line 4 minus Line 7)	$439			$424	$438

The theory behind the percentage adjustment is best illustrated by New Jersey that believes that 37% of child-rearing expenditures are devoted to variable expenses such as food and transportation. To this end, the New Jersey parenting-time adjustment credits Parent A for 37 percent of basic obligation amount from the schedule (which consists of all expenditures on the child) for 20 percent of the time.

Strengths of Percentage Adjustment. The strengths of the Percentage Adjustment are it is a very simple adjustment and easy to apply.

Weaknesses of Percentage Adjustment. Depending on how the state specifies it, it can result in cliff effects. Another weakness is it doesn't always clearly relate to child-rearing expenditures that are transferred between one parent to the other because of the percent of time the one parent cares for the child.

Cross-Credit Formula

With the exception of Wyoming's, all cross-credit formulas multiple the basic obligation by 150 percent to account for about 50 percent of all child-rearing expenditures being duplicated by parents when the child lives in two households (i.e., the child's housing and transportation are duplicated.)

Strengths of Cross-Credit Formula. The strengths of the cross-credit formula are the formula is intuitive and generally makes mathematical sense to guidelines users. It also has a long history of successful use in several states.

Weaknesses of Cross-Credit Formula. It requires the use of a timesharing threshold, which can create some undesirable outcomes. The higher the threshold is set, the more likely it is to produce a cliff effect. (See Exhibit 7 for an illustration of this.) On the other hand, if the

Weaknesses of Cross-Credit Formula. It requires the use of a timesharing threshold, which can create some undesirable outcomes. The higher the threshold is set, the more likely it is to produce a cliff effect. (See Exhibit 7 for an illustration of this.) On the other hand, if the threshold (e.g., 20 percent) is set too low, the formula may not work for certain income situations. (See Exhibit 9 for an illustration of this.) Some states solve this problem by providing that the time-sharing formula can never be more than the sole-custody formula. Vermont also provides a simple percentage adjustment for this by providing a simple transition formula from 20-25 percent timesharing and then, applying the cross-credit fully once the timesharing arrangement is 25 percent or more.

Exhibit 9. Example of Cross-Credit Approach Used to Adjust for Shared-Parenting Time

Line		Mother	Father	Combined
1	Monthly Income	$2,000	$3,660	$5,660
2	Percentage Share of Income	35%	65%	100%
3	Basic Obligation for 1 Child (Line 1 combined applied to Schedule)			$866
4	Each Parent's Share (Line 3 x each parent's Line 2)	$303	**$563**	
5	Shared Custody Basic Obligation (Line 3 x 1.5)			$1,299
6	Each Parent's Share (Line 5 x each parent's Line 2)	$455	$844	
7	Overnights with Each Parent (must total 365)	292	73	365
8	Percentage Time with Each Parent (Line 7 divided by 365)	80%	20%	100%
9	Amount Retained (Line 6 x Line 8 for each parent)	$364	$169	
10	Each Parent's Obligation (Line 6 – Line 9)	$91	$675	
11	Shared Custody Obligation (Subtract smaller from larger on Line 10)		**$584**	
12	Final Order (**lesser of lines 4 and 11**)		**$563**	

Another arguable weakness is it can result in the parent with more of the child's time being the obligated parent if that parent has substantially more income than the other parent. Some policymakers (e.g., the Pennsylvania committee responsible for reviewing its guidelines) argue that the parent with more of the child's time *should always* be the parent receiving support.

Advanced Math Formulas

"Advanced math formulas" refer to formulas that use exponential powers, squaring (a value times itself) or cubing (a value times itself thrice) in the formula. These types of advanced math formulas allow for a gradual decrease in the formula-determined amount as an additional day is added. The intent is illustrated in a graph excerpted from a presentation about the Oregon adjustment at the 2014 National Child Support Enforcement Association Conference in Portland, Oregon, which is shown in Appendix A. Three states fall into this category: Indiana, Michigan, and Oregon. Only Michigan's formula is truly an exponential formula. It is shown below.

$$\frac{(A_o)^3(B_s) - (B_o)^3(A_s)}{(A_o)^3 + (B_o)^3}$$

Where

A_0 – Approximate annual number of overnights the children will spend with parent A

Michigan's formula is essentially similar to the cross-credit but takes the function to the third power (cubed) to make the adjustment more gradual.

Both Oregon and Indiana converted their formulas to tables. In fact, Oregon's table is only an approximation of its non-linear formula and the equation matches the table for some ranges of obligor's share of combined income, but not all shares. As stated in Oregon's guidelines review report[19], the goals of the adjustment were to create graduated change and minimize the difference from its cross-credit formula, which started at 25-percent timesharing. Specifically, Oregon wanted to have a zero parenting-time credit at zero timesharing, 13 percent credit at 25-percent timesharing, and accelerate the timesharing credit to 50 percent beginning with 27-perent timesharing.

Indiana's formula is based on the concept of variable/fixed, duplicated/fixed, non-duplicated expenses. To that end, the Indiana formula **does not result in a $0 order** when there is equal income and equal timesharing.

Strength of Advanced Math Formulas. The major strength is that they can produce gradual changes to the order amount as time with the child increases so reduces conflict over parenting time.

Weaknesses of Advanced Math Formulas. They are complicated and not intuitive.

Per Diem Approach

A few states use *per diem* approaches, which means that they assume the obligated parent has a certain amount of parenting time or parenting expense (e.g., 30 percent in Pennsylvania) and then adjust at a per diem rate for time above that. The Pennsylvania formula, which is not applicable until 40-percent timesharing, is shown below.

Shared custody order = obligor's prorated share - (timeshare – 30%) x basic obligation

Strengths of Per Diem Approach. One strength of the per diem approach is it is simple. Another strength, at least as perceived by Pennsylvania, is the calculation cannot result in a flipping of which parent is obligated to pay support like the cross-credit formula does.

Weakness of Per Diem Approach. By design and a consequence of the math, it generally produces cliff effects.

---

[19] Oregon Child Support Program Guidelines Advisory Committee. (March 27, 2012) *Report and Recommendation: 2011-12 Child Support Guidelines Review.* Pp 19-20. Available at: http://www.oregonchildsupport.gov/laws/guidelines_review/docs/guidelines_advisory_committee_report_and_recommendations_2011-12.pdf

COMPARISONS

There are three sets of comparisons (Exhibits 10, 11, and 12) to illustrate the differences between the existing Minnesota adjustment, the Oregon adjustment, the cross-credit with a multiplier applied to lower levels of timesharing, the Michigan formula, and a modification of the Oregon adjustment. The scenarios involve a case in which the parents have equal incomes, a case in which only one parent has income, and a case in which the higher earner has more time with the child initially.

The intent of the comparisons is to provide some examples to generate a discussion to guide the next round of draft timesharing formulas.

- The Oregon adjustment percentages, which are key to the Oregon formula, are highlighted in red.
- Comparable amounts are shown in the first cluster of the table. Oregon has comparable percentages for the other parent, which are shown in the second cluster.
- The last (bottom) cluster shows the order amounts.

CASE	A.1
# of CHILDREN	1
PARENT A's GROSS INCOME	$ 1,387 ($8 per hour at 40 hours per week)
PARENT B'S GROSS INCOME	$ 1,387 ($8 per hour at 40 hours per week)
COMBINED GROSS INCOME	$ 2,773
SCHEDULE AMOUNT	$ 580
OTHER ADJUSTMENTS	None. Self-support reserve = 120% Federal Povery Level (120% X $981 = $1,177)

	Parent A's Parenting Time Credit Percentage of Basic Obligation										
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Overnights	0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	182.5
Existing MN	0.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	44.00%	50.00%
Cross-Credit (starting at 20% timesharing)	0.00%	0.00%	0.00%	5.00%	12.50%	20.00%	27.50%	35.00%	42.50%	44.00%	50.00%
OR Formula (Applied to MN schedule)	0.00%	3.30%	5.71%	8.87%	12.94%	18.41%	24.80%	32.32%	40.77%	42.74%	50.00%
OR Alternative A	0.00%	4.65%	5.86%	7.44%	9.47%	12.21%	15.40%	19.16%	23.39%	43.37%	50.00%
MI formula (Applied to MN schedule)	0.00%	0.14%	0.55%	1.54%	3.57%	7.30%	13.50%	22.86%	35.39%	38.20%	50.00%

	Parent B's Parenting Time Credit Percentage of Basic Obligation										
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Overnights	365	328.5	310.25	292	273.75	255.5	237.25	219	200.75	197.1	182.5
Existing MN	100.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	56.00%	50.00%
Cross-Credit (starting at 20% timesharing)	100.00%	100.00%	100.00%	95.00%	87.50%	80.00%	72.50%	65.00%	57.50%	56.00%	50.00%
OR Formula (Applied to MN schedule)	100.00%	96.70%	94.29%	91.13%	87.06%	81.59%	75.20%	67.68%	59.23%	57.26%	50.00%
OR Alternative A	100.00%	95.35%	94.15%	92.57%	90.53%	87.80%	84.60%	80.84%	76.62%	56.63%	50.00%
MI formula (Applied to MN schedule)	100.00%	99.86%	99.45%	98.46%	96.43%	92.70%	86.50%	77.14%	64.61%	61.80%	50.00%

	Monthly Support Award										
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Existing MN	$ 290	$ 261	$ 261	$ 261	$ 261	$ 261	$ 261	$ 261	$ 261	$0	$0
Cross-Credit (starting at 20% timesharing)	$ 290	$ 290	$ 290	$ 261	$ 218	$ 174	$ 131	$ 87	$ 44	$ 35	$0
OR Formula (Applied to MN schedule)	$ 290	$ 271	$ 257	$ 239	$ 215	$ 183	$ 146	$ 103	$ 54	$ 42	$0
OR Alternative A	$ 290	$ 263	$ 256	$ 247	$ 235	$ 219	$ 201	$ 179	$ 154	$ 38	$0
MI formula (Applied to MN schedule)	$ 290	$ 289	$ 287	$ 281	$ 269	$ 248	$ 212	$ 157	$ 85	$ 68	$0

CASE	B.1
# of CHILDREN	1
PARENT A's GROSS INCOME	$ 3,200 (between median earnings of MN male worker with a HS degree and a college degree)
PARENT B'S GROSS INCOME	$ -
COMBINED GROSS INCOME	$ 3,200
SCHEDULE AMOUNT	$ 623
OTHER ADJUSTMENTS	None. Self-support reserve = 120% Federal Povery Level (120% X $981 = $1,177)

	Parent A's Parenting Time Credit Percentage of Basic Obligation										
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Overnights	0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	182.5
Existing MN	0.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	19.00%	25.00%
Cross-Credit (starting at 20% timesharing)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.50%	10.00%	17.50%	19.00%	25.00%
OR Formula (Applied to MN schedule)	0.00%	3.30%	5.71%	8.87%	12.94%	18.41%	24.80%	32.32%	40.77%	42.74%	50.00%
OR Alternative A	0.00%	7.65%	8.86%	10.44%	12.47%	15.21%	18.40%	22.16%	26.39%	30.87%	37.50%
MI formula (Applied to MN schedule)	0.00%	0.14%	0.55%	1.54%	3.57%	7.30%	13.50%	22.86%	35.39%	38.20%	50.00%

	Parent B's Parenting Time Credit Percentage of Basic Obligation										
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Overnights	365	328.5	310.25	292	273.75	255.5	237.25	219	200.75	197.1	182.5
Existing MN		88.00%	88.00%	88.00%	88.00%	88.00%	88.00%	88.00%	88.00%	81.00%	75.00%
Cross-Credit (starting at 20% timesharing)		100.00%	100.00%	100.00%	100.00%	100.00%	97.50%	90.00%	82.50%	81.00%	75.00%
OR Formula (Applied to MN schedule)	0.00%	96.70%	94.29%	91.13%	87.06%	81.59%	75.20%	67.68%	59.23%	57.26%	50.00%
OR Alternative A	100.00%	95.35%	94.15%	92.57%	90.53%	87.80%	84.60%	80.84%	76.62%	56.63%	50.00%
MI formula (Applied to MN schedule)	100.00%	99.86%	99.45%	98.46%	96.43%	92.70%	86.50%	77.14%	64.61%	61.80%	50.00%

	Monthly Support Award										
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Existing MN	$ 623	$ 561	$ 561	$ 561	$ 561	$ 561	$ 561	$ 561	$ 561	$467	$467
Cross-Credit (starting at 20% timesharing)	$ 623	$ 623	$ 623	$ 623	$ 623	$ 623	$ 607	$ 561	$ 514	$ 505	$467
OR Formula (Applied to MN schedule)	$ 623	$ 602	$ 587	$ 568	$ 542	$ 508	$ 468	$ 422	$ 369	$ 357	$312
OR Alternative A	$ 623	$ 575	$ 568	$ 558	$ 545	$ 528	$ 508	$ 485	$ 459	$ 431	$389
MI formula (Applied to MN schedule)	$ 623	$ 622	$ 620	$ 613	$ 601	$ 578	$ 539	$ 481	$ 403	$ 385	$312

CASE	C.1
# of CHILDREN	1
PARENT A's GROSS INCOME	$ 3,200 (between median earnings of MN male worker with a HS degree and a college degree)
PARENT B'S GROSS INCOME	$ 4,800 (median earnings of MN female worker with graduate or professional degree)
COMBINED GROSS INCOME	$ 8,000
SCHEDULE AMOUNT	$ 1,040 (Parent A has 40 percent of combined income)
OTHER ADJUSTMENTS	None. Self-support reserve = 120% Federal Povery Level (120% X $981 = $1,177)

Parent A's Parenting Time Credit Percentage of Basic Obligation

Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Overnights	0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	182.5
Existing MN	0.00%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	49.00%	55.00%
Cross-Credit (starting at 20% timesharing)	0.00%	0.00%	0.00%	10.00%	17.50%	25.00%	32.50%	40.00%	47.50%	49.00%	55.00%
OR Formula (Applied to MN schedule)	0.00%	3.30%	5.71%	8.87%	12.94%	18.41%	24.80%	32.32%	40.77%	42.74%	50.00%
OR Alternative A	0.00%	4.05%	5.26%	6.84%	8.87%	11.61%	14.80%	18.56%	22.79%	45.87%	52.50%
MI formula (Applied to MN schedule)	0.00%	0.14%	0.55%	1.54%	3.57%	7.30%	13.50%	22.86%	35.39%	38.20%	50.00%

Parent B's Parenting Time Credit Percentage of Basic Obligation

Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Overnights	365	328.5	310.25	292	273.75	255.5	237.25	219	200.75	197.1	182.5
Existing MN		95.20%	95.20%	95.20%	95.20%	95.20%	95.20%	95.20%	95.20%	51.00%	45.00%
Cross-Credit (starting at 20% timesharing)		100.00%	100.00%	90.00%	82.50%	75.00%	67.50%	60.00%	52.50%	51.00%	45.00%
OR Formula (Applied to MN schedule)	0.00%	96.70%	94.29%	91.13%	87.06%	81.59%	75.20%	67.68%	59.23%	57.26%	50.00%
OR Alternative A	100.00%	95.35%	94.15%	92.57%	90.53%	87.80%	84.60%	80.84%	76.62%	56.63%	50.00%
MI formula (Applied to MN schedule)	100.00%	99.86%	99.45%	98.46%	96.43%	92.70%	86.50%	77.14%	64.61%	61.80%	50.00%

Monthly Support Award

Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%
Existing MN	$ 416	$ 374	$ 374	$ 374	$ 374	$ 374	$ 374	$ 374	$ 374	($156)	($156)
Cross-Credit (starting at 20% timesharing)	$ 416	$ 416	$ 416	$ 312	$ 234	$ 156	$ 78	$ -	$ (78)	$ (94)	($156)
OR Formula (Applied to MN schedule)	$ 416	$ 382	$ 357	$ 324	$ 281	$ 225	$ 158	$ 80	$ (8)	$ (28)	($104)
OR Alternative A	$ 416	$ 374	$ 361	$ 345	$ 324	$ 295	$ 262	$ 223	$ 179	$ (61)	($130)
MI formula (Applied to MN schedule)	$ 416	$ 415	$ 410	$ 400	$ 379	$ 340	$ 276	$ 178	$ 48	$ 19	($104)

CONCLUSIONS AND NEXT STEPS

The conclusions are bulleted below.

- The existing Minnesota schedule is based on five different sources including three different studies of child-rearing expenditures.
- There are alternative measures of poverty but none are readily available for use at a practical level.
- There is a dearth of academic evidence on how parents actually share child-rearing expenditures in shared-parenting situations including whether expenses differ substantially between those occurred for "routine visitation" and "substantial shared physical custody."
- Most state guidelines parenting-time adjustments are part policy and part assumption about how parents share expenses. Nonetheless, they often incorporate math/economics about child-rearing expenditures.
- Minnesota's parenting-expense formula is unique.
    - The two-tier formula is unique.
    - Few other states have a timesharing threshold that start as low as 10 percent timesharing.
        - Minnesota is the only state to apply its percentage adjustment (12 percent) to the obligor's share of the basic obligation. Instead, states with a percentage adjustment apply it to the total basic obligation. This is done to relate to "variable child-rearing expenditures" and the obligor's percent of timesharing (e.g., if 37% of total child-rearing expenditures are variable and 33% timesharing is standard timesharing, the percentage adjustment would be 12%).
    - Few other states have a timesharing threshold that starts as high as 45 percent timesharing for the substantial adjustment, such as the cross-credit adjustment, to apply.
        - This causes a large cliff effect. Further, assuming 50 percent timesharing at 45.01 percent amplifies this cliff effect.
- There is no consistency in the timesharing formulas and criteria (including the timesharing threshold for applying the formula) for using the formula in other states.
    - The cross-credit formula with 150 percent multiplier is the most commonly used formula but it can have a cliff effect, particularly if the timesharing threshold is set high). States using the cross-credit formula vary substantially in their timesharing threshold.
    - A few states use a formula rooted in the concept that child-rearing expenditures can be divided into three categories: variable (e.g., food); fixed, duplicated (e.g., housing); and fixed, non-duplicated (e.g., child's clothing). Pure application of this concept (see Indiana and New Jersey) does not produce a zero order when there is equal timesharing and equal income because one parent always incurs the fixed, non-duplicated expense.

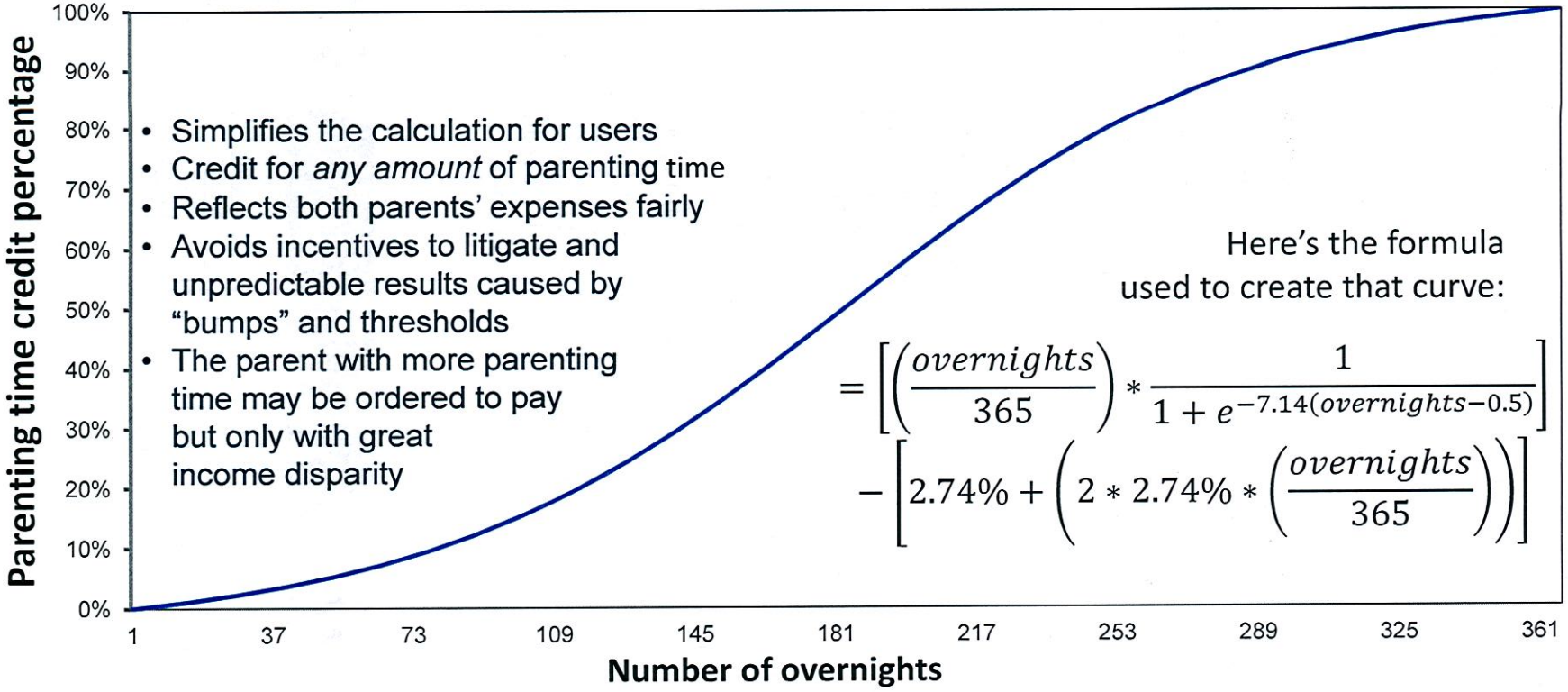
- A few states (Indiana, Michigan, and Oregon) have developed non-linear formulas to create a gradual change in the order amount as one parent has more time with the child. The intent is to reduce parental disputes about the timesharing arrangement and cliff effects. Oregon used a non-linear formula to develop its timesharing adjustment, which is in table formula. The formula, which is recommended for use over the table, does not match the table amounts.

The next steps, which require direction from the work group, are bulleted below.

- *Policy decision on formula:* An Oregon-like parenting-time formula or even another formula from another state will be significantly different than the existing Minnesota adjustment. There is no formula type that will minimize the impact of what Minnesota currently provides. Is the work group okay with that?
- *Policy decision on formula.* What are some of the expectations of the formula?
  - Should there be a zero adjustment at zero or nine-percent timesharing or another amount?
  - Should there be a zero order when the parents have equal timesharing and equal income?
  - Should the formula allow for a "flip" between the parent obligated to pay support when there is almost equal timesharing and the higher-income parent has more time-sharing (as the cross-credit and Oregon formula provide for)?
  - At what percentage of timesharing should the adjustment recognize that each parent has substantial child-rearing expenditures, specifically, should it be lower than the 45.01 percent timesharing required in Minnesota's current formula?
  - Are there other expectations of the formula at certain timesharing arrangements?
  - Should the criteria for applying the parenting-time adjustment be changed?
  - Are there other expectations of the formula in general?
- *Policy decision on case examples used for comparison.* What case examples are helpful? CPR intends to develop a simple calculator that work group members can use to examine a wide range of case examples, but it will not be able to adjust for factors beyond the schedule (e.g., the low-income adjustment, non-joint children, the child's healthcare expenses, and childcare expenses). If these are important is there are another way to run comparisons?
- *Other?*

Median Incomes of Minnesota Workers 25 Years and over with Earnings (Source 2013 American Community Survey)		
Educational Attainment	Male	Female
ALL	$45,860	$32,037
Less than high school graduate	$24,795	$16,040
High school graduate (includes equivalency)	$35,666	$23,370
Some college or associate's degree	$42,106	$29,703
Bachelor's degree	$61,918	$41,442
Graduate or professional degree	$78,301	$57,883

Oregon's Parenting Time Curve (Excerpt from 2014 Presentation by Michael Ritchey, Sr. Assist. Attorney General Counsel, Oregon Child Support Program)



Alternative Adjustments for Parenting Expenses

And Technical Overview of Excel Calculator of Alternative Adjustments

Prepared for:
The Child Support Work Group
Minnesota Department of Human Services
Child Support Division

Prepared by:
Jane Venohr, Ph.D.
Center for Policy Research
Denver, CO 80218
www.centerforpolicyresearch.org
303.837.1555
jvenohr@centerforpolicyresearch.org

October 2, 2015

Table of Contents

OVERVIEW

The major purposes of this briefing are to provide:

- An overview of the four parenting-time expense adjustments being compared to Minnesota's existing adjustment in the Excel calculator, and
- Technical considerations in using the Excel calculator.

More detailed information about parenting-time adjustments used in state guidelines is provided in the September brief. The four parenting-time adjustments being compared in the Excel calculator are:

- The Cross-credit formula,
- The Oregon table,
- A version of the Oregon table, called "Oregon Alternative A," that has percentages that results in support awards closer to those under the existing Minnesota parenting-expense adjustment, and
- The Michigan formula.

CROSS-CREDIT ADJUSTMENT

As mentioned in the September briefing, the cross-credit adjustment is the most commonly used adjustment among states. All but one state's cross-credit formula increases the basic obligation by 150 percent to account for the additional expense of raising a child in two households, which is more the expense of raising a child in one household. Housing expenses for the child, for example, are often duplicated in both households.

Minnesota currently uses a cross-credit for situations in which the child's time with each parent exceeds 45 percent. Instead of weighing each parent's theoretical order by each parent's timeshare like the typical cross-credit formula does, the Minnesota adjustment uses 50 percent for all timesharing arrangements exceeding 45 percent.

Exhibit 1 provides an example of the cross-credit. The cross-credit formula in the Excel calculator starts at 20-percent timesharing. It is programmed such that it can never result in an award amount more than 0-percent timesharing. If Minnesota were to adopt a cross-credit formula, it is highly recommend that there be a provision stating that the parenting-expense calculation can never exceed guidelines-determined amount assuming zero timesharing.

Examples of Vermont's and Colorado's cross-credit formulas are appended to this briefing.

Exhibit 1. Example of Cross-Credit Approach Used to Adjust for Shared-Parenting Time				
Line		**Parent A**	**Parent B**	**Combined**
1	Monthly Income	$3,000	$2,000	$5,000
2	Percentage Share of Income	60%	40%	100%
3	Basic Obligation for 1 Child (Line 1 combined applied to Schedule)			$831
4	Each Parent's Share (Line 3 x each parent's Line 2)	$499	$332	
5	Shared Custody Basic Obligation (Line 3 x 1.5)			$1,247
6	Each Parent's Share (Line 5 x each parent's Line 2)	$748	$499	
7	Overnights with Each Parent (must total 365)	164	201	365
8	Percentage Time with Each Parent (Line 7 divided by 365)	45%	55%	100%
9	Amount Retained (Line 6 x Line 8 for each parent)	$337	$274	
10	Each Parent's Obligation (Line 6 – Line 9)	$411	$225	
11	Shared Custody Obligation (Subtract smaller from larger on Line 10)	$186		
12	Final Order (**lesser of lines 4 and 11**) for Parent with amount on Line 11	$186		

OREGON ADJUSTMENT

The Oregon adjustment can be calculated using a formula or a lookup table of percentage adjustments. The percentage adjustment is applied to the parent's combined basic obligation; then, that amount is subtracted from that parent's prorated share of the basic obligation. The subtraction is made to each parent's prorated share. The parent whose remainder is positive is the parent obligated to pay support. Exhibit 2 illustrates the Oregon adjustment.

Exhibit 2. Example of Oregon Adjustment Used to Adjust for Shared-Parenting Time				
Line		**Parent A**	**Parent B**	**Combined**
1	Monthly Income	$3,000	$2,000	$5,000
2	Percentage Share of Income	60%	40%	100%
3	Basic Obligation for 1 Child (Line 1 combined applied to Schedule)			$831
4	Each Parent's Share (Line 3 x each parent's Line 2)	$499	$332	
5	Overnights with Each Parent (must total 365)	164	201	365
6	Parenting Expense Percentage from Oregon Table (*This is not the same as overnights/365*).	0.4077	0.5923	100%
7	Each Parent's Adjustment (Line 3 X Line 6)	$339	$492	
8	Each Parent's Theoretical Order	$160	-$160	
9	Final Order (amount on Line 8 for parent with positive amount)	$160		

A copy of the Oregon guidelines was provided to the workgroup earlier.

Oregon Alternative A

The Oregon Alternative A formula works exactly like the Oregon adjustment but uses different percentage adjustments. A comparison of the Oregon table and Oregon Alternative A table is shown in Exhibit 3. Alternative A percentages are slightly more than Oregon's at low levels of timesharing to reflect that Minnesota's existing adjustment of 12

percent applied to 10 percent timesharing. Alternative A is more at mid-levels of timesharing than Minnesota's existing adjustment to gradually phase into amounts similar to what Minnesota's existing formula produces for timesharing arrangements above 45 percent.

MICHIGAN FORMULA

Michigan's formula is explained in the September briefing. It requires a calculator. An excerpt of Michigan's guidelines detailing the formula is appended to this brief. In reading the Michigan guidelines, be careful to note that Michigan flips the concepts of Parent A and Parent B. Michigan uses Parent A to refer to the parent with more timesharing and Parent B to refer to the parent with less timesharing.

Exhibit 3: Comparison of Oregon Table to Alternative Table A

Overnights	Oregon Credit %	Alternative A Credit %	Overnights	Oregon Credit %	Alternative A Credit %	Overnights	Oregon Credit %	Alternative A Credit %	Overnights	Oregon Credit %	Alternative A Credit %
0	0.00%	0.00%	36	3.19%	4.60%	72	8.67%	7.34%	108	17.77%	11.89%
1	0.07%	0.04%	37	3.30%	4.65%	73	8.87%	7.44%	109	18.09%	12.05%
2	0.14%	3.07%	38	3.42%	4.71%	74	9.07%	7.54%	110	18.41%	12.56%
3	0.21%	3.11%	39	3.54%	4.77%	75	9.27%	7.64%	111	18.73%	13.07%
4	0.28%	3.14%	40	3.66%	4.83%	76	9.48%	7.74%	112	19.06%	13.58%
5	0.35%	3.18%	41	3.78%	4.89%	77	9.68%	7.84%	113	19.39%	14.10%
6	0.42%	3.21%	42	3.91%	4.96%	78	9.90%	7.95%	114	19.72%	14.61%
7	0.49%	3.25%	43	4.04%	5.02%	79	10.11%	8.06%	115	20.06%	15.12%
8	0.57%	3.29%	44	4.16%	5.08%	80	10.33%	8.17%	116	20.40%	15.64%
9	0.65%	3.33%	45	4.30%	5.15%	81	10.55%	8.28%	117	20.75%	16.15%
10	0.72%	3.36%	46	4.43%	5.22%	82	10.77%	8.39%	118	21.10%	16.66%
11	0.80%	3.40%	47	4.56%	5.28%	83	11.00%	8.50%	119	21.45%	17.17%
12	0.88%	3.44%	48	4.70%	5.35%	84	11.23%	8.62%	120	21.81%	17.69%
13	0.96%	3.48%	49	4.84%	5.42%	85	11.47%	8.74%	121	22.17%	18.20%
14	1.04%	3.52%	50	4.98%	5.49%	86	11.70%	8.85%	122	22.54%	18.71%
15	1.13%	3.57%	51	5.12%	5.56%	87	11.94%	8.97%	123	22.90%	19.23%
16	1.21%	3.61%	52	5.27%	5.64%	88	12.19%	9.10%	124	23.27%	19.74%
17	1.29%	3.65%	53	5.41%	5.71%	89	12.43%	9.22%	125	23.65%	20.25%
18	1.38%	3.69%	54	5.56%	5.78%	90	12.68%	9.34%	126	24.03%	20.76%
19	1.47%	3.74%	55	5.71%	5.86%	91	12.94%	9.47%	127	24.41%	21.28%
20	1.56%	3.78%	56	5.87%	5.94%	92	13.19%	9.60%	128	24.80%	21.79%
21	1.65%	3.83%	57	6.02%	6.01%	93	13.45%	9.73%	129	25.19%	22.30%
22	1.74%	3.87%	58	6.18%	6.09%	94	13.72%	9.86%	130	25.58%	22.82%
23	1.84%	3.92%	59	6.34%	6.17%	95	13.98%	9.99%	131	25.98%	23.33%
24	1.93%	3.97%	60	6.51%	6.26%	96	14.25%	10.13%	132	26.38%	23.84%
25	2.03%	4.02%	61	6.67%	6.34%	97	14.53%	10.27%	133	26.78%	24.35%
26	2.12%	4.06%	62	6.84%	6.42%	98	14.80%	10.40%	134	27.19%	24.87%
27	2.22%	4.11%	63	7.01%	6.51%	99	15.08%	10.54%	135	27.60%	25.38%
28	2.32%	4.16%	64	7.19%	6.60%	100	15.37%	10.69%	136	28.01%	25.89%
29	2.43%	4.22%	65	7.36%	6.68%	101	15.66%	10.83%	137	28.43%	26.41%
30	2.53%	4.27%	66	7.54%	6.77%	102	15.95%	10.98%	138	28.85%	26.92%
31	2.64%	4.32%	67	7.72%	6.86%	103	16.24%	11.12%	139	29.27%	27.43%
32	2.74%	4.37%	68	7.91%	6.96%	104	16.54%	11.27%	140	29.70%	27.95%
33	2.85%	4.43%	69	8.09%	7.05%	105	16.84%	11.42%	141	30.13%	28.46%
34	2.96%	4.48%	70	8.28%	7.14%	106	17.15%	11.58%	142	30.56%	28.97%
35	3.08%	4.54%	71	8.47%	7.24%	107	17.46%	11.73%	143	31.00%	29.48%

144	31.44%	30.00%	181	49.24%	48.97%	218	67.23%	68.46%	255	81.59%	87.44%
145	31.88%	30.51%	182	49.75%	49.49%	219	67.68%	68.98%	256	81.91%	87.96%
146	32.32%	31.02%	183	50.25%	50.51%	220	68.12%	69.49%	257	82.23%	88.12%
147	32.77%	31.54%	184	50.76%	51.03%	221	68.56%	70.00%	258	82.54%	88.27%
148	33.22%	32.05%	185	51.26%	51.54%	222	69.00%	70.52%	259	82.85%	88.43%
149	33.68%	32.56%	186	51.76%	52.05%	223	69.44%	71.03%	260	83.16%	88.58%
150	34.13%	33.07%	187	52.27%	52.56%	224	69.87%	71.54%	261	83.46%	88.73%
151	34.59%	33.59%	188	52.77%	53.08%	225	70.30%	72.05%	262	83.76%	88.88%
152	35.05%	34.10%	189	53.27%	53.59%	226	70.73%	72.57%	263	84.05%	89.03%
153	35.52%	34.61%	190	53.77%	54.10%	227	71.15%	73.08%	264	84.34%	89.17%
154	35.99%	35.13%	191	54.27%	54.62%	228	71.57%	73.59%	265	84.63%	89.32%
155	36.45%	35.64%	192	54.77%	55.13%	229	71.99%	74.11%	266	84.92%	89.46%
156	36.93%	36.15%	193	55.27%	55.64%	230	72.40%	74.62%	267	85.20%	89.60%
157	37.40%	36.66%	194	55.77%	56.15%	231	72.81%	75.13%	268	85.47%	89.74%
158	37.88%	37.18%	195	56.27%	56.67%	232	73.22%	75.65%	269	85.75%	89.88%
159	38.35%	37.69%	196	56.77%	57.18%	233	73.62%	76.16%	270	86.02%	90.01%
160	38.83%	38.20%	197	57.26%	57.69%	234	74.02%	76.67%	271	86.28%	90.14%
161	39.32%	38.72%	198	57.75%	58.21%	235	74.42%	77.18%	272	86.55%	90.28%
162	39.80%	39.23%	199	58.25%	58.72%	236	74.81%	77.70%	273	86.81%	90.41%
163	40.29%	39.74%	200	58.74%	59.23%	237	75.20%	78.21%	274	87.06%	90.53%
164	40.77%	40.25%	201	59.23%	59.75%	238	75.59%	78.72%	275	87.32%	90.66%
165	41.26%	40.77%	202	59.71%	60.26%	239	75.97%	79.24%	276	87.57%	90.79%
166	41.75%	41.28%	203	60.20%	60.77%	240	76.35%	79.75%	277	87.81%	90.91%
167	42.25%	41.79%	204	60.68%	61.28%	241	76.73%	80.26%	278	88.06%	91.03%
168	42.74%	42.31%	205	61.17%	61.80%	242	77.10%	80.77%	279	88.30%	91.15%
169	43.23%	42.82%	206	61.65%	62.31%	243	77.46%	81.29%	280	88.53%	91.27%
170	43.73%	43.33%	207	62.12%	62.82%	244	77.83%	81.80%	281	88.77%	91.39%
171	44.23%	43.85%	208	62.60%	63.34%	245	78.19%	82.31%	282	89.00%	91.50%
172	44.73%	44.36%	209	63.07%	63.85%	246	78.55%	82.83%	283	89.23%	91.62%
173	45.23%	44.87%	210	63.55%	64.36%	247	78.90%	83.34%	284	89.45%	91.73%
174	45.73%	45.38%	211	64.01%	64.87%	248	79.25%	83.85%	285	89.67%	91.84%
175	46.23%	45.90%	212	64.48%	65.39%	249	79.60%	84.36%	286	89.89%	91.95%
176	46.73%	46.41%	213	64.95%	65.90%	250	79.94%	84.88%	287	90.10%	92.05%
177	47.23%	46.92%	214	65.41%	66.41%	251	80.28%	85.39%	288	90.32%	92.16%
178	47.73%	47.44%	215	65.87%	66.93%	252	80.61%	85.90%	289	90.52%	92.26%
179	48.24%	47.95%	216	66.32%	67.44%	253	80.94%	86.42%	290	90.73%	92.37%
180	48.74%	48.46%	217	66.78%	67.95%	254	81.27%	86.93%	291	90.93%	92.47%

292	91.13%	92.57%	329	96.81%	95.41%
293	91.33%	92.67%	330	96.92%	95.46%
294	91.53%	92.77%	331	97.04%	95.52%
295	91.72%	92.86%	332	97.15%	95.58%
296	91.91%	92.96%	333	97.26%	95.63%
297	92.09%	93.05%	334	97.36%	95.68%
298	92.28%	93.14%	335	97.47%	95.74%
299	92.46%	93.23%	336	97.57%	95.79%
300	92.64%	93.32%	337	97.68%	95.84%
301	92.81%	93.41%	338	97.78%	95.89%
302	92.99%	93.50%	339	97.88%	95.94%
303	93.16%	93.58%	340	97.97%	95.99%
304	93.33%	93.67%	341	98.07%	96.04%
305	93.49%	93.75%	342	98.16%	96.08%
306	93.66%	93.83%	343	98.26%	96.13%
307	93.82%	93.91%	344	98.35%	96.18%
308	93.98%	93.99%	345	98.44%	96.22%
309	94.13%	94.07%	346	98.53%	96.27%
310	94.29%	94.15%	347	98.62%	96.31%
311	94.44%	94.22%	348	98.71%	96.36%
312	94.59%	94.30%	349	98.79%	96.40%
313	94.73%	94.37%	350	98.87%	96.44%
314	94.88%	94.44%	351	98.96%	96.48%
315	95.02%	94.51%	352	99.04%	96.52%
316	95.16%	94.58%	353	99.12%	96.56%
317	95.30%	94.65%	354	99.20%	96.60%
318	95.44%	94.72%	355	99.28%	96.64%
319	95.57%	94.79%	356	99.35%	96.68%
320	95.70%	94.85%	357	99.43%	96.72%
321	95.84%	94.92%	358	99.51%	96.76%
322	95.96%	94.98%	359	99.58%	96.79%
323	96.09%	95.05%	360	99.65%	96.83%
324	96.22%	95.11%	361	99.72%	96.86%
325	96.34%	95.17%	362	99.79%	96.90%
326	96.46%	95.23%	363	99.86%	96.93%
327	96.58%	95.29%	364	99.93%	99.97%
328	96.70%	95.35%	365	100.00%	100.00%

EXCEL CALCULATOR

The Excel Calculator is generally self-explanatory. Users must enter three fields:

- Gross income of Parent A (which is the parent with less "custody")
- Gross income of Parent B (which is the parent with more "custody")
- Number of children for whom support is being determined.

These fields are highlighted by **green** boxes.

Users may also enter two other fields.

- Case allows the user to "put whatever they want" there, and
- The far right cell in the row entitled "Percent of Child's Time" allows a user to put another timesharing arrangement (e.g., 47 percent timesharing) besides the ones that are automatically considered.

The calculator is automatically set up to show the child support award using the existing Minnesota schedule for 0 percent timesharing, 5 percent timesharing, 10 percent timesharing and so forth up to 50 percent timesharing. The number of days per year and days per months associated with these percentages are also shown in the first cluster.

The first cluster considers the monthly support award. The second and third clusters show the percentage adjustment comparable to the Oregon Table for Parent A and Parent B, respectively. They are labeled "Parent A's/B's Parenting Time Credit Percentage of Basic Obligation." These percentages are critical to developing an Oregon-like table adjustment. The Oregon parenting-expense adjustment does not factor in the parent's prorated share of the basic obligation into the calculation, whereas the existing Minnesota adjustment, the cross-credit, and the Michigan formula do. None of these adjustments (i.e. current Minnesota, cross-credit, and the Michigan formula) can be expressed in table form like Oregon's Table. **As a consequence, a major policy trade-off is the simplicity of the Oregon Table and whether the obligor's share should affect the amount of the adjustment.**

The Excel Calculator is not set up to consider non-joint children, the self-support reserve, childcare expenses, the child's health insurance or other special factors that are considered under the existing guidelines.

An excerpt of the calculator is shown on the next page.

Version 10/2/2015.C

INSTRUCTIONS: Put "**# of Children**" and **each parent's income** in the GREEN boxes. You may also enter another "**Percent of Child's Time**" with Parent A in cell M13.

Case Put whatever you want here **# of Children** 1

Parent A's Gross Income (parent with less "custody") $ 3,000.00

Parent B's Gross Income (parent with more "custody") $2,000.00

Combined Gross Income of the Parents $5,000.00

Schedule Amount (Basic Obligation) $ 831

	Monthly Support Award											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%	**47.0%**
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	182.5	171.6
Average overnights per month	0	3.0	4.6	6.1	7.6	9.1	10.6	12.2	13.7	14.0	15.2	14.3
Existing MN (No SSR applied)	**$499**	**$449**	**$449**	**$449**	**$449**	**$449**	**$449**	**$449**	**$449**	**$125**	**$125**	**$125**
Cross-Credit (starting at 20% timesharing)	**$499**	**$499**	**$499**	**$499**	**$436**	**$374**	**$312**	**$249**	**$187**	**$175**	**$125**	**$162**
OR Formula (Applied to MN schedule)	**$499**	**$471**	**$451**	**$425**	**$391**	**$346**	**$293**	**$230**	**$160**	**$143**	**$83**	**$127**
OR Alternative A	**$499**	**$460**	**$450**	**$437**	**$420**	**$394**	**$318**	**$241**	**$164**	**$147**	**$83**	**$130**
MI formula (Applied to MN schedule)	**$499**	**$498**	**$494**	**$486**	**$469**	**$438**	**$386**	**$309**	**$205**	**$181**	**$83**	**$157**

	Parent A's Parenting Time Credit Percentage of Basic Obligation											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	50%	47%
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	182.5	171.6
Existing MN *	0.00%	7.20%	7.20%	7.20%	7.20%	7.20%	7.20%	7.20%	7.20%	39.00%	45.00%	45.00%
Cross-Credit (starting at 20% timesharing)	0.00%	0.00%	0.00%	0.00%	7.50%	15.00%	22.50%	30.00%	37.50%	39.00%	45.00%	40.50%
OR Formula (Applied to MN schedule)	0.00%	3.30%	5.71%	8.87%	12.94%	18.41%	24.80%	32.32%	40.77%	42.74%	50.00%	44.73%
OR Alternative A	0.00%	4.65%	5.86%	7.44%	9.47%	12.56%	21.79%	31.02%	40.25%	42.31%	50.00%	44.36%
MI formula (Applied to MN schedule)	0.00%	0.14%	0.55%	1.54%	3.57%	7.30%	13.50%	22.86%	35.39%	38.20%	50.00%	41.09%

	Parent B's Parenting Time Credit Percentage of Basic Obligation											
Percent of Child's Time	100%	90%	85%	80%	75%	70%	65%	60%	55%	54%	50%	53%
Overnights	365.0	328.5	310.3	292.0	273.8	255.5	237.3	219.0	200.8	197.1	182.5	193.5
Existing MN	100.00%	92.80%	92.80%	92.80%	92.80%	92.80%	92.80%	92.80%	92.80%	61.00%	55.00%	55.00%
Cross-Credit (starting at 20% timesharing)	100.00%	100.00%	100.00%	100.00%	92.50%	85.00%	77.50%	70.00%	62.50%	61.00%	55.00%	59.50%
OR Formula (Applied to MN schedule)	100.00%	96.70%	94.29%	91.13%	87.06%	81.59%	75.20%	67.68%	59.23%	57.26%	50.00%	50.00%
OR Alternative A	100.00%	95.35%	94.15%	92.57%	90.53%	87.44%	78.21%	68.98%	59.75%	57.69%	50.00%	55.64%
MI formula (Applied to MN schedule)	100.00%	99.86%	99.45%	98.46%	96.43%	92.70%	86.50%	77.14%	64.61%	61.80%	50.00%	58.91%

*This is not the same as the 12% adjustment. The purpose of the caculated percentages is to be comparable to the OR table amounts.

APPENDIX A: EXAMPLES OF CROSS-CREDIT FORMULA

VERMONT

http://dcf.vermont.gov/sites/dcf/files/pdf/ocs/GuidelinesShared.pdf

SHARED CUSTODY

Child Support Worksheet Instructions

When each parent exercises physical custody (keeping the children overnight) thirty percent (30%) or more of a calendar year, this is considered shared custody. The guideline calculation in these cases is adjusted to reflect the additional costs of maintaining two households. This is a credit which is determined by multiplying 150% of the child expenditures by the percentage of time that parent exercises custody. *15 V.S.A. § 657(a)*

When one parent exercises physical custody for twenty-five percent (25%) or more, but less than thirty percent (30%) of the calendar year, there is an additional adjustment in order to minimize economic disputes over parent-child contact and visitation. *15 V.S.A. § 657(b)* This adjustment is derived from the Partial Shared Costs Table at the end of the Shared Tax Conversion Table (the last pink page).

These instructions and worksheets incorporate all adjustments for shared custody cases. On the shared custody worksheet, parent A is the parent with the child(ren) the higher percentage of time. If each parent has the child(ren) 50% of the time, Parent A is the parent with the lower Monthly Gross Income.

COLORADO

(a Colorado Revised Statutes § 14-10-115(8).) . . . a total child support obligation is determined by adding each parent's respective basic child support obligation, as determined through the guidelines and schedule of basic child support obligations . . . , work-related net child care costs, extraordinary medical expenses, and extraordinary adjustments to the schedule of basic child support obligations. The parent receiving a child support payment shall be presumed to spend his or her total child support obligation directly on the children. The parent paying child support to the other parent shall owe his or her total child support obligation as child support to the other parent minus any ordered payments included in the calculations made directly on behalf of the children for work-related net child care costs, extraordinary medical expenses, or extraordinary adjustments to the schedule of basic child support obligations.

(b) Because shared physical care presumes that certain basic expenses for the children will be duplicated, an adjustment for shared physical care is made by multiplying the basic child support obligation by one and fifty hundredths (1.50). In cases of shared physical care, each parent's adjusted basic child support obligation . . . shall first be divided between the parents in proportion to their respective adjusted gross incomes. Each parent's share of the adjusted basic child support obligation shall then be multiplied by the percentage of time the children spend with the other parent to determine the theoretical basic child support obligation owed to the other parent. To these amounts shall be added each parent's proportionate share of work-related net child care costs, extraordinary medical expenses, and extraordinary adjustments to the schedule of basic child support obligations. The parent owing the greater amount of child support shall owe the difference between the two amounts as a child support order minus any ordered direct payments made on behalf of the children for work-related net child care costs, extraordinary medical expenses, or extraordinary adjustments to the schedule of basic child support obligations. In no case, however, shall the amount of child support ordered to be paid exceed the amount of child support that would otherwise be ordered to be paid if the parents did not share physical custody.

APPENDIX B: EXCERPT FROM MICHIGAN

http://courts.mi.gov/Administration/SCAO/Resources/Documents/Publications/Manuals/focb/2013MCSF.pdf

Note that in MI, Parent A has more "custody" and Parent B has less "custody." So, the parents should be flipped in the calculation for comparison to how Minnesota defines Parent A and Parent B.

3.03 Adjusting Base Obligation with the Parental Time Offset

3.03(A) Presuming that as parents spend more time with their children they will directly contribute a greater share of the children's expenses, a base support obligation needs to offset some of the costs and savings associated with time spent with each parent. (1) Base support mainly considers the cost of supporting a child who lives in one household. When a parent cares for a child overnight, that parent should cover many of the child's unduplicated costs, while the other parent will not have to spend as much money for food, utility, and other costs for the child.

(2) Apply the following Parental Time Offset Equation to adjust base support to reflect some of the cost shifts and savings associated with the child spending time with both parents:

$$\frac{(A_o)^3 \cdot (B_s) - (B_o)^3 \cdot (A_s)}{(A_o)^3 + (B_o)^3}$$

A_o = Approximate annual number of overnights the children will likely spend with parent A
B_o = Approximate annual number of overnights the children will likely spend with parent B
A_s = Parent A's base support obligation
B_s = Parent B's base support obligation

Note: A negative result means that parent A pays and a positive result means parent B pays.

3.03(B) An offset for parental time generally applies to every support determination whether in an initial determination or subsequent modification, whether or not previously given.

3.03(C) Apply the parental time offset to adjust a base support obligation whenever the approximate annual number of overnights that each parent will likely provide care for the children-in-common can be determined. When possible, determine the approximate number based on past practice. (1) When different children spend different numbers of overnights with the parents, use the average of the children's overnights.

(2) Absent credible evidence of changed practices, presume the same approximate number that was used in determining the most recent support order.

(3) In cases without a past determination or other credible evidence, presume the approximate number of overnights granted in the terms of the current custody or parenting time order.

(4) Credit a parent for overnights a child lawfully and actually spends with that parent including those exercised outside the terms of the currently effective order. This may happen by agreement, or when one parent voluntarily foregoes time granted in the order. Do not consider overnights exercised in violation of an order. (a) If a parent produces credible evidence that the approximate number exercised differs from the number granted by the custody or parenting time order, credit the number according to the evidence without requiring someone to formally petition to modify the custody or parenting time order.

(b) When the most recent support order deviated based on an agreement to use a number of overnights that differed from actual practice, absent some other change warranting modification, credible evidence of changed practices only includes an order changing the custody or parenting time schedule.

3.03(D) If a substantial difference occurs in the number of overnights used to set the order and those actually exercised (at least 21 overnights or that causes a change of circumstances exceeding the modification threshold (§4.04)), either parent or a support recipient may seek adjustment by filing a motion to modify the order.

3.03(E) So the court can know if circumstances have changed at the time of a subsequent determination, every child support order must indicate whether it includes a parental time offset and the number of overnights used in its calculation.

Alternative Adjustments for Parenting-Time Expenses and Low-Income Adjustments

Prepared for:
The Child Support Work Group
Minnesota Department of Human Services
Child Support Division

Prepared by:
Jane Venohr, Ph.D.
Center for Policy Research
Denver, CO 80218
www.centerforpolicyresearch.org
303.837.1555
jvenohr@centerforpolicyresearch.org

Nov. 10, 2015

Table of Contents

EXECUTIVE SUMMARY

Minnesota is contemplating two alternative parenting-expense adjustments: the Oregon Alternative A adjustment, and the Michigan formula. Workgroup members are concerned about "flipping;" that is, at what number of overnights does the formula flips from Parent A (the parent with less custody) owing support to Parent B (the parent with more custody) owing support. Workgroup members are also concerned about how an alternative parenting-expense formula would interact with a low-income adjustment. Minnesota's current low-income adjustment consists of a self-support allowance of 120 percent of the Federal Poverty Level for one person ($1,177 per month) and a minimum order of $50, $75 or $100 depending on the number of children. Minnesota applies both the low-income adjustment and its 12-percent adjustment to timesharing arrangements of 45 percent or less, but *does not apply* the low-income adjustment when Parent A has more than 45-percent timesharing.

Flipping occurs in most states' parenting-expense adjustments.

It occurs in the cross-credit formula, which is the most commonly used formula among states, when Parent A's timeshare exceeds Parent's A prorated share of income. In other words, it can only occur when Parent B has more income than Parent A. Under Oregon Adjustment A, the flip occurs when Parent A's prorated share of income is less than the adjustment percentage. In Michigan, flipping occurs when the differences in the parents' prorated share is greater than the cubed difference of their timeshares. This results in Michigan's formula being slower to flip than the cross-credit formula or the Oregon Alternative A formula.

Most states limit flipping through setting a minimum timesharing threshold (e.g., 25-45 percent) before applying the adjustment. Another way that states limit it is to provide that the parenting-expense adjustment cannot be applied if it significantly reduces the custodial household's income or by providing a similar deviation criterion. Based on analysis of case file data in other states and knowledge of other states' policies, CPR believes the occurrence of flipping at low levels of timesharing (e.g., 25 percent or less) is likely to be nominal.

States are mixed on whether they apply both the low-income adjustment and the parenting-expense formula.

Since most states don't have as generous of self-support allowance as Minnesota does — only a few states update their self-support allowance annually and even fewer set their self-support allowance above 100 percent of the FPL— and most states don't apply a parenting-time expense formula to low levels of timesharing (e.g., less than 20 percent), the provisions of other states are not that informative to Minnesota's dilemma.

Nonetheless, this brief does document an anomaly with the minimum order amount. If the minimum order is applied to all parenting-time situations (e.g., almost equal custody and almost equal income), it will result in a minimum-order amount (e.g., $50 per month for one child) rather than a zero or nominal order amount. This is a problem in Oregon as well since Oregon's minimum order is $100 per month. It is less of a problem in Michigan because Michigan's minimum order is generally less (i.e., 10 percent of the parent's net income) and Michigan's version of a self-support allowance is lower than Minnesota's. Regardless, providing that the minimum order shall not be applied if each parent has substantial custody (say, each parent has the child for at least 35 percent of the child's time) can rectify this anomaly.

The Excel calculator now includes the low-income adjustment.

A new Excel calculator that compares the parenting-expense formulas has been developed. Minnesota's existing low-income adjustment is layered on top of these formulas to examine the impact. The new calculator also corrects for a round-off difference with the State's online calculator.

Neither adjustment is clearly better than the other, but either would alleviate the current cliff effect.

The Oregon Alternative A adjustment generally produces support awards slightly less than the Michigan adjustment and the Michigan adjustment more closely tracks the existing Minnesota adjustment.

CPR just learned that after nearly a decade of use, Michigan intends to make a modification to its parenting-expense formula. Instead of using the 3.0 power (i.e., cubing, which provides for a gradual change), Michigan is proposing the power to 2.54, which will produce a more precipitous change as Parent A's time with the child increases.

Oregon has been using its adjustment for about two years. The actual Oregon adjustment has a more precipitous decrease than both the Oregon Alternative Adjustment A (which is by design) and he existing Michigan adjustment. Prior to adopting its existing adjustment, Oregon used the cross-credit formula. Oregon believes its current adjustment reduces parental conflict over the number of overnights each parent has the child.

Each alternative adjustment has some strengths over the other (e.g., ease of use and transparency), but neither adjustment emerges as being better than the other. Nonetheless, either would alleviate the cliff effect in Minnesota's current parenting-expense formula. Minnesota's existing low-income adjustment can also be layered on top of either adjustment, but there should be some exceptions to the minimum order when there is substantial timesharing to address the minimum order anomaly.

PURPOSE

The major purpose of this briefing is to explore the interaction of alternative parenting-expense formulas (i.e., Oregon Alternative A and the Michigan formula, which are explained in earlier briefs) and the existing Minnesota low-income adjustment. It also addresses the issue of "flipping;" that is, situations in which the guidelines calculation results in the parent with more "custody" (i.e., Parent B) owing the other parent (i.e., Parent A) support if Parent B has substantially more income than Parent A as Parent A's time with the child increases.

This brief also explains some technical changes in the guidelines calculator (i.e., a correction for round-off differences between the previous Excel calculator and the Minnesota online calculator) and Michigan's proposed changes to its parenting-expense formula. The brief concludes with a policy assessment of the alternative parenting-expense adjustments.

FLIPPING OF PARENT OBLIGATED TO PAY SUPPORT

Exhibits A and B illustrate "flipping." Exhibit A shows it occurs under the Oregon Alternative A formula if Parent A's prorated share of combined parental income is less than the percentage adjustment.

Exhibit A: Illustration of Flipping of Which Parent Owes Support	Parent A	Parent B	Combined
Line 1. Gross Income	$2,000	$6,000	$8,000
Line 2. Percentage of Income	25%	75%	100
Line 3. Basic Obligation	$260	$880	$1,040
Case A: Line 4. Overnights	134	231	365
Case A: Line 5: Percentage adjustment from Oregon A Table	24.87%		
Case A: Line 6: Parent A's timesharing adjustment (Line 3 combined X Line 5)	$259		
Case A: Line 7: Preliminary Support Award (Line 3 – Line 6)	$1		
Case A: Line 8: Support award (Line 7 or min. support award of $50)	$50		
Case B: Line 4. Overnights	135	231	365
Case B: Line 5: Percentage adjustment from Oregon A Table	25.38%		
Case B: Line 6: Parent A's timesharing adjustment (Line 3 combined X Line 5)	$264		
Case B: Line 7: Preliminary Support Award (Line 3 – Line 6)	($4)		
Case B: Line 8: Support award (Line 7 or min. support award of $50)		$50	

If Parent's A prorated share < percentage time-sharing adjustment →Parent B owes Parent A

Flipping also occurs under the existing Minnesota parenting-expense adjustment and the Michigan formula. Pinpointing when it occurs under these two formulas is not as straightforward as it is for the Oregon Alternative A. Under the existing Minnesota parenting-expense adjustment, it will only occur when Parent A has the child more than 45 percent of the time and Parent B's share of combined parental income is more than 50 percent. Michigan's formula flips when the difference in the parents' prorated share is greater than the difference of their cubed time shares. Exhibit A also shows the amount of the flip is exacerbated by the minimum order (which is $50 per month in this scenario).

Exhibit B

Version 11/5/2015

INSTRUCTIONS: Complete the green boxes

Case Exhibit B **# of Children** 1

Parent A's Gross Income $ 2,000 **Parent B's Gross Income** (parent with more "custody") $ 6,000

Existing Mini

Combined Gross Income of the Parents $ 8,000

Schedule Amount (Basic Obligation) $ 1,040

Existing Self-Support Adjustment (SSA) $ 1,177 (120% Fed. Pov. level for 1 person)

Parent's A prorated share of income (25%) > OR Alternative A adjustment (26.92%)→ Flip in which order obligated to pay support

	Monthly Support Award												
Percent of Child's Time	31.2%	32.9%	34.5%	36.2%	37.8%	39.5%	41.1%	42.7%	44.4%	46.0%	47.7%	49.3%	50.0%
Overnights per year with Parent A	114.0	120.0	126.0	132.0	138.0	144.0	150.0	156.0	162.0	168.0	174.0	180.0	182.5
Average overnights per month	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	19.0
Parent's A Share	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
OR Alternative A	14.61%	17.69%	20.76%	23.84%	26.92%	30.00%	33.07%	36.15%	39.23%	42.31%	45.38%	48.46%	50.00%
Existing MN (w/ MN low-income	$229	$229	$229	$229	$229	$229	$229	$229	$229	($390)	($390)	($390)	($390)
OR Alt A (w/ MN low-income adjustment)	$108	$76	$50	$50	($50)	($52)	($84)	($116)	($148)	($180)	($212)	($244)	($823)
Michigan (w/ MN low-income adjustment)	$171	$151	$127	$100	$69	$50	($50)	($50)	($90)	($138)	($188)	($239)	($823)
MI formula (w/ no low inc adjustment)	$171	$151	$127	$100	$69	$35	($4)	($45)	($90)	($138)	($188)	($239)	($260)
MI formula (w/ MI low-income adjust.)	$171	$151	$127	$100	$69	$35	($4)	($45)	($90)	($138)	($188)	($239)	($260)
OR Alt A (w/ NO low-income adjustment)	$108	$76	$44	$12	($20)	($52)	($84)	($116)	($148)	($180)	($212)	($244)	$50
OR Alt A (w/ varying SSR & 10% min.)	$108	$76	$44	$12	($20)	($52)	($84)	($116)	($148)	($180)	($212)	($244)	$0

The parent obligated to pay support flips from Parent A with 132 overnights per year to Parent B at 138 overnights per year for all three versions of the Oregon Alternative A formula shown in this exhibit. (The different versions are explained in detail later.)

- It flips from Parent A owing $50 to ($50) under Oregon Alternative A(with the Minnesota low-income adjustment)
- It flips from Parent A owing $12 to ($20) under Oregon Alternative A(with no low income adjustment)
- It flips from Parent A owing $23 to ($20) under Oregon Alternative A(with a variable self-support adjustment)

Flipping also occurs under Minnesota's existing parenting-expense formula and the Michigan formula. It is simpler to explain under the Oregon formula. Flipping is more complicated due to the Minnesota 45-percent threshold and Michigan's cubing.

Flipping in Other States with Parenting-Time Expense Adjustments

Most parenting-expense formulas in other state child support guidelines (e.g., Michigan and Oregon) will also flip. Moreover, most policymakers in these states believe a flip is appropriate when Parent B has substantially more income than Parent A.

When the flip occurs and by how much can be mitigated by three ways.

a) **Having a different formula for low-levels of timesharing** that doesn't allow for a flip (e.g., Minnesota's 12 percent adjustment and Missouri's 10 percent adjustment). However, some of the disadvantages of a percentage adjustment are that it assumes a one-size fits all adjustment for a wide range of parenting arrangements and it often produces cliff effects when it transitions to larger adjustments for significant custody situations.

b) **Providing a high timesharing threshold** for applying the parenting-expense formula (e.g., 45 percent timesharing in Minnesota). Most states use the cross-credit formula (which is essentially the framework of the formula Minnesota uses above 45 percent) as the parenting-expense formula and provide that the formula cannot be applied until parenting time exceeds 25 to 40 percent of the child's time. Under the cross-credit formula, flipping occurs when Parent A's share of time exceeds Parent A's prorated share of income. This is more likely to occur at higher levels of shared-parenting time. To this end, higher parenting-time thresholds limit flipping at low levels of timesharing.

c) **Providing a deviation criterion when the parenting-time adjustment significantly reduces the income in the primary residence of the child.** Several states (e.g., Indiana) provide a deviation criterion or that the parenting-time adjustment should not be applied if it significantly reduces the income of the custodial household.

Most states have higher timesharing threshold for applying the parenting-expense adjustment than Minnesota's 10-percent timesharing criterion. There are a few states that have specifically designed their formulas not to flip. New Jersey and Indiana both assume that one parent always has more child-rearing expenses than the other parent even in equal incomes and equal custody cases. These states assume only one parent incurs the cost of the child's clothes, IPod or cellphone (assuming the child has one) and similar personal items. Pennsylvania doesn't make this assumption about the expense of the child's personal items but its formula also doesn't allow for a flip. (As an aside, the committee currently reviewing the Pennsylvania child support guidelines is considering other parenting-expense adjustments to deal with the cliff in Pennsylvania current parenting-expense adjustment.)

PARENTING-EXPENSE ADJUSTMENT & LOW-INCOME ADJUSTMENTS

Updated Excel Calculator

The updated Excel calculator incorporates Minnesota's low-income adjustment into the comparisons of alternative parenting-expense formulas. It also partially corrects for the

difference between the original Excel calculator and the Minnesota online calculator. The discrepancy resulted from the Minnesota online calculator rounding the parent's prorated share to the nearest whole number (e.g., 66.67% is rounded to 67%). The November version of the Excel calculator also rounds to the nearest whole number. A discrepancy, however, still exists with numbers ending in 0.5. The Excel calculator will round 0.5 to 1 while the Minnesota online calculator will round down to 0.[1]

Exhibit C shows the parameters of the alternative parenting-expense adjustments formulas being compared in the November version of the Excel calculator.

Exhibit C: Self Support Allowances and Minimum Orders in November Version of Excel Calculator		
	Self Support Allowance	Minimum Order
Existing MN (w/ MN low-income adjustment)	$1,117 (below 45% timesharing) None (above 45% timesharing)	$50/$75/$100 (below 45% timesharing) None (above 45% timesharing)
OR Alt A (w/ MN low-income adjustment)	$1,117 (all timesharing levels)	$50/$75/$100 (all timesharing levels)
Michigan (w/ MN low-income adjustment)	$1,117 (all timesharing levels)	$50/$75/$100 (all timesharing levels)
MI formula (w/ NO low inc adjustment)	None	None
OR Alt A (MN SSA & min = time adjt amt)	$1,117 (all timesharing levels)	$50/$75/$100 (if the income available for support is less than the minimum) None (if the amount is less than the minimum due to the parenting-expense adjustment)
MI (MN SSA & min = time adjt amt)	$1,117 (all timesharing levels)	Same as above
MI formula (w/ MI low-income adjust.)	$1,000 gross*	Minimum order: 10% of income below $1,000 gross income*
OR Alt A (w/ NO low-income adjustment)	None	None
OR Alt A (w/ varying SSR & 10% min.)	$1,117 + % of FPL for the children multiplied by the % of time the children spend with that parent.	10% of gross income

*Michigan's guidelines are actually based on net income rather than gross income. The actual self-support allowance in Michigan is $931, which is the 2012 federal poverty level for one person, and applied to net income. For purposes of application to gross income, it is assumed that taxes are about $69 per month, so the gross equivalent is $1,000 per month. In addition, Michigan provides a transitional formula for incomes above $931 net ($1,000 gross). The formula is the lesser of the regular guidelines calculation and 10% of income + 50-70% (depending on # of children) multiplied by income above $1,000/month.

Essentially, the Minnesota low-income adjustment, which consists of the self-support allowance ($1,117 per month, which is 120 percent of the 2015 federal poverty level for one person) and the minimum order amount (i.e., $50, $75 or $100 per month depending on the number of children), are layered on top of the Oregon Alternative A adjustment and Michigan adjustment. For purposes of comparisons, other versions include the following.

- *No low-income adjustment.* This is included so users can see the impact of layering Minnesota's current low-income adjustment on the alternative parenting-expense formulas.
- *No minimum order when the amount is driven down by the parenting-expense adjustment.* This is an option to address the anomaly of the minimum order, which is discussed next.

[1] CPR did not check whether there is a pattern of rounding 0.5 down with even numbers and up with odd numbers (e.g., 4.5 is rounded up to 5 while 3.5 is rounded down to 4). That even/odd pattern use to common upon programmers.

- *Michigan's actual low-income adjustment.* Michigan's actual low-income adjustment is more complicated than the Minnesota low-income adjustment. Further, the Michigan low-income adjustment is applied before the parenting-expense adjustment while the Minnesota low-income adjustment is essentially the last step of the guidelines calculation. Michigan's approach generally reduces the support award amount.
- *An alternative low-income adjustment.* One obvious criticism of the existing Minnesota self-support reserve is that it does not consider the needs of the children while in the care of that parent. To rectify this, a larger self-support allowance is used with the Oregon Alternative A formula (which is shown on the last row of the comparisons). Increasing the self-support allowance results in lowered support awards.

Anomaly with the Minimum Order

The minimum order can exacerbate the dollar difference in the order amount when there is flipping of the parent who owes child support. This is a problem in Oregon because Oregon has a minimum order of $100 per month. This means under the Oregon guidelines, Parent A will owe a minimum of $100 per month and just adding one more overnight could flip the Oregon guidelines calculation to Parent B owing the minimum of $100 per month. A similar problem exists if Minnesota applies its minimum order to all shared-parenting situations.

Exhibit D (which is the same scenario shown in Exhibit A) shows that layering the Minnesota low-income adjustment on top of the alternative parenting expense formulas results in the order amount never being less than the minimum amount (e.g., $50 for one child). Case A considers 134 overnights (36.7% timesharing and Case B considers 135 overnights (37.0% timesharing). Before the minimum order is applied, Parent A would owe $1 per month when Parent A has 134 overnights and Parent B would owe $4 if Parent B has 135 overnights.

Exhibit D: Illustration of the Impact of Minimum Orders	Parent A	Parent B	Combined
Line 1. Gross Income	$2,000	$6,000	$8,000
Line 2. Percentage of Income	25%	75%	100
Line 3. Basic Obligation	$260	$880	$1,040
Case A: Line 4. Overnights	134	231	365
Case A: Line 5: Percentage adjustment from Oregon A Table	24.87%		
Case A: Line 6: Parent A's timesharing adjustment (Line 3 combined X Line 5)	$259		
Case A: Line 7: Preliminary Support Award (Line 3 – Line 6)	$1		
Case A: Line 8: Support award (Line 7 or min. support award of $50)	$50		
Case B: Line 4. Overnights	135		
Case B: Line 5: Percentage adjustment from Oregon A Table	25.38%		
Case B: Line 6: Parent A's timesharing adjustment (Line 3 combined X Line 5)	$264		
Case B: Line 7: Preliminary Support Award (Line 3 – Line 6)	($4)		
Case B: Line 8: Support award (Line 7 or min. support award of $50)		$50	

Without the min. order of $50, Parent A would owe $1 in Case A

Without the min. order of $50, Parent B would owe $4 in Case B.

The most direct way to alleviate this potential problem is to limit application of the minimum order.

- For example, the minimum order can only apply if it the parent qualifies because of income, not because of the parenting-expense adjustment.
- Still another example is that the minimum order cannot be applied if Parent A's parenting time exceeds 35 percent of the child's time or another threshold. (The threshold is a policy decision, but should consider when both parents have a significant share of parenting time.)

Based on CPR's analysis of case file data in other states, cases in which Parent B has substantially more income than Parent A and a parenting-time arrangement that is less than Parent B's prorated income share are generally infrequent. As a consequence, these situations may be appropriately addressed by guidelines deviations or court discretion.

Do Other States Apply Both Adjustments?

States are mixed whether their guidelines allow both the low-income adjustment and time-sharing adjustment to be applied. Generally, those states requiring a higher threshold for applying the parenting-expense threshold do not allow **both** the parenting-expense adjustment and low-income adjustment to be applied. For example, Colorado, which uses the cross-credit formula for timesharing arrangements of more than 25 percent, does not apply the minimum order if each parent keeps the children more than 92 overnights per year. Further, Colorado provides that in no case…"shall the amount of child support ordered to be paid exceed the amount of child support that would otherwise be ordered to be paid if the parents did not share physical custody."

As noted in the CPR September brief, there are only eight states, including Minnesota, that provide a parenting-expense formula for parenting arrangements of less than 20 percent. **The provisions of these states are not that informative to Minnesota's current dilemma.** One reason is that Minnesota has a more generous low-income adjustment than many states.

- In *Arizona* and *California*, the low-income adjustment is applied at court discretion in all cases regardless whether the parenting-expense adjustment is applied. In Arizona, the court must first consider the "financial impact the reduction would have on the custodial parent's household" before making the adjustment.
- In *Indiana*, the parenting-expense adjustment is not automatic. "The court should determine if application of the credit will jeopardize a parent's ability to support the children." Further, Indiana's low-income adjustment is incorporated into the schedule, so only applies to a limited number of parents with very low incomes. For the parenting-expense to be applied, there must be at least 52 overnights, and then the adjustment is only 6.2 percent of the schedule amount.

- *Florida and Missouri* incorporate their low-income adjustments into their respective schedules, so Parent A's income would have to fall in that schedule area for the low-income adjustment to be applied. Since neither state has kept their respective low-income adjustments current and both requires a parenting-time order for the parenting-expense to apply, few cases would have both adjustments apply in these states.
- *Michigan's* formula provides that the low-income adjustment be applied prior to inserting the adjusted amount into the Michigan parenting-expense formula. As aside, this results in an amount this is lower than if the low-income adjustment is applied after the parenting-expense formula. Michigan has a lower minimum order (i.e., 10 percent of the obligated parent's net income) than Minnesota, but it has a lower threshold for applying it (i.e., net income of $931 per month).
- *New Jersey* provides that its parenting-expense adjustment cannot be applied unless the custodial parent's household income exceeds 200 percent of the federal poverty level for that family size.
- *Oregon* applies its low-income adjustment as a last step in its guidelines calculation. As a consequence, Oregon's $100 minimum order applies to cases in which the parenting-expense calculation would result in a significantly less order amount (say $25 per month).

The next two pages show the impact when both parents have low income. Each page considers three low-income scenarios.

- The parents have equal incomes in the first scenario.
- Parent A has more income in the second scenario.
- Parent B has more income in the third scenario.

Case	Both parents work 32 hrs per week @ $8/hour							# of Children	1			
					Parent A's Gross Income (parent with less "custody")	$ 1,109		Parent B's Gross Income (parent with more "custody")	$ 1,109			
	Monthly Support Award											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	48%	50%
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	175.2	182.5
Average overnights per month	0	3.0	4.6	6.1	7.6	9.1	10.6	12.2	13.7	14.0	14.6	15.2
Existing MN (w/ MN low-income adjt)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$0**	**$0**	**$0**
OR Alt A (w/ MN low-income adjustment)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$0**
Michigan (w/ MN low-income adjustment)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$0**
MI formula (w/ no low inc adjustment)	**$269**	**$268**	**$266**	**$261**	**$250**	**$230**	**$196**	**$146**	**$79**	**$63**	**$32**	**$0**
OR Alt A (w/ NO low-income adjustment)	**$269**	**$244**	**$238**	**$229**	**$218**	**$201**	**$152**	**$102**	**$52**	**$41**	**$22**	**$0**

Case	Parent A works 40 hrs per week @ $10/hr							# of Children	1			
					Parent A's Gross Income (parent with less "custody")	$ 1,600		Parent B's Gross Income (parent with more "custody")	$ 1,100			
	Monthly Support Award											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	48%	50%
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	175.2	182.5
Average overnights per month	0	3.0	4.6	6.1	7.6	9.1	10.6	12.2	13.7	14.0	14.6	15.2
Existing MN (w/ MN low-income adjt)	**$342**	**$301**	**$301**	**$301**	**$301**	**$301**	**$301**	**$301**	**$301**	**$78**	**$78**	**$78**
OR Alt A (w/ MN low-income adjustment)	**$342**	**$315**	**$308**	**$299**	**$287**	**$269**	**$216**	**$162**	**$109**	**$97**	**$76**	**$52**
Michigan (w/ MN low-income adjustment)	**$342**	**$341**	**$339**	**$333**	**$321**	**$300**	**$264**	**$210**	**$137**	**$121**	**$87**	**$52**
MI formula (w/ no low inc adjustment)	**$342**	**$341**	**$339**	**$333**	**$321**	**$300**	**$264**	**$210**	**$137**	**$121**	**$87**	**$52**
OR Alt A (w/ NO low-income adjustment)	**$342**	**$315**	**$308**	**$299**	**$287**	**$269**	**$216**	**$162**	**$109**	**$97**	**$76**	**$52**

Case	Parent B is the higher earner							# of Children	1			
					Parent A's Gross Income (parent with less "custody")	$ 1,100		Parent B's Gross Income (parent with more "custody")	$ 1,600			
	Monthly Support Award											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	48%	50%
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	175.2	182.5
Average overnights per month	0	3.0	4.6	6.1	7.6	9.1	10.6	12.2	13.7	14.0	14.6	15.2
Existing MN (w/ MN low-income adjt)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**($78)**	**($78)**	**($78)**
OR Alt A (w/ MN low-income adjustment)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**($50)**	**($50)**	**($52)**
Michigan (w/ MN low-income adjustment)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**($50)**	**($52)**
MI formula (w/ NO low inc adjustment)	**$238**	**$237**	**$235**	**$229**	**$217**	**$195**	**$159**	**$105**	**$33**	**$16**	**($18)**	**($52)**
OR Alt A (w/ NO low-income adjustment)	**$238**	**$211**	**$204**	**$195**	**$183**	**$165**	**$111**	**$58**	**$4**	**($8)**	**($28)**	**($52)**

Case	Both parents work 40 hrs per week @ $15/hour					# of Children	1					
					Parent A's Gross Income (parent with less "custody")	$ 2,400			Parent B's Gross Income (parent with more "custody")	$ 2,400		
	Monthly Support Award											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	48%	50%
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	175.2	182.5
Average overnights per month	0	3.0	4.6	6.1	7.6	9.1	10.6	12.2	13.7	14.0	14.6	15.2
Existing MN (w/ MN low-income adjt)	**$410**	**$361**	**$361**	**$361**	**$361**	**$361**	**$361**	**$361**	**$361**	**$0**	**$0**	**$0**
OR Alt A (w/ MN low-income adjustment)	**$410**	**$372**	**$362**	**$349**	**$332**	**$307**	**$231**	**$156**	**$80**	**$63**	**$50**	**$0**
Michigan (w/ MN low-income adjustment)	**$410**	**$409**	**$405**	**$397**	**$381**	**$350**	**$299**	**$222**	**$120**	**$97**	**$50**	**$0**
MI formula (w/ no low inc adjustment)	**$410**	**$409**	**$405**	**$397**	**$381**	**$350**	**$299**	**$222**	**$120**	**$97**	**$49**	**$0**
OR Alt A (w/ NO low-income adjustment)	**$410**	**$372**	**$362**	**$349**	**$332**	**$307**	**$231**	**$156**	**$80**	**$63**	**$34**	**$0**

Case	Parent A works 40 hrs per week @ $15/hour					# of Children	1					
					Parent A's Gross Income (parent with less "custody")	$ 2,400			Parent B's Gross Income (parent with more "custody")	$ 1,100		
	Monthly Support Award											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	48%	50%
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	175.2	182.5
Average overnights per month	0	3.0	4.6	6.1	7.6	9.1	10.6	12.2	13.7	14.0	14.6	15.2
Existing MN (w/ MN low-income adjt)	**$458**	**$403**	**$403**	**$403**	**$403**	**$403**	**$403**	**$403**	**$403**	**$189**	**$189**	**$189**
OR Alt A (w/ MN low-income adjustment)	**$458**	**$427**	**$419**	**$409**	**$395**	**$375**	**$313**	**$252**	**$191**	**$177**	**$153**	**$126**
Michigan (w/ MN low-income adjustment)	**$458**	**$457**	**$454**	**$448**	**$434**	**$410**	**$368**	**$306**	**$223**	**$204**	**$166**	**$126**
MI formula (w/ no low inc adjustment)	**$458**	**$457**	**$454**	**$448**	**$434**	**$410**	**$368**	**$306**	**$223**	**$204**	**$166**	**$126**
OR Alt A (w/ NO low-income adjustment)	**$458**	**$427**	**$419**	**$409**	**$395**	**$375**	**$313**	**$252**	**$191**	**$177**	**$153**	**$126**

Case	Parent B works 40 hrs per week @ $15/hour					# of Children	1					
					Parent A's Gross Income (parent with less "custody")	$ 1,100			Parent B's Gross Income (parent with more "custody")	$ 2,400		
	Monthly Support Award											
Percent of Child's Time	0%	10%	15%	20%	25%	30%	35%	40%	45%	46%	48%	50%
Overnights per year with Parent A	0.0	36.5	54.8	73.0	91.3	109.5	127.8	146.0	164.3	167.9	175.2	182.5
Average overnights per month	0	3.0	4.6	6.1	7.6	9.1	10.6	12.2	13.7	14.0	14.6	15.2
Existing MN (w/ MN low-income adjt)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**($189)**	**($189)**	**($189)**
OR Alt A (w/ MN low-income adjustment)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**($50)**	**($61)**	**($75)**	**($99)**	**($126)**
Michigan (w/ MN low-income adjustment)	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**$50**	**($50)**	**($50)**	**($86)**	**($126)**
MI formula (w/ no low inc adjustment)	**$206**	**$205**	**$202**	**$196**	**$182**	**$157**	**$116**	**$54**	**($29)**	**($48)**	**($86)**	**($126)**
OR Alt A (w/ NO low-income adjustment)	**$206**	**$175**	**$167**	**$156**	**$143**	**$122**	**$61**	**($0)**	**($61)**	**($75)**	**($99)**	**($126)**

CONCLUSIONS AND OTHER CONSIDERATIONS

Exhibit E compares the Oregon Alternative A adjustment and the Michigan adjustment using some desirable qualities of good policy and other attributes.

Exhibit E: Comparison of Alternative Parenting-Expense adjustments by Various Attributes

	Existing MN	Oregon Alternative A	Michigan
Ease of use	Easy	Easy: Lookup table	Difficult: Requires calculator
Transparency of adjustment amount to user	Transparent	Transparent: Lookup table	Difficult: only because formula is difficult
Ease to explain		Difficult: It is a compromise between Oregon's sigmoid function and MN's existing adjustment	Easy to difficult: Has intuition of the cross-credit but taking it to the 3rd power makes it gradual
Cliff effects	At 45%	None in parenting-expense formula	None in parenting-expense formula
Interaction with Low-Income Adjustment (self-support amount & min. order)	Not applicable to timesharing above 45%	Will need rule or deviation factor to address flipping at low-levels of timesharing and minimum-order anomaly	Will need rule or deviation factor to address flipping at low-levels of timesharing and minimum-order anomaly
Interaction with Adjustment for Non-Joint Children	Lowers available income	Lowers available income	Lowers available income
Interaction with Adjustment for Split Custody[2]		To be determined by policy	To be determined by policy
Experiences of the State		This is the third parenting-expense formula that Oregon has used in the last decade. This formula became effective about two years ago. Anecdotal evidence provided by Oregon finds that it reduces parental conflict over the number of overnights because the adjustment is very gradual.	Michigan has always had the same parenting-expense formula but switched from taking it to 2nd power (squaring) to the 3rd power (cubing) about a decade ago. MI switched because it resulted in a more gradual decrease. MI, which is reviewing its guidelines this year, however, is now proposing to take the formula to the 2.54th power. This is in response to criticisms from a Michigan parents' advocacy group that the 3rd power does not provide a sufficient reduction (i.e., it doesn't cover $8 per day for the child's food.)[3]

[2] Under most state guidelines, the best way to address split custody mathematically is to calculate two orders and offset them. One calculation would assume the mother is Parent A and the other calculation would assume the father is Parent A. Support would be determined for each child for whom that parent has primary custody. If there are three children, however, and each parent has primary custody of one child and each parent has equal custody of the third child that may be best handled through a deviation factor. Given that nationally, less than 10 percent of child support cases involve three or more children, this is not likely to be a common situation.

[3] The USDA provides a range of food budgets for individuals and families by age and gender. For each, they offer four different food budgets based on income. The lowest is used for SNAP (formerly called Food Stamps) benefits. The highest is used for military per diem. Michigan consulted the "moderate food budget," which is about $54 per week (about $8 per day) for an eight-year old. The premise is that the timesharing adjustment should at least cover the child's

Neither adjustment clearly merges as the better policy for Minnesota. Oregon Alternative A generally produces lower amounts than the Michigan formula. On the one hand, that could be a merit of the Michigan formula: that is, it more closely tracks the existing Minnesota adjustment. On the other hand, since Michigan is contemplating a change its parenting-expense formula that will make it more generous, this could be a limitation. The counter-argument is that Minnesota could adopt the existing Michigan formula now and then review it as part of its next quadrennial review and tweak it (e.g., modify it so it produces a larger adjustment). This can be done simply by changing the power of the formula (i.e., 2, which is what Michigan used a decade ago; 2.54, which is what Michigan is now proposing; and 3, which is what Michigan uses now.) Similarly, Minnesota could adopt the Oregon Alternative A formula now and tweak it in four years.

Either formula will be an improvement from Minnesota's current formula by alleviating the cliff effect.

food for a day. The USDA food budget are available from: http://www.cnpp.usda.gov/sites/default/files/CostofFoodSep2015.pdf .

APPENDIX A: OREGON ALTERNATIVE A

Note that the adjustment percentages would be 0 for timesharing arrangements below 10 percent if Minnesota provides that the adjustment can only be applied to parenting time in excess of 10 percent.

Exhibit 3: Comparison of Oregon Table to Alternative Table A											
Overnights	Oregon Credit %	Alternative A Credit %	Overnights	Oregon Credit %	Alternative A Credit %	Overnights	Oregon Credit %	Alternative A Credit %	Overnights	Oregon Credit %	Alternative A Credit %
0	0.00%	0.00%	36	3.19%	4.60%	72	8.67%	7.34%	108	17.77%	11.89%
1	0.07%	0.04%	37	3.30%	4.65%	73	8.87%	7.44%	109	18.09%	12.05%
2	0.14%	3.07%	38	3.42%	4.71%	74	9.07%	7.54%	110	18.41%	12.56%
3	0.21%	3.11%	39	3.54%	4.77%	75	9.27%	7.64%	111	18.73%	13.07%
4	0.28%	3.14%	40	3.66%	4.83%	76	9.48%	7.74%	112	19.06%	13.58%
5	0.35%	3.18%	41	3.78%	4.89%	77	9.68%	7.84%	113	19.39%	14.10%
6	0.42%	3.21%	42	3.91%	4.96%	78	9.90%	7.95%	114	19.72%	14.61%
7	0.49%	3.25%	43	4.04%	5.02%	79	10.11%	8.06%	115	20.06%	15.12%
8	0.57%	3.29%	44	4.16%	5.08%	80	10.33%	8.17%	116	20.40%	15.64%
9	0.65%	3.33%	45	4.30%	5.15%	81	10.55%	8.28%	117	20.75%	16.15%
10	0.72%	3.36%	46	4.43%	5.22%	82	10.77%	8.39%	118	21.10%	16.66%
11	0.80%	3.40%	47	4.56%	5.28%	83	11.00%	8.50%	119	21.45%	17.17%
12	0.88%	3.44%	48	4.70%	5.35%	84	11.23%	8.62%	120	21.81%	17.69%
13	0.96%	3.48%	49	4.84%	5.42%	85	11.47%	8.74%	121	22.17%	18.20%
14	1.04%	3.52%	50	4.98%	5.49%	86	11.70%	8.85%	122	22.54%	18.71%
15	1.13%	3.57%	51	5.12%	5.56%	87	11.94%	8.97%	123	22.90%	19.23%
16	1.21%	3.61%	52	5.27%	5.64%	88	12.19%	9.10%	124	23.27%	19.74%
17	1.29%	3.65%	53	5.41%	5.71%	89	12.43%	9.22%	125	23.65%	20.25%
18	1.38%	3.69%	54	5.56%	5.78%	90	12.68%	9.34%	126	24.03%	20.76%
19	1.47%	3.74%	55	5.71%	5.86%	91	12.94%	9.47%	127	24.41%	21.28%
20	1.56%	3.78%	56	5.87%	5.94%	92	13.19%	9.60%	128	24.80%	21.79%
21	1.65%	3.83%	57	6.02%	6.01%	93	13.45%	9.73%	129	25.19%	22.30%
22	1.74%	3.87%	58	6.18%	6.09%	94	13.72%	9.86%	130	25.58%	22.82%
23	1.84%	3.92%	59	6.34%	6.17%	95	13.98%	9.99%	131	25.98%	23.33%
24	1.93%	3.97%	60	6.51%	6.26%	96	14.25%	10.13%	132	26.38%	23.84%
25	2.03%	4.02%	61	6.67%	6.34%	97	14.53%	10.27%	133	26.78%	24.35%
26	2.12%	4.06%	62	6.84%	6.42%	98	14.80%	10.40%	134	27.19%	24.87%
27	2.22%	4.11%	63	7.01%	6.51%	99	15.08%	10.54%	135	27.60%	25.38%
28	2.32%	4.16%	64	7.19%	6.60%	100	15.37%	10.69%	136	28.01%	25.89%
29	2.43%	4.22%	65	7.36%	6.68%	101	15.66%	10.83%	137	28.43%	26.41%
30	2.53%	4.27%	66	7.54%	6.77%	102	15.95%	10.98%	138	28.85%	26.92%
31	2.64%	4.32%	67	7.72%	6.86%	103	16.24%	11.12%	139	29.27%	27.43%
32	2.74%	4.37%	68	7.91%	6.96%	104	16.54%	11.27%	140	29.70%	27.95%
33	2.85%	4.43%	69	8.09%	7.05%	105	16.84%	11.42%	141	30.13%	28.46%
34	2.96%	4.48%	70	8.28%	7.14%	106	17.15%	11.58%	142	30.56%	28.97%
35	3.08%	4.54%	71	8.47%	7.24%	107	17.46%	11.73%	143	31.00%	29.48%

144	31.44%	30.00%	181	49.24%	48.97%	218	67.23%	68.46%	255	81.59%	87.44%
145	31.88%	30.51%	182	49.75%	49.49%	219	67.68%	68.98%	256	81.91%	87.96%
146	32.32%	31.02%	183	50.25%	50.51%	220	68.12%	69.49%	257	82.23%	88.12%
147	32.77%	31.54%	184	50.76%	51.03%	221	68.56%	70.00%	258	82.54%	88.27%
148	33.22%	32.05%	185	51.26%	51.54%	222	69.00%	70.52%	259	82.85%	88.43%
149	33.68%	32.56%	186	51.76%	52.05%	223	69.44%	71.03%	260	83.16%	88.58%
150	34.13%	33.07%	187	52.27%	52.56%	224	69.87%	71.54%	261	83.46%	88.73%
151	34.59%	33.59%	188	52.77%	53.08%	225	70.30%	72.05%	262	83.76%	88.88%
152	35.05%	34.10%	189	53.27%	53.59%	226	70.73%	72.57%	263	84.05%	89.03%
153	35.52%	34.61%	190	53.77%	54.10%	227	71.15%	73.08%	264	84.34%	89.17%
154	35.99%	35.13%	191	54.27%	54.62%	228	71.57%	73.59%	265	84.63%	89.32%
155	36.45%	35.64%	192	54.77%	55.13%	229	71.99%	74.11%	266	84.92%	89.46%
156	36.93%	36.15%	193	55.27%	55.64%	230	72.40%	74.62%	267	85.20%	89.60%
157	37.40%	36.66%	194	55.77%	56.15%	231	72.81%	75.13%	268	85.47%	89.74%
158	37.88%	37.18%	195	56.27%	56.67%	232	73.22%	75.65%	269	85.75%	89.88%
159	38.35%	37.69%	196	56.77%	57.18%	233	73.62%	76.16%	270	86.02%	90.01%
160	38.83%	38.20%	197	57.26%	57.69%	234	74.02%	76.67%	271	86.28%	90.14%
161	39.32%	38.72%	198	57.75%	58.21%	235	74.42%	77.18%	272	86.55%	90.28%
162	39.80%	39.23%	199	58.25%	58.72%	236	74.81%	77.70%	273	86.81%	90.41%
163	40.29%	39.74%	200	58.74%	59.23%	237	75.20%	78.21%	274	87.06%	90.53%
164	40.77%	40.25%	201	59.23%	59.75%	238	75.59%	78.72%	275	87.32%	90.66%
165	41.26%	40.77%	202	59.71%	60.26%	239	75.97%	79.24%	276	87.57%	90.79%
166	41.75%	41.28%	203	60.20%	60.77%	240	76.35%	79.75%	277	87.81%	90.91%
167	42.25%	41.79%	204	60.68%	61.28%	241	76.73%	80.26%	278	88.06%	91.03%
168	42.74%	42.31%	205	61.17%	61.80%	242	77.10%	80.77%	279	88.30%	91.15%
169	43.23%	42.82%	206	61.65%	62.31%	243	77.46%	81.29%	280	88.53%	91.27%
170	43.73%	43.33%	207	62.12%	62.82%	244	77.83%	81.80%	281	88.77%	91.39%
171	44.23%	43.85%	208	62.60%	63.34%	245	78.19%	82.31%	282	89.00%	91.50%
172	44.73%	44.36%	209	63.07%	63.85%	246	78.55%	82.83%	283	89.23%	91.62%
173	45.23%	44.87%	210	63.55%	64.36%	247	78.90%	83.34%	284	89.45%	91.73%
174	45.73%	45.38%	211	64.01%	64.87%	248	79.25%	83.85%	285	89.67%	91.84%
175	46.23%	45.90%	212	64.48%	65.39%	249	79.60%	84.36%	286	89.89%	91.95%
176	46.73%	46.41%	213	64.95%	65.90%	250	79.94%	84.88%	287	90.10%	92.05%
177	47.23%	46.92%	214	65.41%	66.41%	251	80.28%	85.39%	288	90.32%	92.16%
178	47.73%	47.44%	215	65.87%	66.93%	252	80.61%	85.90%	289	90.52%	92.26%
179	48.24%	47.95%	216	66.32%	67.44%	253	80.94%	86.42%	290	90.73%	92.37%
180	48.74%	48.46%	217	66.78%	67.95%	254	81.27%	86.93%	291	90.93%	92.47%

292	91.13%	92.57%	329	96.81%	95.41%
293	91.33%	92.67%	330	96.92%	95.46%
294	91.53%	92.77%	331	97.04%	95.52%
295	91.72%	92.86%	332	97.15%	95.58%
296	91.91%	92.96%	333	97.26%	95.63%
297	92.09%	93.05%	334	97.36%	95.68%
298	92.28%	93.14%	335	97.47%	95.74%
299	92.46%	93.23%	336	97.57%	95.79%
300	92.64%	93.32%	337	97.68%	95.84%
301	92.81%	93.41%	338	97.78%	95.89%
302	92.99%	93.50%	339	97.88%	95.94%
303	93.16%	93.58%	340	97.97%	95.99%
304	93.33%	93.67%	341	98.07%	96.04%
305	93.49%	93.75%	342	98.16%	96.08%
306	93.66%	93.83%	343	98.26%	96.13%
307	93.82%	93.91%	344	98.35%	96.18%
308	93.98%	93.99%	345	98.44%	96.22%
309	94.13%	94.07%	346	98.53%	96.27%
310	94.29%	94.15%	347	98.62%	96.31%
311	94.44%	94.22%	348	98.71%	96.36%
312	94.59%	94.30%	349	98.79%	96.40%
313	94.73%	94.37%	350	98.87%	96.44%
314	94.88%	94.44%	351	98.96%	96.48%
315	95.02%	94.51%	352	99.04%	96.52%
316	95.16%	94.58%	353	99.12%	96.56%
317	95.30%	94.65%	354	99.20%	96.60%
318	95.44%	94.72%	355	99.28%	96.64%
319	95.57%	94.79%	356	99.35%	96.68%
320	95.70%	94.85%	357	99.43%	96.72%
321	95.84%	94.92%	358	99.51%	96.76%
322	95.96%	94.98%	359	99.58%	96.79%
323	96.09%	95.05%	360	99.65%	96.83%
324	96.22%	95.11%	361	99.72%	96.86%
325	96.34%	95.17%	362	99.79%	96.90%
326	96.46%	95.23%	363	99.86%	96.93%
327	96.58%	95.29%	364	99.93%	99.97%
328	96.70%	95.35%	365	100.00%	100.00%

F. Other Research

Research Department

Patrick J. McCormack, Director

600 State Office Building
St. Paul, Minnesota 55155-1298
651-296-6753 [FAX 651-296-9887]
www.house.mn/hrd/

Minnesota House of Representatives

November 9, 2015

TO: Representative Peggy Scott

FROM: Lynn Aves and Mary Mullen

RE: Child support information

As you requested on November 1, 2015, attached is information we have compiled to answer the following questions:

1. How do other states calculate child support for low-income obligors?
2. How do other states calculate child support when there is no existing child support order?
3. Is reliable data available on the number of people who may be impacted by a change in the parenting expense adjustment?

We met with two analysts in our office who have backgrounds in economics, Pat Dalton and Sean Williams, about the issues related to calculations of child support. Because the interpretation and implementation of various formulas is within the skill sets of both Pat and Sean, we suggest you contact either or both of them for information on proposed child support and parenting expense adjustment formulas.

Please let us know if you can be of further assistance.

LA/MM/jg

Self-Support Reserves & Low Income Obligors

States use a variety of different methods for calculating minimum support obligations and downward deviations for low-income obligors. Many states allow for or require a downward deviation, usually to a set state minimum child support amount, when an obligor has income below a certain number. Comparing these systems is an "apples to oranges" comparison in many cases. Below I have listed a few reasons why it is difficult to compare these self-support reserves and low-income obligations:

1. States each have a different way of determining what a parent's "income" will be for the purposes of calculation;
2. States input income to parents who are underemployed or unemployed in different ways;
3. States sometimes apply the self-support reserve to only the obligor or to both parents, some states only look at the obligor's income, and some states look at both parents income to determine support; and
4. Many states leave downward deviations in support orders to the discretion of the court.

Below I have listed a few trends to highlight how states handle the issue of minimum orders and self-support reserves. After that I have included a few states as examples. A comparison of low and high-income provisions can be found on the NCSL website: http://www.ncsl.org/research/human-services/states-treatment-of-low-high-income-child-support.aspx

- Some states look at the combined income of the parents, and when it is below a certain number, then the downward deviation or state minimum for child support can be used.
    - Florida, Maryland, Indiana, Kansas, and Louisiana all look at the combined income of the parents. Indiana has one of the lowest with a combined income of less than $100 per week.
- Many states allow for judicial discretion to determine if a deviation or the minimum award should be allowed.
    - Some states provide that deviation is a percentage of the obligor's income (Michigan), some states provide that the support obligation cannot be more than a certain percentage of the parent's income (New Mexico), and some states allow for judicial discretion in the downward deviation from the support order.
    - Many states set a minimum award to be used in low-income cases. These vary with the lowest number being $7 per month (Kansas) to as high as $100 per month for one child (Nevada, South Carolina. Tennessee), or in Connecticut $200 per month, but most states fall in-between that range at around $25 or $50 per child per month.
- Many states have a number that is set, usually tied to the federal poverty guidelines, but also just a set number, and when an obligor's income falls below that number, the court either imposes the state's minimum support obligation or does a downward deviation at their discretion.

- The number used by states varies widely, Georgia allows the court to consider a downward deviation when an obligor makes less than $1,850 per month, while North Dakota allows a minimum support obligation on a case-by-case basis and sets $100 per month as the amount to consider the deviation.
- Many states use a number between $500 and $900 as the trigger for a downward deviation or minimum support order including: Arizona, D.C., Iowa, Maryland, Michigan, Mississippi, New Jersey, New Mexico, Ohio, Pennsylvania, Rhode Island, South Carolina, Utah, Washington state, West Virginia, and Wyoming. (Not a complete list.)
- A number of states are tied to the federal poverty guidelines, or use a number over $900 per month to apply a minimum award or downward deviation, including: Alaska, California, Colorado, Georgia, Kansas, Maine, Minnesota, New York, North Carolina, and Oklahoma. (Not a complete list.)

State Examples

Below are excerpts from various state's child support guidelines or statutes that provide some basic information on what the self-support reserve is, and in some cases, what their minimum child support order is in low-income cases. Many of them have a citation to their state code or to the child support guidelines for that state.

California

The court can make a low-income adjustment by ordering a lower amount of child support if a parent's net disposable income is less than $1000, unless it would be unfair or inappropriate to do so under the circumstances. California Family Code Sections 4050-4076.

Colorado

When either the obligor's monthly adjusted gross income, or the parents' combined monthly adjusted gross income, is less than $1,100, the guideline provides for a minimum order of $50 per month for one child, $70 per month for two children, $90 per month for three children, $110 per month for four children $130 per month for five children, and $150 per month for six or more children. The minimum order amount shall not apply when each parent keeps the children more than 92 overnights each year. In no case however, shall the amount of child support ordered to be paid exceed the amount of child support that would otherwise be ordered to be paid if the parents did not share physical custody.

In circumstances in which the parents' combined monthly adjusted gross income is $1,100 or more, but in which the parent with the least number of overnights per year with the child has a monthly adjusted gross income of less than $1,900, the parent with the least overnights per year is eligible for a low-income adjustment as follows. First, the monthly gross income of each parent will be determined. Based upon the parents' combined monthly gross incomes, the monthly basic child support obligation will be determined and each parent's presumptive

proportionate share of that obligation. Then, the income of the parent with the fewest number of overnights per year will be adjusted by subtracting $1,100 from that parents' monthly adjusted gross income. The result of the subtraction will be added to the basic minimum child support amount listed above (e.g., $50 per month for one child, etc.) to determine the minimum child support obligation. However, if the result of the subtraction is zero or a negative number, then zero will be added to the basic minimum child support amount. The product of this low-income adjustment will be compared to the parents' presumptive proportionate share of the monthly basic support obligation, and the lesser of the two amounts shall be the basic monthly support obligation to be paid by the low-income parent, as adjusted by the low-income parent's proportionate share of the work-related and education-related child care costs, health insurance, extraordinary medical expenses, and other extraordinary adjustments. The low-income adjustment shall not apply when each parent keeps the children more than 92 overnights each year.

https://www.courts.state.co.us/Forms/PDF/JDF%201822%20-%20Child%20Support%20Guideline%20-%20R1%2014%20(FINAL).pdf

Connecticut

There is no award when an obligor has less than $50 per week income, and there is a reduced award when a parent has a "low-income designation" and makes less than $290 per week.

Michigan

Michigan law has a low-income threshold, currently set at $931 (2012 United States HHS Poverty Guideline). When one parent's net income does not exceed the low-income threshold, they do not include that parent's income in the monthly net family income used to calculate the other parent's general care support obligation.

The court can then use a low-income equation to calculate support. When a parent's monthly net income does not exceed the low-income threshold, the parent's base support obligation is 10 percent of that parent's income.

F x 10% = L
F = Parent's monthly net income, when below the low-income threshold (§ 2.09(A))
10% = Percentage for income below the threshold
L = Base support (round to the nearest whole dollar)

There is also an alternative formula that can be used and the court can use the obligation from the formula that is lower.

http://courts.mi.gov/Administration/SCAO/Resources/Documents/Publications/Manuals/focb/2013MCSF.pdf

New Jersey

Self-support reserve. The self-support reserve is a factor in calculating a child support award only when one or both of the parents have income at or near the poverty level. The self-support reserve is 105 percent of the U.S. poverty guideline for one person. It attempts to ensure that the obligor has sufficient income to maintain a basic subsistence level and the incentive to work so that child support can be paid. A child support award is adjusted to reflect the self-support reserve only if payment of the child support award would reduce the obligor's net income below the reserve and the custodial parent's (or the parent of the primary residence's) net income minus the custodial parent's share of the child support award is greater than 105 percent of the poverty guideline. The latter condition is necessary to ensure that custodial parents can meet their basic needs so that they can care for the children. As of January 22, 2015, the self-support reserve is $238 per week (this amount is 105 percent of the poverty guideline for one person). Note that the deviation is not allowed when the obligee is also below the poverty guideline. A minimum order is $5 per week.

If the court finds that the guidelines are inappropriate in a specific case, it may either disregard the guidelines or adjust the guidelines-based award to accommodate the needs of the children or the parents' circumstances.

https://www.judiciary.state.nj.us/csguide/app9a.pdf

New York

The 2015 poverty income guideline amount for a single person as reported by the United States Department of Health and Human Services is $11,770 and the 2015 self-support reserve is $15,890.

Below $14,200 annual income a parent pays $25 a month per child, over $14,200 a parent pays $50 per month plus $25 per additional child until the regular calculation begin. This number jumps again at $15,700 and continues to move up from there.

Oregon

Subtracts a self-support reserve of $1,135 from the parent's adjusted gross income. This amount is based on the federal poverty guidelines and is adjusted to account for estimated taxes. Oregon Child Support Guidelines 137-050-0745.

Pennsylvania

Low-income adjustments. Pennsylvania is one of 46 states that provide a low-income adjustment in their guidelines. The purpose of the low-income adjustment is to preserve at least a subsistence level of income for obligors with poverty-level incomes after payment of the guidelines-determined amount. Most of these states incorporate the adjustment into their basic schedules/formulae. The amount of the low-income adjustment varies significantly among states.

States such as Pennsylvania that routinely update their low-income adjustment for periodic changes in the federal poverty level have lower schedules/formulae at very low incomes than state guidelines with no low-income adjustment and guidelines schedule/formulae of states that have not recently updated their low-income adjustment.

https://www.humanservices.state.pa.us/CSWS/CSWS/Forms/PAguidelines.pdf

Self-Support Reserve ("SSR"). The amended schedule also incorporates an increase in the ''Self-Support Reserve'' or ''SSR'' from $748 per month to $867 per month, the 2008 federal poverty level for one person. Formerly designated as the ''Computed Allowance Minimum'' or ''CAM,'' the Self-Support Reserve, as it is termed in most other states' guidelines, is intended to assure that low-income obligors retain sufficient income to meet their own basic needs, as well as to maintain the incentive to continue employment. The SSR is built into the schedule in Rule 1910.16-3 and adjusts the basic support obligation to prevent the obligor's net income from falling below $867 per month. Because the schedule in Rule 1910.16-3 applies to child support only, Rule 1910.16-2(e)(1)(B) provides for a similar adjustment in spousal support and alimony pendent lite cases to assure that the obligor retains a minimum of $867 per month.

http://www.pacode.com/secure/data/231/chapter1910/s1910.16-1.html

South Carolina

A self-support reserve allows a low-income parent with the legal duty to pay support to retain a minimal amount of income before being assessed a full percentage of child support. This insures that the parent with the legal duty to pay support has sufficient income available to maintain a minimum standard of living which does not negatively affect his or her earning capacity, incentive to continue working, and ability to provide for him or herself. These guidelines incorporate a self-support reserve of $748.00 per month. In order to safeguard the self-support reserve in cases where the income of the parent with the obligation to pay support and corresponding number of children fall within the shaded area of the Schedule of Basic Child Support Obligations, the support obligation must be calculated using the obligor's income only. To include the income of the parent to whom support is owed in the calculation of such cases, or include any adjustments like medical insurance or day care expense, would reduce the net income of the parent with the legal duty to pay support to an amount below the self-support reserve. When a parent makes over $750 per month the child support guidelines start at $100 per month for one child.

http://www.state.sc.us/dss/csed/forms/2014guidelines.pdf

Determining child support when there is no parenting time order

Several states and counties have adopted laws and procedures for determining child support when there is no existing child support order.

Standard parenting time presumption. This method is used in the state of Texas and in some Michigan counties. A predictable baseline for parenting time that is established by a standard parenting plan spells out how the child's time will be divided between each parent during regular, holiday, and vacation time periods. This method is used automatically if the parents have not developed an alternative plan.

Self-help resources. Some jurisdictions have developed resources that parents may access on their own to develop a parenting time plan. Oregon has developed online fill-in-the-blank parenting plans that can be filed with the court along with the required legal documents. There are various templates for numerous plan options. Texas offers a statewide telephone hotline on visitation that is staffed by attorneys who offer callers general information.

Mediation and facilitation. A few counties (DuPage County, Illinois; Oakland County, Michigan; Cuyahoga County, Ohio; and various counties in Colorado) offer neutral, third-party assistance to never-married parents in the state child support program to create parenting plans. This service can be based at the court, the child support agency, or at a community organization.

https://www.acf.hhs.gov/sites/default/files/programs/css/center_for_policy_research_policy_brief.pdf

Dissolution and support data

Below is data provided by the Minnesota Judicial Branch on the number of cases filed involving dissolutions with children, dissolutions without children, and child support only cases.

Case Filings

	2010	2011	2012	2013	2014	Change over 5 years
Dissolution without children	8,261	8,075	8,209	8,002	7,768	-6%
Dissolution with children	9,228	8,844	8,716	8,255	7,778	-16%
Support	15,642	15,386	15,401	14,370	13,209	-16%

In terms of pending cases, here are the numbers as of September 30, 2015:

Dissolution without Children	1,618
Dissolution with Children	2,891
Support	2,936

Overview of State Guidelines and How Reviewed/Updated

Background

Two important factors should be considered when looking at other states' methods for reviewing and updating child support guidelines:

(1) what branch of government is responsible for the creation and modification of child support guidelines; and
(2) what group, if any, is responsible for periodic recommendation to review the guidelines.

The following chart shows that there is a wide range of combinations currently used throughout the United States. Responsibility for the guidelines can be housed in any branch of government —executive (administrative regulations), legislative (statutes), or judicial (court rules). States use a variety of permanent commissions, ad hoc committees, pre-existing legislative groups, and administrative agencies to make recommendations to the bodies actually responsible for modifying the guidelines.

Currently, Minnesota is an outlier in that there is no set commission or ad hoc committee to review the guidelines. Statute directs the executive branch agency to perform the quadrennial review every four years, but does not provide a set path for any changes to get back to the legislature. And since our guidelines are housed in statute, only the legislature is currently capable of changing the guidelines.

Please review the chart paying close attention to which branch of government holds the guidelines (court rule, administrative regulation, or statute) and the different types of membership noted for the various commissions.

Chart

State	Guidelines Model	Commission, Ad Hoc Group, Advisory Committee, or Council	Statutory Cite	Implementation of Guidelines
Alabama	Income Share Model.	Advisory Committee • Appointed by the Supreme Court • Every four years review the guidelines and schedule of basic support obligations • Any recommendations concerning the guidelines or schedule of basic support obligations shall be put in writing and sent to the Supreme Court for review	Alabama Rules of Court, Rule 32(G)	Court Rule

Alaska	Percentage of income.	Commission on Child Support Enforcement • Governor appointed the commission in 1984 to study the state's child support program. The commission created a report to the Governor recommending adoption of a variation of WI's percentage income formula. • The guidelines are set forth in Alaska's Civil Rule 90.3 • It appears this was a one-time commission that does not continue to meet	None	Court Rule
Arizona	Shared income.	Until this year, Committee** • 21 members representing the legislature, legal community, parents, judiciary and state child support agency • A forum for all system stakeholders to develop and coordinate policies and strategies to improve the child support system including recommended legislative and/or administrative changes	A.R.S. § 25-323.01 **Effective July 24, 2014, the statutory authority enabling these legislative committees was repealed	Court Rule
Arkansas	Percentage of Income Model.	Committee • Family support chart shall be revised every 4 years by a committee appointed by the Chief Justice to ensure support amounts are appropriate • The Supreme Court shall approve the family support chart and criteria upon revision by the committee.	A.C.A. § 9-12-312(a)(4)-(5)	Court Rule
California	Shared Income Model. The formula uses the percentage of both parents' net disposable incomes, adjusted according to the percentage of time each parent has primary physical	Judicial Council • Child support commissioner within the administrative office of the judicial branch uses a consulting firm and a group of family-law lawyers to do the case review. • The Judicial Council reviews the findings and makes recommendations to the legislature. • "Most members are appointed by the Chief Justice, who serves as Chair of the Council, or by the State Bar Board of Trustees. Legislative representatives and advisory members also serve. Most members serve three year terms and each year about a	Family Code Section 4054; Section 4067	Statute

	responsibility for child(ren).	third of the membership rotates off and a new group is sworn in." Legislative Review • "It is the intent of the Legislature that the statewide uniform guideline shall be reviewed by the Legislature at least every four years and shall be revised by the Legislature as appropriate to ensure that its application results in determination of appropriate child support amounts. The review shall include consideration of changes required by applicable federal laws and regulations or recommended from time to time by the Judicial Counsel pursuant to Section 4054."		
Colorado	Shared Income Model.	Commission • Conducting a review of the child support guidelines at least every four years. The Commission must consider economic data on the cost of raising children and other related issues. • issues a report to the governor and general assembly of the results of the review and any recommended changes	14-10-115(16), C.R.S.	Statute
Connecticut	Income shares.	Commission • Issue child support and arrearage guidelines to ensure the appropriateness of criteria for the establishment of child support awards and to review and issue updated guidelines every four years. • The Commission is made up of 11 members: chief court admin; commissioner social services; AG; chairperson and ranking members of join standing committee; representative of bar association; 3 members appointed by Governor (including an agency that delivers legal services to the poor; one who represents financial concerns of child support obligors; and one who represents the permanent commission on the status of women) • Commissioner of social services shall convene the commission whenever a review is required	Connecticut Statutes section 46b-215a	Administrative Regulation

Delaware	Melson Formula	Family Court Reviews, updates and adjusts • Numerical values used in the formula will be adjusted every 2 years.	Family Court Rules of Civil Procedure Rule 500(b)	Court Rule
District of Columbia	Shared income, (gross income)	Commission • study and make recommendations on the child support guidelines to the Mayor • review pertinent economic data; hold public meeting to receive comments • Members are a chairperson and 8 members who are DC residents. Chief Judge may appoint 2 members' Mayor shall appoint the chairperson and 2 members (one shall be from the DC Bar and expert in family law and child support; Mayor shall appoint one member from CSED; the council shall designate one councilmember and 2 additional members	DC Code Section 16-916.02	Statute
Florida	Income shares	Committee on Children, Families, and Elder Affairs • Legislative Committee reviews the guidelines every 4 years • Identify options/recommendations to the legislature	None	Statute
Georgia	Guidelines effective January 1, 2007 follow a shared income model under Georgia code section O.C.G.A. 19-6-15. Orders prior to that date were based on a percent of the non-custodial parent's gross income.	Commission • Study and collect information and data relating to awards of child support • Create and revise the child support obligation table • Conduct comprehensive review of guidelines, economic conditions, and all matters relevant to maintaining effective and efficient guidelines • Determine whether adjustments are needed to the obligation table • Nothing in the commission's report shall be considered to authorize or require a change without action by the general assembly • 15 Members—3 members who are judges; one member Justice of Supreme Court or Court of Appeals; 2 members of House and 2 members of Senate; 7 other members	Georgia Statute Sections 19-6-50 to 53	Statute

Hawaii	Melson Formula.	Child Support Guidelines Task Force • Family Court in consultation with the agency shall update the guidelines at least once every 4 years • Members of the task force included judges, attorneys, child support agency	HRS § 576D-7	Court Rule
Idaho	Shared Income Model	Child Support Guidelines Advisory Committee • Judicial committee		Court Rule
Illinois	Percentage income model	Child Support Advisory Committee • Members of the general assembly, judiciary, private bar, and others with expertise specific to child support establishment and enforcement • Periodic review of the guidelines • Members appointed to one year terms • Meet at least quarterly and at other times	305 ILCS 5/12-4.20c	Statute
Indiana	Income Shares.	Advisory Committee • Members of the General Assembly, judiciary, private bar and others with expertise specific to child support establishment and enforcement • Makes recommendations to the legislature		Court Rule
Iowa	Pure income shares Iowa Court Rules: Chapter 9	Advisory Committee • Members: judge, representatives of CP groups, NCP groups, the general assembly, office of ombudsman, Iowa state bar association, Iowa County Attorneys association, other constituencies • Assist in review of the guidelines and recommendations for revision • Examination of the child support system to identify program improvements or enhancements which would increase effectiveness of securing support and parental involvement	I.C.A. § 217.3A(3)	Court Rule

		• Recommendation of legislation which would clarify and improve state law regarding support for children		
Kansas	Shared income model.	Advisory Committee • The initial appointment occurred in 1989 to review the implementation of the guidelines, solicit public input and make recommendations to address new federal mandates. • The committee has been convened periodically to conduct a comprehensive review of the guidelines and update the economic data.	Rules of the Supreme Court of Kansas Child Support Guideline VI	Court Rule
Kentucky	Income Shares.	Commission • Table shall be reviewed at least every 4 years • Members: secretary of the Cabinet of Health and Family Services; 2 members from the bar association -1 urban member, 1-less populated area; 2 circuit judges; 1 district court judge; 2 county attorneys-1 urban, 1-less populated; AG; 1 CP, 1 NCP, 1 parent with split custody; 1 child advocate. • Members are appointed by the governor from a list of 3 names for each category submitted by the Cabinet for Health and Family Services • Make recommendations to the general assembly to ensure the table results in appropriate child support amounts	KRS § 403.213(4)	Statute
Louisiana	Shared income model.	Committee • Guidelines shall be reviewed by the legislature not less than every 4 years • Office of children and family services, child support section and the district attorneys association in consultation with the review committee shall obtain all information requires to comply with the federal review requirements. • Present to the legislature • Members: reporter of the Louisiana State Law Institute Marriage and Advisory Committee; chairman of House Committee on Civil Law and Procedure; chairman of Senate Committee on Judiciary; president judges association; executive	LSA-R.S. 9:315.16	Statute

		director of district attorneys association; present juvenile and family court judges association; charimain bar association family law section; chairman Louisiana American Academy Matrimonial Lawyers; Dept. of children and family services; chairman Children's Cabinet; president Hearing officers association		
Maine	Income Shares Model.	The department in consultation with the Supreme Judicial Court and interested parties shall adopt rules in accordance with Title 5, chapter 375 establishing a child support table.	19-AMRSA § 2011	Administrative Regulation
Maryland	Shared Income Model.	The child support enforcement administration shall review the guidelines and report its findings and recommendations to the general assembly at least every 4 years.	MD Code Family Law § 12-202	Statute
Massachusetts	Shared Income Model.	Task Force • Members appointed by chief justice (in 2012 included a combination of judges, lawyers, and court staff) • Complete guidelines review • Guidelines are promulgated as rules by chief justice of the trial courts		Court Rule
Michigan	Modified income shares.	Friend of Court Bureau • Reviews and changes periodically • There is a Friend of Court Advisory Committee to assist its performance of duties. This is not specific just to child support.	MCLA 552.519	Court Rule
Minnesota	Income Shares Model as of 1/1/07, which uses the parents' combined gross income to calculate basic support, medical support and	No Group • CSED in charge of the review	Minnesota Statutes section 518A.77	Statute

	childcare support.			
Mississippi	Percentage of adjusted gross income. Percentage determined by number of children.	DHS shall review the appropriateness of these guidelines every 4 years and report its findings to the Legislature. The Legislature shall amend these guidelines when it finds that amendment is necessary to ensure equitable support is being awarded.	Miss. Code Ann § 43-19-101(5)	Statute
Missouri	Income Shares. The income shares method of determining a child support obligation takes into consideration both parents' gross incomes and obligations.	Nothing in statute	Supreme Court rule Civ. Proc. Form 14	Court Rule
Montana	Modified Melson.	The department shall review guidelines at least every 4 years and propose any appropriate modification to the legislature.	MCA 40-5-209	Administrative Regulation
Nebraska	Shared Income Model.	Advisory Commission • Members include judges; Bar Association member; county attorney; professional in field of economics; CP; NCP; chairperson of the judiciary committee of the legislature; chairperson of health and human services committee of the legislature; state treasurer; state court administrator; IV-D director	Neb. Rev. Stat. § 43-3342.05	Court Rule

		• Supreme Court shall notify Executive Board of the Legislative Council of its intent to review guidelines and the commission shall call a meeting; • Review guidelines adopted by Supreme Court and recommend any changes. When practicable commission shall base its recommendations on economic data and statistics collected in the State of Nebraska. • Commission may conduct public hearings • Present reports and recommendations to the Supreme Court and Executive Board. • The Supreme Court shall review the reports and may amend the guidelines based on recommendations.		
Nevada	Percentage of Income model.	Nothing in statute		Statute
New Hampshire	New Hampshire's guidelines are statutorily determined using a percentage of income model.	No Group—Legislative Report • Review conducted by Department of Health and Human Services not less than once every 4 years • Upon completion of review, the department shall report its findings and recommendations to the president of the senate, the speaker of the House of Representatives, and the governor. • May be conducted in conjunction with a legislative review	N.H. Rev. Stat. §458-C:6	Statute
New Jersey	Shared income model	Family Practice Committee make findings and recommendations regarding guidelines		Court Rule
New Mexico	Shared Income	Every 4 years the child support guidelines shall be reviewed by an appropriate executive or legislative commission or executive department.	NMSA 1978 § 40-4-11.3	Statute

New York	A hybrid model between a Shared Income Model and a Percentage of Income Model. The formula includes a "basic percentage of income component" based on income and number of children to support; a "supplementary shared income component" with respect to child care, educational expenses,and unreimbursed health care expenses; and a provision for health insurance if determined available based on cost and access. New York State Family Court Act, Section 413	Commissioner must review the child support standards act at least once every 4 years to ensure that its application results in appropriate amounts. Commissioner of Social Services must publish annually a child support standards chart, which includes revised poverty income guidelines, revised self-support reserve, the dollar amounts yield through application of the child support percentages in the family court act.	McKinney's Social Services Law § 111-b and i	Statute
North Carolina	Income shares model	Periodically, but at least once every four years, the Conference of Chief District Judges shall review the guidelines to determine whether their application results in appropriate child support award amounts. The Conference may modify the guidelines accordingly. The Conference shall give the Department of Health and Human Services, the Administrative	Section 50-13.4	Court Rule

		Office of the Courts, and the general public an opportunity to provide the Conference with information relevant to the development and review of the guidelines. Any modifications of the guidelines or criteria shall be reported to the General Assembly by the Administrative Office of the Courts before they become effective by delivering copies to the President Pro Tempore of the Senate and the Speaker of the House of Representatives. The guidelines, when adopted or modified, shall be provided to the Department of Health and Human Services and the Administrative Office of the Courts, which shall disseminate them to the public through local IV–D offices, clerks of court, and the media		
North Dakota	Variable percentage of obligor's net income.	Rulemaking Authority to ensure that the application of guidelines results in determination of appropriate child support award. Before commencing any rulemaking proceeding under this section, the department shall convene a drafting advisory committee that includes two members of the legislative assembly.	NDCC, 14-09-09.7	Administrative Regulation
Ohio	Income Shares Model.	Advisory Council • Dept. of Job and Family Services reviews basic child support schedule and prepares a report of its review, submits a copy of the report to both houses of the general assembly • The Dept. establishes an advisory council to assist the department in the completion of its reviews and reports • Council members: obligors, obliges, judges, attorneys, representatives from child support agencies, other persons interested in welfare of children, 3 members of senate, 3 members of house • Dept. shall consider input from council; the council ceases to exist at the time that it submits its report	R.C. § 3119.024	Statute
Oklahoma	Shared Income Model.	Guidelines shall be reviewed every 4 years by the judiciary committees of the senate and house of representatives.	43 Okl.St.Ann. § 119.1	Statute

Oregon	Shared Income Model.	Advisory Committee • Members are stakeholders and child support staff appointed by the director of child support • Director of child support responds to recommendations and Department of Justice promulgates rules complete with public hearings		Administrative Regulation
Pennsylvania	Income Shared Model - a child of separated, divorced or never-married parents should receive the same proportion of parental income that he/she would have received if parents lived together. Reference - Pa. R.C.P. 1910.16-1 through Pa. R.C.P. 1910.16-7 and 23 Pa.C.S. §4322.	Procedural Rule Committee • Part of the Pennsylvania Supreme Court • Reviews guidelines • Recommends guidelines changes as rule changes, ultimately approved/rejected or modified by the Supreme Court		Court Rule
Rhode Island	Shared Income Model	Updated by administrative order from the Rhode Island Family Court		Court Rule
South Carolina	Income Shares model (last updated in	Department shall review regulations at least once every four years	Code 1976 § 63-17-470	Administrative Regulation

	2006)			
South Dakota	Income Shares.	Commission • Review provisions of the child support chapter • Report findings to the Governor and Legislature and propose amendment • Governor issues an executive order every 4 years to establish the commission; members include NCP; CP; Judiciary; Department of Social Services; member of State Bar; members from each chamber of the Legislature	25-7-6.12	Statute
Tennessee	Income Shares Model	Rulemaking authority for the administration of the child support program. Income shares advisory committee.	T.C.A. § 71-1-132	Administrative Regulation
Texas	Fixed percentage of obligor's net resources with adjustment for multiple family obligations. Variances from guidelines within courts discretion. Texas Family Code chapter 154, subchapter C.	Prior to each regular legislative session, the standing committees of each house of the legislature having jurisdiction over family law shall review and if necessary recommend revisions to the guidelines. Committee shall report results of the review and include recommended revisions in committee's report to the legislature. Every 4 years the Title IV-D agency shall review guidelines and report the results and any recommendations for changes to the standing committee of each house of the legislature.	V.T.C.A., Family Code § 111.001	Statute
Utah	Income Shares.	Advisory Committee • Review guidelines • Report to the Legislative Judiciary Interim Committee • Report shall include recommendations of the majority of the committee	U.C.A. 1953 § 78B-12-402	Statute

		• Staff for the committee shall be provided from the existing budget of DHS		
Vermont	Shared income model.	Secretary of human services has authority to amend the guideline from time to time as necessary but not less than once every 4 years.	15 V.S.A. § 654	Administrative Regulation
Virginia	Income shares based on the combined gross income of both parents	Child Support Guidelines Review Panel • Created for the purpose of periodically reviewing guidelines • Consists of 15 members-4 legislative and 11 non-legislative appointed by the Governor upon recommendation by the Secretary of Health and Human Resources. • Report findings to the general assembly • Funding for the costs and compensation shall be provided by the Department. • The Department provides support staff	VA Code Ann. § 20-108.2(H)	Statute
Washington	Income shares.	Statutory Work Group • Beginning in 2011 and every 4 years thereafter, the division of child support shall convene a work group to review the guidelines and the report prepared under 26.19.026 and 26.18.210 to determine if the guidelines results in appropriate support orders. • Members consist of legislators, director of DSHS-child support division; representatives of the legal community; an economist; cp's; ncp's • Recommendations are made to the legislature on items where consensus could be reached	RCWA 26.19.025	Statute
West Virginia	Income Shares	Commission • Review and analyze current guidelines; relevant research and data regarding the cost of child rearing; research and data on the application of and deviations from the guidelines; current law, administrative rules and practices regarding child support; and any other data the commission deems relevant to the review of guidelines	W. Va. Code § 48-17-101 to 109	Statute

		• 9 members; commission is created in the Department of Health and Human Resources and may use the administrative support and services of that department • 7 members appointed by Governor, no more than 5 may belong to the same political party; 1 member is a lawyer; 1 member is a public administrator; 1 member is an employer; 1 member is a practicing family court judge; 3 members are representatives of the public at large with at least one being an obligor and one being an obligee; Commissioner of Bureau of Children and Families; Commissioner of Bureau of Child Support enforcement		
Wisconsin	Percentage of Income Standard			Administrative Regulation
Wyoming	Percentage of income of both parties.	No group • Child support division in charge of review and must bring changes to the legislature		Statute

G. Minority Report

December 31, 2015

TO: Jeffrey Jorgenson, Director
Child Support Division
Minnesota Department of Human Services

FROM: Marie Garza

SUBJECT: Minority Report, Child Support Work Group

As a Work Group member who represents custodial parents, I am unable to endorse and accept the majority report. While I am not totally opposed to the Michigan model, time is needed to fully investigate it, especially when the Michigan model is still a work-in-progress in the state of Michigan. I feel that we are rushing into a situation to pacify outside entities, not necessarily for the best interest of women and children who live in the state of Minnesota.

There are very different economic realities for single women custodial parents based on earning potentials of women vs. men. The United States has a rigid class system, with many in "middle class" income brackets not making a living wage, and the majority of those not making a living wage are women.

Thus, the bottom line economic impact of adopting a new parental expense adjustment system on single, custodial mothers is crucial. Indications are that the Michigan model will result in significant reductions in child support for some custodial parents—custodial parents whose incomes are below that needed for basic expenses of raising a child.

Is it in the best interests of the child to further impoverish custodial parents?

Below are my detailed comments on the Working Draft Report, dated Dec. 11, 2015, of the Child Support Work Group:

1. The report is unclear about its overriding purpose. Is the purpose to eliminate the cliff? Is the purpose to recognize increased costs to the non-custodial parent as his parenting time increases by reducing the child support amount? Is the purpose to avoid impoverishment of child support obligors? Do the recommendations consider the economic impact on single custodial mothers? Has there been a determination of the percentage of parenting time at which there are decreases to expenses of the custodial parent?
2. There is no data provided in the report that supports the recommendations.
3. Here we are talking about child support and yet we do not have accurate, complete, and up-to-date data on the cost of raising a child/children in the state of Minnesota.
4. The work group did not reflect Minnesota's demographic makeup in many ways: race, ethnicity, income level, gender.

5. Is it in the best interests of the child to reduce child support payments to a single custodial parent who is not making enough to support her/himself and a child or children?
6. It is concerning that possible legislative language (p. 16) may be included in the report, but I and other Work Group members haven't had a chance and won't have a chance to review this.
7. The report should have a detailed analysis of the bottom-line, economic impact of switching to the Michigan system. At what income levels and what percentage parenting time will there be significant reductions in child support?
8. The report's overview of all alternative models (p.9-10) lists "reflects both parents' expenses fairly" as a "strength" for all four alternatives. All four alternatives reflect the increased expenses incurred by non-custodial parents as their parenting time increases, but, because there is no accurate data on actual parenting expenses when there are two separate households, it can't be said that they "reflect both parents' expenses fairly."
9. How major are the implementation recommendations on p. 13?
10. There are no data regarding the argument that litigation at the 45.1% the main reason for this change. In the end this is not enough to push a change so drastic, especially without data. Further, we don't know if the recommended changes will actually result in reduced litigation.
11. There is no self-support reserve fund for custodial parents.
12. On p.5, *Context and History*, it seems to be a one-sided interpretation. "Results when payments (for the parent with less parenting time) increase substantially if the parenting time they spend with their child dips below 45 percent". This language would be a fairer option to use: "The cliff results when child support payments decrease substantially when scheduled time with the child is above 45%".
13. Is there actual data supporting this statement: "The Michigan formula offers a theoretical framework that accounts for parenting expenses in two ways the daily costs of raising a child that increase day by day and the duplicated costs of raising a child in two households when a child is no longer a visitor in the second parent's home."?
14. On (p.7), *Definition of problem: Parenting time adjustment cliff*. This would suggest that Minnesota is unique. All guidelines have points where parenting expense adjustment changes and always at that point a small increase in parenting time will make a difference. This further makes the argument that no matter what is done this will not stop the "fighting" in family court.
15. Throughout our Work Group meetings I have spoken about the importance of diversity and the lack of, and yet on (p.13-14), *Recommendations: Permanent Child Support Task Force*, why isn't that diversity reflected more centrally in the recommendations for this permanent task force?
16. I echo the comment on the Draft Report by the Minnesota County Attorney's Association asking for language identifying that the work of the Child Support Work Group is independent of the work of the Custody Dialogue Group. There was not a representative of custodial parents on the Custody Dialogue Group (although there was a representative of non-custodial parents). I was not a member of the Custody Dialogue Group. This comment supports my recommendation that more time be

allowed for recommendations on changes to the parenting expense adjustment model. The Work Group had only six meetings—six meetings to analyze and determine an immensely significant change to Minnesota's child support system.

17. I recommend that community members of the future Permanent Child Support Task Force be better compensated for their time and expense. Community members (especially single mothers) do not attend Task Force meetings as part of their paid work responsibilities, and may have to take unpaid time off work in order to serve on the Task Force. This economic reality is often a deterrent to having the voices of lower income parents be part of the process.

Appendix H

Task Force Public Comment Questionnaire

Minnesota Department of **Human Services**

Applicant Name	Street Address
Email Address	City, State, Zip Code
Date	Primary Telephone Number

CHILD SUPPORT TASK FORCE PARENT QUESTIONNAIRE

Attach additional pages as needed

1. Is there a current order in place for you to pay child support?
   - ☐ Yes
   - ☐ No

2. If no, has there been an order in *the past* for you to pay child support?
   - ☐ Yes
   - ☐ No

3. Is there a current order in place for you to receive child support?
   - ☐ Yes
   - ☐ No

4. If no, has there been an order *in the past* for you to receive child support?
   - ☐ Yes
   - ☐ No

5. Do you or have you ever received child support services from a tribal or county child support office?
   - ☐ Yes
   - ☐ No

6. If you answered YES to any of the above questions, please explain.

7. The statute authorizing this task force requires diversity amongst the membership. DHS is committed to fulfilling our responsibility to appoint parent members to best represent Minnesota's diverse communities. Are you a member of a diverse cultural and/or social community? If yes, explain.

8. What personal experience do you have with child support that would be a valuable point of view to have on the Child Support Task Force?

9. Are you currently involved in active litigation related to child support or other issues? If yes, explain.

10. What do you think the goals of a child support program should be?

11. How do you work to resolve conflict within a group setting that contains diverse points of view?

12. Have you ever served on a work group, task force, or similar entity? If yes, for what organization?
    - ☐ Yes
    - ☐ No

13. What meeting times are you able to attend? Check all that apply:
    - ☐ All day meetings during the work week
    - ☐ Half day meetings during the work week
    - ☐ Morning meetings
    - ☐ Afternoon meetings
    - ☐ Weekend meetings
    - ☐ Evening meetings

14. Do you have references who could speak to your ability to participate respectfully and objectively on a Task Force with diverse opinions, complex economic data, etc.?
    - ☐ Yes
    - ☐ No

15. If asked, would you be willing to undergo a background check?
    - ☐ Yes
    - ☐ No

Appendix I

Dr. Rogers' Report, September 2017

Cost Shares Child Cost Schedules, Underlying Issues, and Transitional Alternatives

Presentation to the Minnesota Child Support Task Force

September 27, 2017

Rogers Economics, Inc.
617 Garamond Place
Peachtree City, GA 30269

RogersEconomics.com

Child Support Cost Schedules

- Child support cost schedules are a key part of child support guidelines in most states—including Minnesota.
- Cost schedules play a huge role in the size of child support awards. The schedule forms the starting point of the cost shared between parents.
- The impact is seen on the child, the custodial parent, and the noncustodial parent.
- Is more always better? Is there a “Laffer Curve” to child support awards? The analogy is from the 1980s when too high tax rates led to less revenue for government, not more.
- Some argue that when child support is too high, the receiving parent and child get less because the obligor cannot pay and finds ways to “leave the system” in whole or part.
- The argument continues—a reasonable and affordable child support award leads to the child actually receiving more money—not just being owed more money.

Current Approaches to Child Cost Schedules

- The prevalent method of estimating child costs is generically called "Income Shares."
- The economic meaning of Income Shares is that child costs are estimated indirectly using data from intact (married) households. The indirect measure is that child costs are the amount of money required to restore the parents' standard of living after having a child as before having a child.
- The measure of well-being is the dollar level spent on adult clothes.
- There is disagreement over whether this methodology overestimates or underestimates actual child costs for intact families.
- There is no disagreement that spending on children in intact families is higher than based on two, single-parent households because the extra cost of a second house is not included. Higher overhead of two households leave less money for spending on the parents and the children.

Current Approaches to Child Cost Schedules, Cont.

- Another approach to estimating child costs that is often discussed is the U.S. Dept. of Agriculture (USDA) approach.
- The USDA methodology does measure costs by major category (food, housing, clothing, etc.) which are then totaled.
- The two key shortcomings of USDA estimates as currently applied in child support guidelines are:
  - Estimates considered for child support guidelines are for intact families, and
  - Most components are not based on marginal or additional costs from child but are largely "per capita" costs. Family expenditures for a category are largely averaged between adults and child. This mixes adult costs with child costs.

Current Approaches to Child Cost Schedules, Cont.

- A new method for estimating child cost is from a study by William Comanor and co-authors, Mark Sarro and Mark Rogers (CSR). Notably, the study measures “out of pocket” spending on children. This is a different definition of child costs from Rothbarth and USDA.

- The CSR approach is still experimental and under continued development.

- There are two key findings:

  - This measure of child costs is sharply lower than traditional measures, and

  - Unlike Income Shares, it recognizes that parents are limited by budget constraints. Specifically, it recognizes that parents shift spending between various items to pay for child costs. The budget constraint is alive and well in determining spending on children.

The Cost Shares Approach to Estimating Child Costs

- Child costs should reflect the economic reality of divorce (or unwed situations). There are two households in which the parents and children reside.
- Child costs are based on the limitation of extra, second housing costs reducing discretionary income. Use of intact family data does not reflect case facts and is inappropriate.
- Both parents' self-support needs are addressed in the calculations.

The Cost Shares Approach to Estimating Child Costs, Cont.

- The Cost Shares child cost schedule has been based on USDA data but heavily relying on single-parent household data.
- Adjustments have been made to estimate the marginal costs in expenditure categories (such as food, clothing).
- The lower estimated child costs are due both to using direct expenditures on a marginal cost basis and to not using intact family data.
- Minnesota can move to the Cost Shares approach in four steps:

1) Add a second household adjustment to the current schedule or to a Rothbarth schedule,
2) Incorporate a smoother parenting time adjustment,
3) Retain consideration of sharing tax dependency exemptions or make presumptive, and
4) Retain or improve self-support calculations.

First Step to Adapting to Cost Shares: Applying a 2nd Household Adjustment

- There are several economic deficiencies with the use of traditional Income Shares and USDA cost schedules.
- A large and easy to understand deficiency is the use of intact family data which assumes both parents live in the same house and split the costs of one set of utilities.
- Either MN's current USDA cost schedule can be adjusted to reflect the extra cost of maintaining two households instead of one. Or an Income Shares/Rothbarth table can be adjusted.
- Kansas already has a second household adjustment in its child cost schedule. While that state's concept is clear, its statistical methodology is hard to follow.
- A simple adjustment process is available (discussed below).

Why Should There Be a 2nd Household Adjustment?

- Child support should be based on actual ability to pay.
- Intact family data overstate true ability to pay.
- States traditionally have relied on the principle of “needs and ability to pay“ for child support determination.
- An intact family standard for child costs does not pass the “common sense” test.
- Legal principles indicate that an intact family standard for child support is likely unconstitutional on a due process standard.

Needs and Ability to Pay

- The case that most concisely states this standard may be *Scherberger v Scherberger*, 260 Ga. 635, 398 S.E.2d 363 (1990):

  > In all cases child support must be assessed by some calculation of the needs of the child and the ability of the parent to pay. *Clavin v. Clavin*, 238 Ga. 421 (233 S.E.2d 151) (1977). Any award, termination, or modification of child support without concern for those issues falls short of the mandate of the law.

- Pennsylvania statute bases child support determination on the needs of the child ability of the obligor to pay child support. See Pennsylvania Consolidated Statutes, 23 Pa.C.S.A. § 4322(a):

  > § 4322. Support guideline.
  > Statewide guideline--Child and spousal support shall be awarded pursuant to a Statewide guideline as established by general rule by the Supreme Court, so that persons similarly situated shall be treated similarly. The guideline shall be based upon the reasonable needs of the child or spouse seeking support and the ability of the obligor to provide support.

- Other states generally have such needs and ability to pay standards in either code or in appellate opinion.

Intact Family Standard of Living for the Child: Passing the "Common Sense" Test or Not?

- Assume first that there are two parents that are married with one child.
- The mother and father each has a monthly gross income of $4,000. The intact family standard of living for the parents and child is based on $8,000 per month spent "under one roof."
- Then assume that the parents divorce and set up two separate households. Each household has a standard of living based on $4,000 per month in income. Each parent enjoys a standard of living based on $4,000 in monthly income.
- However, the intact family standard of living presumption essentially states that the child has a legal right to an $8,000 per month income standard of living.
- How does the child have a right to a standard of living that is based on twice the income that each parent bases their own standard of living? How does the child have a right to a higher standard of living than both parents can provide for themselves?

Legal Principles: Are Intact Family Child Cost Tables Unconstitutional for Child Support Determination?

- Intact family child cost tables presume that the parents and child live in the same household and have discretionary income based on living in one household.

- Traditional case law on legal presumptions indicates that when the underlying facts for a presumption do not exist in application in a particular case, then that is a basis for setting the presumption aside—or rebutting it. This is a due process issue. See *Leary*, for example:

  > A statute based upon a legislative declaration of facts is subject to constitutional attack on the ground that the facts no longer exist; in ruling upon such a challenge a court must, of course, be free to re-examine the factual declaration.

- *Leary v. United States*, 395 U.S. 6 at 32-37 (1969), footnote 68. See also *Block v Hirsh*, 256 US 135, 154-155, 65 L Ed 865, 870, 41 S Ct 458, 16 ALR 165 (1921*); Communist Party v SACB*, 367 US 1, 110-114, 6 L Ed 2d 625, 697, 699 (1961).

Due Process Says that a Presumption Should Not be Arbitrary

- Courts interpreting the Constitution have established that irrebuttable presumptions can violate the right to due process of law by denying persons subject to the statute or rule a reasonable opportunity to present specific circumstances to rebut the presumption. The United State Supreme Court articulated this principle in Bandini Co. vs. Superior Court, 284 U.S. 8 18-19 (1931):

  > The State...may provide that proof of a particular fact, or of several facts taken collectively, shall be prima facie evidence of another fact when there is some rational connection between the fact proved and the ultimate fact presumed. The legislative presumption is invalid when it is entirely arbitrary, or creates an invidious discrimination, or operates to deprive a party of a reasonable opportunity to present pertinent fact in his defense.

- The use of intact family data is arbitrary and denies a reasonable opportunity to rebut with child costs in the actual circumstances of the child support case.

Solutions to the Presumption of Intact Family Costs Being Applied to Non-Intact Family Situations (Cont.)

- Regarding the second approach (applying a second household adjustment), the Income Shares (or USDA) intact family data on child costs can be at least partially corrected for the additional adult overhead of a second household to be maintained after divorce or in unwed situation.
- One can deduct the cost of a second mortgage (or rent) and utilities from combined net income.
- The same child cost study can be used but the net income used should be redefined for this adjustment.
- The lower adjusted net incomes are associated the same gross income amounts, resulting in lower child cost percentages associated with the various gross income brackets.

Overview of Second Household Adjustment

- A second household adjustment to child cost tables using intact family data brings presumptive costs closer to economic reality of child support cases.
- Second household adjustments can be made to traditional “Rothbarth” Income Shares cost schedules or USDA based schedules such as in MN.
- Either would provide a familiar starting point for 2nd household adjustments.
- A cost table incorporating a second household adjustment is in line with the Cost Share principle of basing child costs on actual ability to pay.
- Kansas has built in such a calculation in its presumptive child cost schedule. Kansas uses a variation of the Income Shares methodology. As noted in the Kansas guidelines:

> The [child cost] schedules also include a built-in reduction from average expenditures per child (**the dissolution burden**), because of the financial impact on the family of maintaining two households instead of one. See Kansas Judicial Branch, Rules Adopted by the Supreme Court, Rules Relating to District Court, Administrative Order 180, Re: 2003 Kansas Child Support Guidelines, Kansas Child Support Guidelines, II(C). [emphasis added]

Overview of Second Household Adjustment Continued

- The basic idea of second household adjustment starts with standard cost table spending on children is based on intact family child costs which are based on intact family net income. Household costs (only one house) limit the amount of discretionary income.

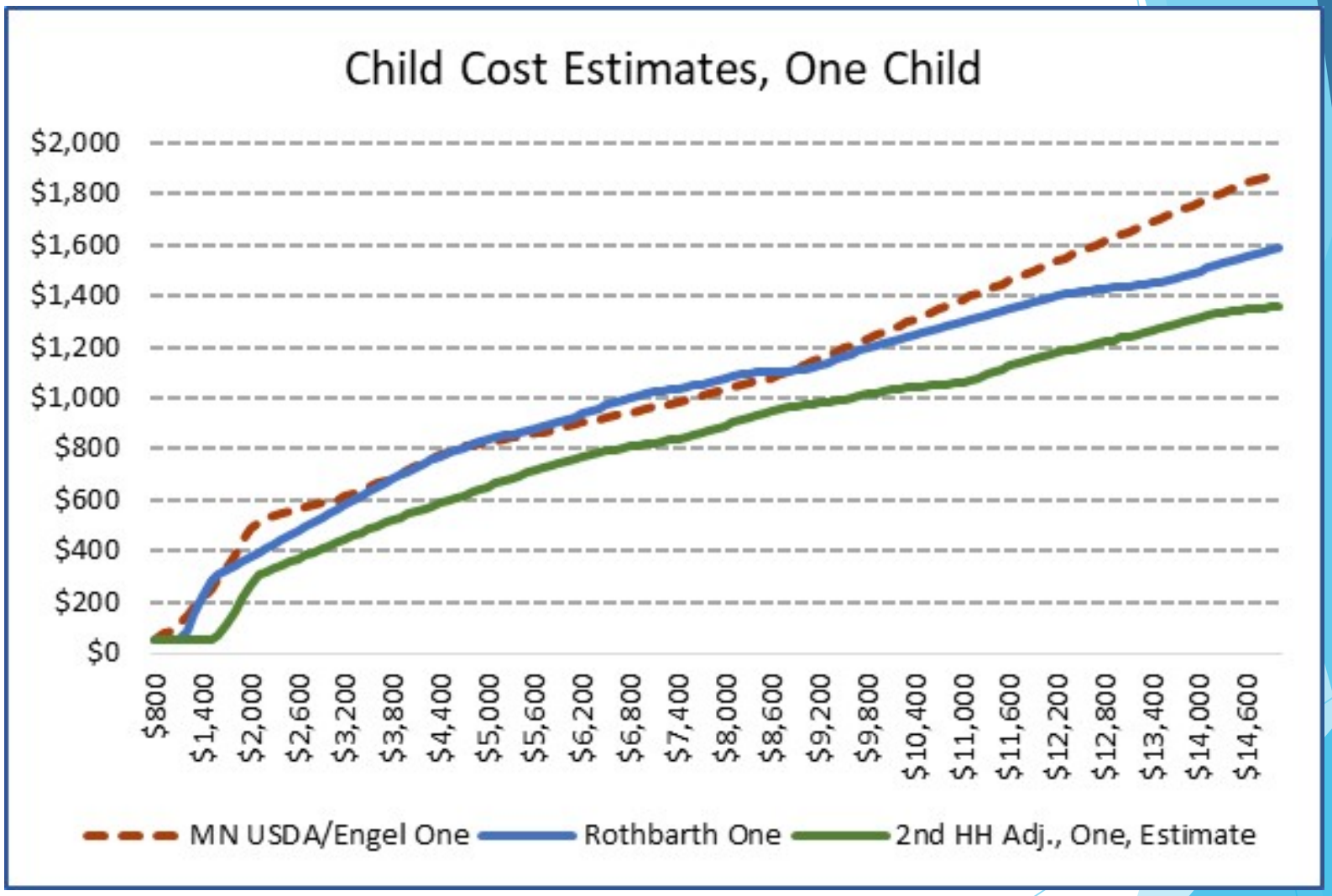
- First, adjust net income to reflect cost of maintaining a 2nd residence.

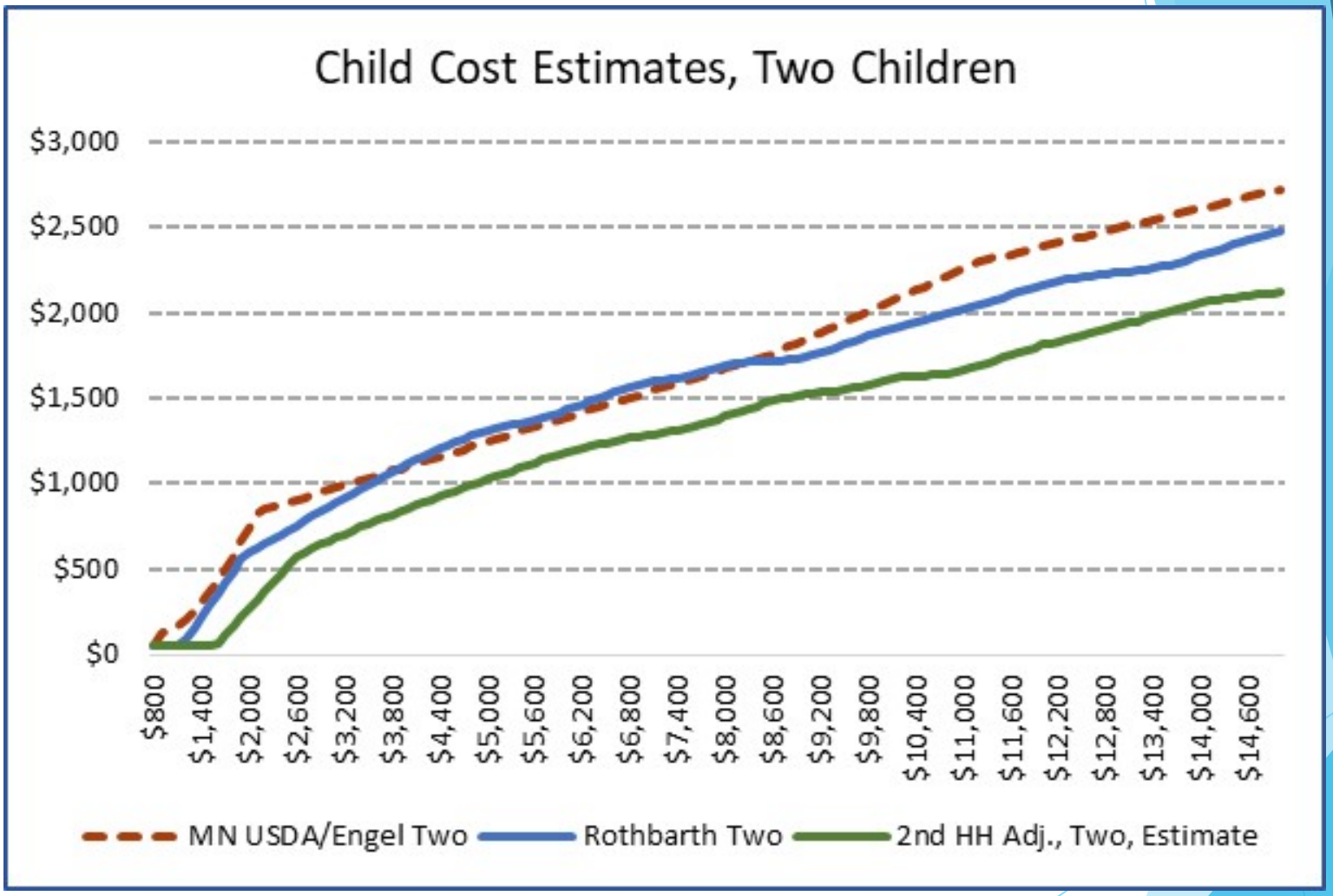
- Second household costs (rent/mortgage & utilities) are treated as if they were a tax, reducing net income.

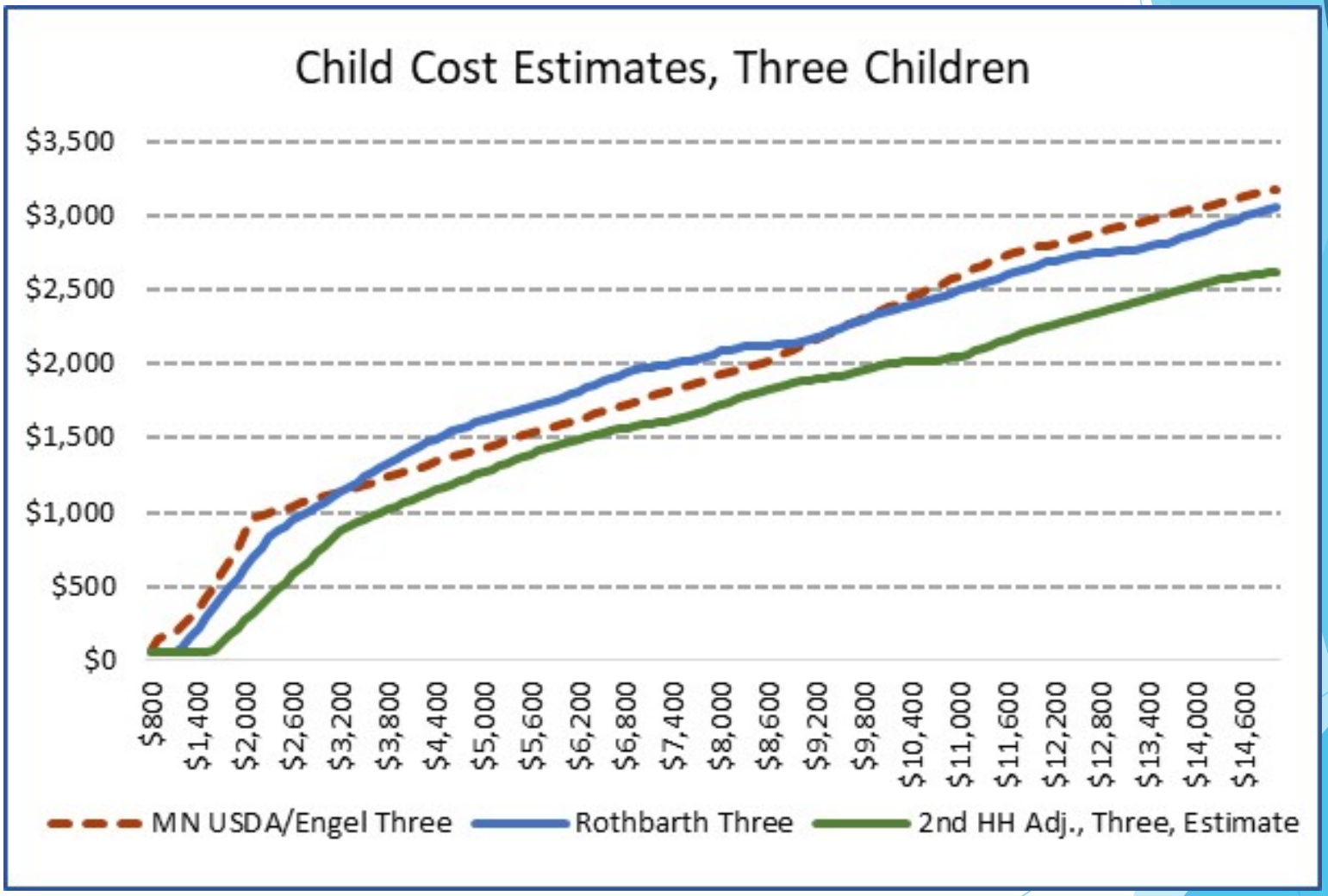
  Adjusted Net Income = Gross Income – “Income Taxes” - 2nd HH Adj.

- Adjusted net income is used to calculate child costs based on the spending patterns from USDA or Rothbarth studies

- However, adjusted net income is less than net income for the same level of gross income.


Child Cost Estimates, One Child
$2,000
$1,800
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
$800
$1,400
$2,000
$2,600
$3,200
$3,800
$4,400
$5,000
$5,600
$6,200
$6,800
$7,400
$8,000
$8,600
$9,200
$9,800
$10,400
$11,000
$11,600
$12,200
$12,800
$13,400
$14,000
$14,600
MN USDA/Engel One
Rothbarth One
2nd HH Adj., One, Estimate


Child Cost Estimates, Two Children
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$800
$1,400
$2,000
$2,600
$3,200
$3,800
$4,400
$5,000
$5,600
$6,200
$6,800
$7,400
$8,000
$8,600
$9,200
$9,800
$10,400
$11,000
$11,600
$12,200
$12,800
$13,400
$14,000
$14,600
MN USDA/Engel Two
Rothbarth Two
2nd HH Adj., Two, Estimate


Child Cost Estimates, Three Children
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$800
$1,400
$2,000
$2,600
$3,200
$3,800
$4,400
$5,000
$5,600
$6,200
$6,800
$7,400
$8,000
$8,600
$9,200
$9,800
$10,400
$11,000
$11,600
$12,200
$12,800
$13,400
$14,000
$14,600
MN USDA/Engel Three
Rothbarth Three
2nd HH Adj., Three, Estimate

Cost Shares Principles: Further Discussion

- Parenting Time Adjustments.
- Self-Support Calculations.
- Child-Related Tax Benefits as Cost Offsets.

Further Discussion: Parenting Time Adjustments

- The Cost Shares approach takes into account many facets of child support determination—not just the child cost schedule. Other issues can be addressed separately.
- Child cost tables do not incorporate built-in adjustments for the noncustodial parent's costs of exercising parenting time. Since sharing child costs depends on both parenting time share and income share, it is mathematically impossible to correctly build in an adjustment to the table.
- The presumptive parent time adjustments getting attention currently are used in Arizona and Indiana. They are similar, start with low parenting share, and gradually increase with parenting time.
- These formulas are reasonable approximations to economic patterns of parenting time costs, are gradual and do not have large and abrupt thresholds creating jockeying for parenting time between parents.

Further Discussion: Arizona's Parenting Time Adjustment

- Arizona has a graduated credit percentage applied to the award paid by the obligor. The percentage applies to the total child cost from the schedule and is credited against the NCP's obligation.

- There is a "Table B" for situations in which the NCP does not share all types of child costs.

PARENTING TIME, TABLE A	
Number of Parenting Time Days	Adjustment Percentage
0 - 3	0.0%
4 - 20	1.2%
21 - 38	3.1%
39 - 57	5.0%
58 - 72	8.5%
73 - 87	10.5%
88 - 115	16.1%
116 - 129	19.5%
130 - 142	25.3%
143 - 152	30.7%
153 - 162	36.2%
163 - 172	42.2%
173 - 182	48.6%

Further Discussion: Self-Support Calculations

- New federal regulations on child support (effective January 19, 2017) require states to implement self-support calculations in a state's guidelines.
- Currently, some states merely have a low income deviation and not a presumptive formula.
- Minnesota has a self-support formula under Minnesota Statutes, Section 518A.42.
- Self support is based on 120 percent of the federal poverty guidelines for one adult but with a minimum presumptive award.
- Minnesota may want to revisit the adequacy of its self support provisions to ensure compliance with federal regulations.

Further Discussion: Child-Related Tax Benefits

- States take a variety of approaches to applying child-related tax benefits in child support determination. These are:

  1) Not address the issue at all,

  2) Presumptively pro-rate child dependency exemptions,

  3) Reallocate the dependency exemptions on a deviation basis, or

  4) Treat the dependency exemptions on a case-by-case basis, calculate the value of the benefits to either parent, award the dependency exemptions to the parent with the greater benefit, and prorate the benefit dollar value and apply to the other parent's share of the presumptive award (raise the award if exemptions go to the NCP; lower the award if kept by the CP).

- Minnesota uses a variation of approach #3 under Minnesota Statutes, Section 518.145.

Appendix J

Rose v. Rose

765 N.W.2d 142
Court of Appeals of Minnesota.

In re the Marriage of Karen Anne ROSE, petitioner, Respondent,
v.
Brian Keith ROSE, Appellant.

No. A08–1063.
|
May 12, 2009.

Synopsis
Background: Former husband filed motion to modify child support. The District Court, Chisago County, James Brinegar, Child Support Magistrate and Robert G. Rancourt, J., denied motion, and husband appealed.

Holdings: The Court of Appeals, Gordon W. Shumaker, J., held that:

[1] husband's showing of differential of at least 20% and $75 between original order of child support and new child support calculation under shared income guidelines entitled him to irrebuttable presumption of substantial change in circumstances, and

[2] husband was still required to prove that current child support order was unreasonable and unfair.

Reversed and remanded.

***143** *Syllabus by the Court*

1. After January 1, 2008, the income-shares guidelines may be used to demonstrate substantially changed circumstances justifying modification of a child-support obligation under Minn.Stat. § 518A.39, subd. 2(b)(1) (2008).

2. If a party demonstrates entitlement to the presumptions under Minn.Stat. § 518A.39, subd. 2(b)(1), it is not necessary to first or separately show a change in circumstance listed in Minn.Stat. § 518A.39, subd. 2(a) (2008).

3. A party who demonstrates entitlement to the presumption of a substantial change of circumstances under Minn.Stat. § 518A.39, subd. 2(b)(1), must also show that the presumed change has rendered the existing order unreasonable and unfair before a modification may be granted.

Attorneys and Law Firms

Karen Anne Rose, Wyoming, MN, pro se respondent.

***144** Janet Reiter, Chisago County Attorney, Center City, MN, for respondent County of Chisago.

Mark Nygaard, Nygaard & Longe, St. Paul, MN, for appellant.
Considered and decided by STONEBURNER, Presiding Judge; SHUMAKER, Judge; and PORITSKY, Judge.*

OPINION

SHUMAKER, Judge.

A child support magistrate (CSM) denied appellant's motion to modify his child-support obligation, ruling that appellant was not entitled to rely on the amendment of the child-support guidelines, which provides a combined parental income mechanism for determining child support, to show the requisite substantial change in circumstances. The district court affirmed that ruling on review. Because the ruling erroneously deprived appellant of the irrebuttable presumption of changed circumstances under Minn.Stat. § 518A.39, subd. 2(b)(1), we reverse and remand.

FACTS

In the parties' marriage dissolution in 1997, the district court awarded physical custody of their minor daughter to respondent Karen Anne Rose, granted parenting time to appellant Brian Keith Rose, and ordered appellant to pay monthly child support of $674 in accordance with the child-support guidelines. Because of cost-of-living adjustments, by 2008, the support amount had increased to $859.

On January 29, 2008, appellant moved to modify his child-support obligation so as to decrease his monthly payment. Using a checklist affidavit provided by Chisago County to support his motion, appellant gave two reasons for the motion. For the first, he simply checked a box indicating "[a] 20% change in the gross income of the obligor." His second reason was his statement that "[t]o the best of my knowledge, application of the income-shares guidelines would result in a reduction of at least 20% of the current support order. This meets the guidelines of a substantial change in circumstances under Minn.Stat. 518A.39." This statement was the appellant's reference to a statutory change in child-support guidelines that became effective on January 1, 2007.[1]

A CSM heard the motion on March 5, 2008. Both parties appeared pro se. The CSM noted appellant's reference in his affidavit to the income-shares guidelines and asked, "Do you have any other basis for bringing ... your motion?" Appellant replied, "No sir."

The CSM then denied the motion, explaining that "the new statute cannot in and of itself create a substantial change of circumstances, to modify child support." Rather, the CSM indicated, "You have to actually show other substantial changes...." The CSM then issued a written order in which he found that

> [t]he [appellant's] motion is based solely upon the change in basic support which the new support guidelines would require. He affirmed that there is no other basis to his motion, but argues that he should be allowed lower support ***145** because the new guidelines would result in an amount which is more than 20% lower than the existing amount.

The CSM concluded that a change in the law does not constitute a substantial change in circumstances and that appellant had otherwise failed to show such a change. The district court then denied appellant's motion for review and affirmed the CSM's order. This appeal followed.

ISSUE

Minn.Stat. § 518A.39, subd. 2(a)(1), provides that a child-support order may be modified if there has been a substantial

increase or decrease in the gross income of the obligor or obligee so that the order becomes unreasonable and unfair. Minn.Stat. § 518A.39, subd. 2(b)(1), provides a presumption of substantial change in financial circumstances when an application of the child-support guidelines shows increases or decreases specified in the subdivision.

Is the child-support obligor entitled to the presumption of subdivision 2(b)(1) only after first satisfying subdivision 2(a)(1)?

ANALYSIS

[1] [2] When a CSM's decision is affirmed on a motion for review, the decision is treated as that of the district court. *Kilpatrick v. Kilpatrick*, 673 N.W.2d 528, 530 n. 2 (Minn.App.2004). The district court has broad discretion in deciding child-support issues and we will not reverse the court's determination absent a clear abuse of that discretion. *Gully v. Gully*, 599 N.W.2d 814, 820 (Minn.1999). A court abuses its discretion if it improperly applies the law. *Pikula v. Pikula*, 374 N.W.2d 705, 710 (Minn.1985). We review questions of statutory interpretation and application de novo. *In re Kleven*, 736 N.W.2d 707, 709 (Minn.App.2007) (citing *Brookfield Trade Ctr. v. County of Ramsey*, 584 N.W.2d 390, 393 (Minn.1998)).

[3] A child-support order may be modified upon a showing of a substantial change in circumstances that makes the order "unreasonable and unfair." Minn.Stat. § 518A.39, subd. 2(a). The modification statute lists eight types of changes that can qualify for modification. *Id.* The party who moves to modify an existing child-support order has the burden of demonstrating both a substantial change in circumstances and the unfairness and unreasonableness of the order because of the change. *Bormann v. Bormann*, 644 N.W.2d 478, 481 (Minn.App.2002), *review denied* (Minn. Aug. 5, 2003).

[4] The modification statute also provides for (1) a presumption of a substantial change in circumstances and (2) a concomitant rebuttable presumption of unreasonableness and unfairness if "the application of the child support guidelines in section 518A.35, to the current circumstances of the parties results in a calculated court order that is at least 20 percent and at least $75 per month higher or lower than the current support order." Minn.Stat. § 518A.39, subd. 2(b)(1). When the 20%/$75 difference is shown, the presumption of substantial change arising therefrom is irrebuttable. *Frank–Bretwisch v. Ryan*, 741 N.W.2d 910, 914 (Minn.App.2007). There is no dispute here that the record shows that appellant has demonstrated the 20%/$75 difference provided in subdivision 2(b)(1) when the existing child-support guidelines are applied.

The CSM interpreted the modification provisions of subdivision 2(a) and subdivision 2(b)(1) as independent and sequential. At the hearing, he explained to appellant that the statute has "two boxes." He said that appellant was required to satisfy "box number one" (subdivision 2(a)) before he could get into "the next box" (subdivision ***146** 2(b)(1)). And, the CSM indicated that to satisfy the first box, appellant was not entitled to rely on the 20% change when the guidelines are applied. The effect of the CSM's reading of the modification law was to deny to appellant the presumption in subdivision 2(b)(1). We hold that the CSM's interpretation of the modification statute was error, as was the district court's affirmance of that interpretation.

[5] [6] [7] [8] "When interpreting a statute, we first look to see whether the statute's language, on its face, is clear or ambiguous. A statute is only ambiguous when the language therein is subject to more than one reasonable interpretation." *Am. Family Ins. Group v. Schroedl*, 616 N.W.2d 273, 277 (Minn.2000) (citation and quotation omitted). If a statute is unambiguous, the court may engage in no further construction or interpretation but must apply its plain meaning. *State by Beaulieu v. RSJ, Inc.*, 552 N.W.2d 695, 701 (Minn.1996). "We are to read and construe a statute as a whole and must interpret each section in light of the surrounding sections to avoid conflicting interpretations." *Am. Family*, 616 N.W.2d at 277.

The modification provisions at issue are not ambiguous. Under subdivision 2(a)(1), the requisite change in circumstances can be shown by "substantially increased or decreased gross income of an obligor or obligee." Minn.Stat. § 518A.39, subd. 2(a)(1). The next subdivision quantifies that change of circumstances with the 20%/$75 "higher or lower" formula when the child-support guidelines are applied and attaches a presumption of a substantial change of circumstances. *Id.*, subd. 2(b)(1). Construing subdivisions 2(a)(1) and 2(b)(1) together, as we must, it is apparent that the legislature intended subdivision 2(b)(1) as a mechanism for satisfying subdivision 2(a)(1). To rule, as the CSM did, that subdivision 2(a) must be satisfied before subdivision 2(b)(1) may be considered, would deprive obligors and obligees of the benefit of a presumption that we have held irrebuttable. *Frank–Bretwisch*, 741 N.W.2d at 914.

Appellant supported his motion for modification with detailed financial information that demonstrated at least a 20% change in his support obligation when the child-support guidelines are applied. Because there is no dispute on appeal as to the accuracy or credibility of that information, we need not address it further. Appellant is entitled to the irrebuttable presumption in subdivision 2(b)(1) that there has been a substantial change in his circumstances.

The CSM also concluded that appellant is not entitled to rely on a statutory amendment to the child-support guidelines as the basis for his alleged change in circumstances. In support of this conclusion, the CSM cited Minn.Stat. § 518A.39, subd. 2(i) (2008), which provides that "[e]xcept as expressly provided, an enactment, amendment, or repeal of law does not constitute a substantial change in the circumstances for purposes of modifying a child support order."

Subdivision 2(i) is clear on its face, but what the CSM overlooked is the proviso, "[e]xcept as expressly provided." Subdivision 2(b)(1) expressly provides that a substantial change in circumstances will be presumed when the 20%/$75 formula is applied to the child-support guidelines. The CSM's application of subdivision 2(i) contradicts the plain meaning of that subdivision and negates subdivision 2(b)(1). This was error.

Although we need not interpret subdivision 2(i) because it is clear on its face, the historical context of the child-support guidelines amendment bolsters the conclusion that subdivision 2(i) must be read ***147** consistently with all other modification provisions in subdivision 2.

The legislature amended the child-support guidelines to provide an income-shares model for calculating child support. 2005 Minn. Laws ch. 164, §§ 26, 29, at 1920–24, *amended by* 2005 Minn. Laws 1st Spec. Sess. ch. 7, § 28, at 3092–93. The amended guidelines became effective on January 1, 2007. 2005 Minn. Laws ch. 164, § 32, at 1925, *amended by* 2006 Minn. Laws ch. 280, § 44, at 1145. But subject to certain exceptions, child-support obligors and obligees were not entitled to rely on the amended guidelines to modify child support until January 1, 2008. Minn.Stat. § 518A.39, subd. 2(j) (2006). In other words, the legislature imposed a moratorium on the use of the amended guidelines to demonstrate a change in circumstances unless an exception could be satisfied. The moratorium expired by its own terms on January 1, 2008. *Id.* Thus, after January 1, 2008, there was no limitation on the use of the amended child-support guidelines to demonstrate a substantial change in circumstances.

By the clear language of the law existing at the time of appellant's motion, he was entitled to the presumption in subdivision 2(b)(1) as applied to the amended child-support guidelines. The CSM's conclusion to the contrary was erroneous, and the district court's affirmance of that conclusion is reversed.

[9] Because the CSM did not reach the issue of the rebuttable presumption in subdivision 2(b) that the current child-support order is unreasonable and unfair, a remand for that determination is necessary. The record may be reopened if necessary to facilitate a proper resolution of that issue.

DECISION

The district court erroneously affirmed the CSM's conclusions that appellant was required first to satisfy Minn.Stat. § 518A.39, subd. 2(a), before he was entitled to the presumption in Minn.Stat. § 518A.39, subd. 2(b)(1), and that appellant was not entitled to rely on the child-support guidelines to show the requisite change in circumstances for modification of a child-support order. Because neither the CSM nor the district court reached the issue of the rebuttable presumption of unreasonableness and unfairness of the existing order, remand is necessary.

Reversed and remanded.

All Citations

765 N.W.2d 142

Footnotes

[*] Retired judge of the district court, serving as judge of the Minnesota Court of Appeals by appointment pursuant to Minn. Const. art. VI, § 10.

[1] The child-support guidelines were amended in part to provide that basic child support must be "divided between the parents based on their proportionate share of the parents' combined monthly parental income ..." calculated according to a graph in the statute. Minn.Stat. § 518A.35, subd. 2 (2006).

End of Document