# Analysis of Child Support Issues 

Submitted to the 2007 Washington State Child Support Work Group

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This analysis is dedicated to my 8 year-old daughter, Sierra, in the hope that by the time she grows up and has children of her own, we will have ended the barbaric practice of State-sanctioned separation of children from loving and devoted parents. While I have read over 20 text books on child development, all of which have stressed the importance of the bond between children and their parents to the child's development, none of these texts have taught me as much as Sierra has about the importance of both parents to children and the importance of their children to both parents.

This analysis is also dedicated to the 100,000 plus fathers currently sitting in jail today because they were assessed child support payments far higher than they could possibly make. My hope is that someday we will also end the practice of criminalization of parents so that these parents will be permitted to return to their jobs and to caring for their children instead of sitting in jail.

Finally, this text is submitted in sad memory of the 5,000 or more fathers who commit suicide each year because they were involuntarily removed from their children and turned into slaves, deprived of their children, their homes and their lives by a system that harms families and children far more than it helps. No loving and devoted parent should ever have to suffer such a fate.

My hope is that this analysis will mark the beginning of a new era in our history based upon a clearer understanding of a child's need to retain both parents in their life after divorce, just as the child had two parents before divorce. It is also my hope that we as adults will learn to work together in a cooperative manner, for the best interest of children and thereby end the current adversarial system of winners and losers wherein the only winners are attorneys and the certain losers are families and children.
"We have grown up in a climate of competition between people... We have been taught by economists that competition will solve our problems. Actually, competition, we see now, is destructive. It would be better if everyone would work together as a system, with the aim for everyone to win... Competition leads to loss. People pulling in opposing directions on a rope only exhaust themselves; they go nowhere. What we need is cooperation."

Deming, W.D., (1993) The New Economics for Industry, Government, Education.

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## FOREWARD

This section is intended to answer questions raised by Dr. Betson in his January 4, 2008 letter to the Washington State Child Support Work group (Betson 2008A) and to answer questions raised during my presentation of some of the following information to the Washington State Child Support Work Group on December 14, 2007.

The first and most important question, raised by some Work group members during my presentation, is why they should even bother considering the opinion of someone who does not have a PHD in Economics?

There are at least three reasons work group members should be open to multiple points of view and go beyond making decisions based purely on credentials. The first reason is that having credentials is no guarantee that one is right. Dr. Lenora Weitzman is a perfect example of this problem. For over ten years she was able to promote a point of view of "rich dads and poor moms" based upon data that turned out to be wrong. Yet, because Dr. Weitzman was blindly accepted as "America's most highly respected authority" on the issue of child support at the time, few questioned Dr. Weitzman or her research, and her model was accepted as the "absolute truth" in virtually every State. Dr. Weitzman even testified before Congress on this subject and thereby was influential in establishing the current federal regulations which are to this day, still based on her (false) data. Here in Washington State, our own economic table was based, and is still based, largely on the "research data" of Dr. Weitzman. It was considered political suicide to challenge her methods or her conclusions. As a consequence of her errors, and as a consequence of blind acceptance of her conclusions, millions of children have been deprived of a relationship with their fathers. Thus, credentials alone should never be used as the sole means of making decisions and resolving problems. Instead of hiding behind "appeals to authority," we should instead remain open to the possibility that "experts" may be wrong. The only way to avoid a repeat of the Weitzman problem is to insist that experts release their data and that we closely look at their methods to see if what they are claiming is actually true.

Those who fail to seek out both sides of a debate are likely to fall victim to misinformation by those with a vested interest in raising child support rates by presenting only one side of the debate. Thus it is imperative that we separate out fact from fiction and focus on the advantages and drawbacks of the competing models as well as the evidence that might support or refute competing claims.

The second reason to consider the point of view of those outside the field of economics is to avoid the "tunnel vision" inherent in any field of specialization. Child support is not merely an economic question. It is also a child developmental question in that the child has essential emotional needs for a relationship with both parents that may be as great or greater than a child's basic financial needs for food, clothing and shelter. If one only considers the "economics" of child support, one might indeed conclude, as Dr. Betson, did that there are no drawbacks to over-estimating child support. It is only when the child is viewed more broadly, as a real human being, that the drawbacks of overestimating child support become more apparent.

The third reason to consider the views of those quoted in this analysis is that many of them are in fact PHD Economists who strongly disagree with the methodology used by Dr. Betson. At least 16 of the authors cited in the following pages as making comments critical of the Betson methodology are PHD Economists.

In a letter sent to the Child Support Work Group on January 4, 2008, Dr. Betson claimed that "Mr. Spring is unfamiliar with the statistical techniques" used in economics (Betson, 2008A, page 1 ). Dr. Betson implies that economists follow different statistical rules that educational researchers. This is simply not true. One of my degrees is in Science Education. My work is conducting literature reviews and doing data analysis. No field in science is allowed to delete $90 \%$ of the sample and claim that their results can be generalized to those clearly not represented in the sample. No model which explains less than $20 \%$ of the variation in data would be considered acceptable upon which to based predictions of actual spending patterns even of those who were represented by the sample. These are not merely my concerns. They are the concerns of numerous PHD Economists.

The views of these 16 PHD economists are not represented in either the 2003 Sterling Washington Report or the 2005 PSI Washington Report. Thus, the Washington State Child Support Work group has, in the past, only been given an extremely one sided and highly biased point of view. In the pages that follow you will have a chance to consider the concerns of these PHD Economists who have thus far been excluded from consideration. It is important to at least be aware of both side of a debate before making a decision on who is right.

As for my academic training, I have a Bachelor's Degree in Science Education, a Masters Degree in Child Development, and I am currently a researcher in child development at the University of Washington. I have completed nearly all the course work to get a PHD in Child Development. My area of research specialization is conducting literature reviews and data analysis. Relevant to the current debate, I have a minor in mathematics and I have completed numerous courses in statistical analysis. In addition, I have 20 years teaching experience in problem solving and conflict resolution.

My educational background has greatly influenced how I view this problem. First, this is a scientific question best answered using the scientific method, which therefore requires gathering information from multiple sources of data, isolation of variables and seeking empirical evidence to decide between competing models.

In his letter to the work group, Dr. Betson claimed that I criticized his model based only upon a brief reading of the 2006 PSI Oregon report which he wrote. Nothing could be further from the truth. Although I have cited over 90 references in this analysis, there were in fact well over 150 studies I reviewed in preparing this report. As many of these studies approached 100 pages or more, this analysis is a distillation of over 10,000 pages of reading and commentary condensed down to 170 pages of issues. Of these 150 plus studies, over 10 were written by Dr. Betson and/or by his associates at PSI.

I also read many reports and studies critical of Dr. Betson's methods, most of which were written by PHD Economists. In addition, I read most of the source documents referred to by Dr. Betson. It is not accurate to claim that I do not understand Dr. Betson's methodology. It is precisely because I do understand his methods that I disagree with him. One purpose of this analysis is to explain in simple terms why his methods do not comply with well accepted scientific methods.

Second, this is a child developmental question in that a child has relationship needs with both parents rather than merely economic needs for food and shelter. I am concerned about the developmental wellbeing of children after divorce. My hope is to promote a child support system that will provide for true "child support" for both the child's physical needs as well as supporting the child's emotional needs to retain a relationship with both parents after divorce. This is probably the greatest difference between my view and that of Dr. Betson.

Dr. Betson clearly believes that it is in the best interest of children to preserve their financial stability after divorce in a single parent household even at the expense of depriving them of the emotional stability of preserving their relationships with both parents. This view is tied to the traditional "one wage earner-one care giver" family model that supposedly existed 40 years ago and that now only exists in the fantasy world of the Income Shares model. This traditional view of families ignores a mountain of evidence (described in detail in the final section on residential credits) that the modern family consists of two full time wage earners who are also two highly involved caregivers. Numerous studies have shown that over $70 \%$ of all families involve both parents working full time. In another $20 \%$, either the mother or the father works parttime. Thus, there are very few "traditional" families left. So why would we use a child support estimate based upon a family structure model that no longer exists?

This modern two wage earner-two caregiver family model is required in part because most modern families are living on the edge. Both parents must work full time and the family typically cannot afford to pay for child care. Parents solve this problem by working offsetting hours so that each is highly involved in caregiving while the other is at work. To deprive the child of one of these highly involved caregivers after divorce is more harmful to the child than chopping off one of the child's arms.

Dr. Betson claims that this question of whether a child is better off with two home or just one home after divorce is a "normative judgment" that cannot be resolved by scientific research. Phased another way, Dr. Betson assumes that whether a child is better off with two parents or just one parent after divorce is a "normative judgment" that cannot be resolved by scientific research. However, this assumption is simply wrong. There are at least 100 highly credible scientific studies that have been conducted on this topic in the past 20 years and none of them have concluded that a child is better off in a single family home after divorce. Instead, they all have concluded that children are better off with two highly involved parents after divorce. More precisely, the lose of either parent has severe and adverse consequences for the development of children. For a meta-analysis of this post-divorce child development research, see Bauserman, (2002). For a review of 100 studies of the benefit of father involvement in child development, see Rohner \& Veneziano (2001).

I am sure Dr. Betson is not deliberately trying to harm children. Instead, it is obvious that Dr. Betson is simply unaware of how much harm his model inflicts upon children. The only way to avoid this harm to children is to recognize that the child has a physical and emotional need for two homes after divorce, and that this emotional need for two homes is far greater than any financial need to preserve the child's pre-divorce standard of living in one home. Just as equity requires consideration of the income of both parents after divorce, so does equity require a consideration of the real expenses of both parents after divorce. Again, this is not a "normative judgment" wherein we can simply ignore the scientific research on this topic. The best interest of children requires an understanding of the true developmental needs of children. That research exists and it should not be ignored.

Third, it is apparent that this is a social "problem solving and conflict resolution" question involving people with competing interests rather than just numbers in a data set. It is not helpful to the problem solving process for Dr. Betson to discount, distort and otherwise mis-state my position or the positions of other opponents of his methods. For example, Dr. Betson erroneously claims that the $15 \%$ flat rate model I propose would lead to higher child support orders for lower income parents than the current table with the addition of a self support reserve This is simply not true.

On pages 20, 21 and 23 of Dr. Betson's letter (Betson, 2008A), he shows three charts indicating my proposal as charging a $15 \%$ rate for combined incomes below $\$ 2,000$ and even below $\$ 1,000$. Yet slide 66 of my presentation in December 2007 clearly states that I advocate starting the table at $\$ 2,400$ (based upon a combined full time minimum wage for both parents). If in fact, parents have less income for any reason than that, there would be less or no obligation. Thus, if one examines the tables in this analysis, it is obvious that my proposed Table accounts for the proposed self support reserve and therefore closely follows the red line in all three of Dr. Betson's tables until the red line hits $15 \%$ at which point it follows the green line.

One of my primary concerns in recognizing the true costs of both parents after divorce is reducing defaults and deviations by relieving the excessive burden currently placed on low income parents. It is harmful to children (and expensive for the State) to put either of the child's parents in jail due to child support orders being so high they cannot possibly be paid. Thus, there are no cases where the child support payment would go up under my proposal. To the contrary, awards would only go up under Dr. Betson's proposal, in which case all lower time parents, including low income parents would see dramatic increases in child support payments, dramatic increases in defaults and dramatic increases in low income parents going to jail instead of going to work or spending quality time caring for their children. Thus, the true case is the opposite of that stated by Dr. Betson.

As a second example, Dr. Betson asserts that "Mr. Spring's child support model is not based upon what American families - intact or nonintact - actually spend on children.". (Betson, 2008A, page 9). Once again, the true case is the opposite of that stated by Dr. Betson. As the following analysis will confirm, I have gone to great lengths to consider all relevant research on what families actually spend on children.

In my analysis I included the three best examples of this "bottom up, direct cost-based" research, but there were also a dozen additional studies I looked at in this area (two of which are listed in the Appendix). One of the few sources I did not use in arriving at a final Combined Cost Share estimate was Dr. Betson's model. One of the primary reasons I did not take his estimate into account was that the Betson Indirect proxy model is not based upon actual family spending on children. It is therefore extremely ironic that Betson should attempt to turn truth on its head, when it is the Betson method rather than the combined cost share method that fails to consider actual child costs.

Problem solving is not aided by either side misrepresenting or distorting the position of the other side. Instead, problems are best resolved by systematic and conscious use of basic problem solving steps. The following problem solving steps have been found useful in solving complex social problems:

1. Identify all reasonable options.
2. Avoid tunnel vision
3. Use multiple sources of information.
4. Analyze advantages and drawbacks of all options.
5. Make implicit assumptions of each option explicit.
6. Assess validity and reliability of all assumptions.
7. Divide complex decisions into smaller decisions.
8. Make explicit decisions on underlying assumptions before making bigger decisions.
9. Consider consequences of all options. Avoid snap decisions.
10. Seek a win-win solution: consensus promotes cooperation.
11. Choose the "most equitable" option for everyone.

I am also concerned about resolving conflicts. At the December 2007 work group meeting, Senator Carroll described two ways of resolving conflicts. To paraphrase him, the "hard way" is to ignore the point of view of your critics and try to jam your own solution down the throats of your adversaries. The reason this approach is not likely to be successful in the long run is because the "losers" will feel they were treated unfairly. Lack of consensus leads to a lack of cooperation. This "traditional" winners and losers approach to problem solving leads to a result where everyone loses except the lawyers. Senator's Carroll's "easy way" to resolve conflicts involves both sides listening to each other and responding to each others concerns in order to achieve a consensus solution. Children always benefit when adults work together for win-win solutions. Children always lose when adults fall back on the traditional model of winners and losers.

There is another approach to conflict resolution that I have spent years studying. Conflicts can be seen as stress responses to perceived threats. Often these threats do not really exist. But our brains fool us into thinking we are being attacked, when it is merely our assumptions and biases that are being questioned. The typical human response to perceived threat is to drop into "fight or flight" responses. Our higher brain functions, located in the frontal and temporal areas of the brain, become "shortcircuited" to the point where we cannot even talk. The cortisol level inside the brain rises as does our blood pressure. This is related to hyper-activation of the limbic system (or primitive brain) which over-rides the prefrontal cortex.

Because the prefrontal cortex (which is involved in complex thinking) is essentially taken offline, fight or flight responses are extremely counter-productive to solving problems and resolving conflicts. People become more rigid in their thinking when real solutions require just the opposite- more flexible, creative thinking. These fight or flight responses are seen in nearly all group conflicts. For example, when group members attack each others credentials rather than focusing on the merits of the models, this is related to a "fight" response. Alternately, some might refuse to even consider an alternate point of view and refuse to even listen to what is being said. This can be seen as a "flight" response. Such responses increase rather than reduce group conflicts.

So how do we get past fight and flight responses in order to work together to achieve consensus? One common solution is to focus on the shared vision or shared purpose of the group. We are all concerned about the well being of children. This is why we hold our points of view with such a passion. We are trying to help children. A fundamental aspect of all humans is the desire to protect children from harm. This need is so great in human adults that nearly any normal adult will risk their life in order to protect a child, even to protect a child the adult does not know and has never met.

However, because we all hold strong views, values and assumptions about the best way to help children, merely focusing on a shared vision will not help us get beyond our differences. In fact, some will claim that we can not get beyond our differences. They argue that we simply have different "normative values" and we must simply choose one point of view or the other. Their way of "resolving the conflict" is simply to vote. But such votes do not actually resolve the conflict. It fact, it may make the conflict worse by forcing group members to take sides and choose between opposing entrenched positions.

Thankfully, there is another way. It involves recognizing the underlying cause of our fight and flight responses and using the prefrontal cortex to restructure the conflict. This restructuring includes first reassure the limbic system that disagreements are not personal threats either to oneself or to children, and second getting the focus back on the problem solving steps noted above, namely identifying options, analyzing their advantages and shortcomings and using scientific research to resolve disagreements rather than relying on emotion and unexamined "normative values." .

For example, is it really true that "normative values can never be questioned"? I would argue that this statement is a perfect example of tunnel vision thinking. Normative values are nothing but assumptions based in part on past experiences and in part based upon conclusions derived from those past experiences.

However, the concerns expressed in this analysis are only partially about the hidden assumptions of Income Shares. The real problem with Dr. Betson's methodology is not merely that his Income Shares assumptions do not match the reality of modern families. Instead it is that Dr. Betson's Indirect Proxy method does not match the requirements of the scientific method. Thus, the following analysis spends very little time on "normative values" and instead focuses almost entirely on the severe shortcomings of the indirect proxy method.

A key skill in problem solving and conflict resolution is close examination of our assumptions by searching for empirical evidence that might support or refute those assumptions. Thus, many or even all "normative values" and conflicts over those values can be answered rationally rather than emotionally. In short, the solution to problem solving and conflict resolution involves using our prefrontal cortex to over-ride our limbic system rather than falling victim to the primitive area of the brain over-riding the more rational areas.

Finally, another important component of problem solving is to learn from past mistakes. In reviewing the processes and conclusions of the last work group, it is clear that they failed to achieve any kind of consensus. The vote on the final recommendation was split nearly 50-50. Just as important, public comment was nearly $100 \%$ against raising the child support rates as expressed in the Economic Table. Yet the slight majority of the 2005 work group completely ignored this public input, as well as ignoring the concerns of almost $50 \%$ of the work group, in recommending dramatic increases to the Economic Table. In short, the 2005 Work group tried to solve the problem by what Senator Carroll called "the hard way" and it did not work.

As a consequence of this failure to reach consensus, the legislature rejected the "majority" and "minority" recommendations and instead established the current work group to see if we can not find a better way to work out our differences. My hope is that the 2007 work group will learn from the mistakes made by the 2005 work group and try to reach consensus. This will make our job much harder. But it will make getting a bill through the legislature much easier.

I also want to apologize for the length of this analysis. Unfortunately this is an extremely complex question that involves literally dozens of hidden assumptions, each involving inter-related advantages and shortcomings. I want to make it clear that I am not expecting work group members to read the entire 170 page analysis.

For this reason, I have summarized most of the important issues in the Executive Summary section which comes next. This summary shows that three variables tend to determine the outcome of child support estimates. First, marginal methods are about $6 \%$ lower than per capita methods ( $15 \%$ versus $21 \%$ if both are direct cost, $18 \%$ versus $24 \%$ if both are indirect proxy). Second direct cost estimates are about 3\% lower than indirect proxy estimates (18\% versus 15\% if both are marginal, 24\% versus $21 \%$ if both are per capita). Third, within indirect proxy methods, Rothbarth methods are about lower 3\% than Engel methods (24\% versus 27\%). Thus, the lowest cost estimates are direct cost marginal methods (Combined Cost Share). The highest cost estimates are indirect proxies using a per capita adjustment and the Engel (food) proxy (Betson-Engel). These results hold especially when using the same set of data. But since child costs considered in the Economic Table (excluding child care and health care), as a percentage of combined family income, have been relatively stable for the past 30 years, these results also hold when comparing different sets of data as is shown by a comparison of 10 different studies in the next section. This explains why the Betson Engel method is higher $6 \%+3 \%+3 \%=12 \%$ higher than the combined cost share method. This relationship is shown in the following table.

| Child Cost <br> Methods | Direct Cost | Indirect Proxy: <br> Rothbarth | Indirect Proxy <br> Engel |
| :--- | :--- | :--- | :--- |
| Marginal | Combined Cost <br> Share (15\%) | Deaton (1986) <br> $11 \%^{*}(15 \% ? ?)$ | Williams (1987) (19\%) <br> Florida State (2004) (17\%)** |
| Per Capita | USDA (2005) <br> $(21 \%)$ | Betson-Rothbarth <br> $(2006) 22 \%$ | Betson Engel (1990) (28\%) <br> Betson Engel (2001) (25\%) |

* Deaton used a very low income sample from Sri Lanka and Indonesia who spent little money on adult expenses compared to spending on food. Deaton therefore got what he called a "lower bound" marginal - Rothbarth result of $11 \%$ and an upper bound marginal- Engel result of 29\%. Had Deaton used a typical U.S. sample it is likely that his marginal Rothbarth result would have been raised to about $15 \%$ and his Engel result would have been lowered to about $18 \%$.
** Florida State (McCaleb, 2004) got a Marginal Engel result of 17\%. Using the Betson per capita Indirect proxy results as a ratio to compare Rothbarth to Engel, had Florida State used a marginal-Rothbarth method, they would have got a result of $15 \%$.

Note that the most crucial difference in terms of determining outcome is whether the study is marginal or per capita. This chart highlights two recent misrepresentations by Dr. Betson. First, at the December 2007 meeting, Dr. Betson claimed that Florida State (McCaleb, 2004) had "replicated" his Betson-Rothbarth methodology. After researching the Florida State study, this turned out not to be true. Instead, Florida State replicated the Williams-Engel (1987) method. As the Florida State authors noted (McCaleb et al. 2004), and as is clearly shown in the above chart, all the original indirect proxy researchers used a marginal method (which McCaleb choose to follow) while Betson significantly changed the method by introducing a per capita adjustment. The Florida State authors then compared their result to the Betson-Engel method using the exact same data set and found that merely changing from a marginal to per capita adjustment raised the child cost estimate about $8 \%$ with no change in the underlying data. Regarding the Betson per capita adjustment, the Florida State authors noted on page 34: Following Espenshade, (the Florida State study) uses the log of total family expenditures and its square and the log of family size to control for total family spending and economies of scale. The Betson model uses the log of per capita family expenditures and its square and the log of family size to control for total family spending and economies of scale. There does not appear to be any substantive economic rationale for choosing one of these specifications over the other, but this difference in specification seems to be driving the differences in estimates.

Thus, far from replicating Betson, the Florida State authors (all three of whom were PHD economists) were so critical of Betson's method, they refused to use it. The reason this is important is because the current Washington Table is based primarily on a marginal-indirect proxy method (Williams-Engel, 1987) result of $19 \%$ that was recently replicated and supported by the marginal-Engel Florida State result of 17\%. The Florida State study is thus both strong evidence for retaining the status quo of the current table and also further confirmation of the Combined Cost Share estimate of $15 \%$. Should the Child Support Work group vote to adopt the Betson-Rothbarth method, they will in fact by voting to substantially change the way child support is calculated away from the original Income Shares marginal proxy model and to a new model which has very little to do with Income Shares philosophy and instead is simply using a per capita adjustment to arbitrarily raise child support even though there has been no change in the underlying data.

In addition, the Work group will be voting to use a child support model that has never been replicated and from a researcher who has not only repeatedly mis-represented the work of others but who also has refused to release his data set.

The Executive Summary is followed in Section 2 with a history of the Economic Table which will help readers understand how the current debate has been strongly influenced and distorted by past events. Significant issues covered in this section include the fact that Dr. Betson's claim on the bottom of page 5 (Betson 2008A) that his Rothbarth method is based upon the work of Angus Deaton is also not true. Instead, Deaton, Rothbarth, McCaleb, and several other economists referred to in this analysis all used a marginal indirect proxy method while Betson has used a Per Capita Indirect Proxy method.

A common myth promoted by Dr. Betson and his associates at PSI is that Deaton (1986) determined that the Rothbarth method resulted in a "lower bound" and the Engel method resulted in an "upper bound." This myth hides three key facts. First, Deaton used an extremely poor Sri Lanka sample. Given the difference in spending patterns between Sri Lanka and America it is not likely that the a Sri Lanka study can predict anything about American spending habits. Second, Deaton used a marginal control factor while Betson used a per capita control factor. This accounts for the third difference between Betson and Deaton, namely that Deaton got a marginal Rothbarth result of $11 \%$ while Betson got a per capita Rothbarth result of $22 \%$. What Deaton was really calling a lower limit was not at all the Rothbarth method. Instead, it was a result of $11 \%$. I agree with Deaton that $11 \%$ is likely to be a little too low. However, Deaton's study does not at all support a conclusion that Betson, using an entirely different method than the marginal Rothbarth method used by Deaton is some kind of lower limit. This was truly a monumental misrepresentation of the Deaton study on the part of Betson and his PSI associates.

Section 3 presents a summary of the drawbacks of Betson's methodology. I strongly encourage those currently in favor of this model to read this section. It is important to know the drawbacks of the options one is supporting. A highlight of section 3 is the analysis of Dr. Betson's sample size restrictions and the sample bias effect that this was likely to have on over-estimating child costs. On page 4 of Betson (2008A), Dr. Betson mis-states the both my December 2007 presentation data and the underlying BLS (Reyes-Morales, 2003) data.

Referring back to my Power Point presentation slides 32 through 34, Dr. Betson states (on Page 4, Betson 2008A) that "Mr. Spring should have stated I had over 150,000 QUARTERLY household interviews available to me. By dropping the word QUARTERLY he leads you to believe that I had over 150,000 interviews from over 150,000 different households."

In fact the 2003 BLS study was referring to over 150,000 different households. The number of "quarterly interviews" were well over 200,000 even for a four year period. Thus, I was not at all referring to quarterly interviews. I was in fact referring to 150,000 household units. Of these families, Dr. Betson eliminated various unspecified groups until he reached his sample of about 9,000 "complete responders" all of who were intact families.

This leads to Dr. Betson's next mis-representation. On page 2 and 3 of Betson 2008A, he explains that the reason it is okay to exclude the majority of American families is because he is only interested in the spending patterns of "intact families." Yet the CEX complete responders are only $29 \%$ of the sample while incomplete responders are $36 \%$ of the CEX sample. This means that in eliminating all the incomplete responders, Dr. Betson eliminated $36 \% / 29 \% \times 9,000=$ over 11,000 INTACT FAMILIES! If Dr. Betson was truly interested in learning about real intact families, then why did he eliminate over half of them? The answer is obvious. It is not merely that Dr. Betson would have gotten a much lower estimate of child costs. Far more damaging than that, the variation in these "incomplete responders" was likely to have been so high, it would have rendered his entire model invalid. (See Section 2 for a further discussion of the Variance problems inherent in the Betson Rothbarth method).

Section 4 presents a recommended alternative, the combined cost share method. This is a flat rate model similar to that used in several States, including the State of New York, which is demographically similar to the State of Washington. The information in this section is substantially different from the description provided by Dr. Betson in his January 4, 2008 letter. For example, neither the Rogers Cost Shares Model nor the Combined Cost Share model assume that the parents have equal income. Instead, both models are based upon total spending on the child which is then divided between the parents based upon their income.

Additionally, Dr. Betson mis-stated the methodology used to derive the combined cost share estimate. It is not based upon a "minimum estimate" of child rearing costs. Instead, it is based upon a "maximum estimate" of child rearing costs using three bottom up methods and three top down methods. It is important to understand that these six methods were not averaged. Instead in every case the highest estimate that could be supported by scientific evidence was used in order to arrive at a maximum possible estimate for low income wage earners. For example, the Rogers estimate for housing was not used because it was lower than the SSS estimate. In the area of transportation, the SSS method was not used because it is not realistic to base a child cost model upon the assumption that everyone will use a bus pass after divorce. In the area of food, all the estimates were rejected because none were based upon credible scientific research. Finally in the area of tax credits, the tax code is far more complex than described by Dr. Betson on pages 14, 15 and 16 of Betson 2008A. There is a more detailed analysis of this issue in Section 3. However, the combined cost share estimate uses the lowest estimate that was supported by scientifically credible research ( $\$ 150$ per month) because the intention was to arrive at a maximum total cost for the child rearing for items included in the economic table, not a minimum cost or even an average cost. (See Appendix 2 for additional information on this decision making process).

On page 17 of Betson 2008A, Dr. Betson notes that the actual ratio for one of the six methods I used to determine the Combined Cost Share estimate was only 14\% (13.98\%). Actually, two of the six methods came in at about $14 \%$ and one (the Rogers method) was about 12\%. However, the other three were about 15\% after adjusting for the known errors in the three estimates (for example after adjusting for the per capita housing error in the USDA estimate and the bus pass error in the SSS estimate.

Had I taken an average, I would have advocated for a $14 \%$ flat rate. But I wanted to make sure it was a maximum estimate for lower income parents as this is the group of parents I am most concerned about and I wanted to make sure children in low income households would have an adequate standard of living.

Finally, Dr. Betson notes throughout Betson 2008A that the six estimates are amazingly close. A couple of the bottom up methods resulted in estimates that turned out to be identical or nearly identical to a couple of the top down methods. I too was surprised by this result. I was expecting there to be a much greater spread in these estimates which would require making a additional determination of which of the six methods were more reliable and valid than the other methods. In the end, the convergence of the six methods around a central tendency was so precise that further analysis was not needed. All of the marginal cost estimates, whether they were bottom up or top down converged around a central tendency of $15 \%$ (or slightly less).

Given the divergent nature of some of the methods and the varying sources of data, this does at first seem a little odd. However, this convergence is similar to the odd convergence seen in family spending on housing. No matter how little or how much family income is or how many or how few children are in a family, or how broad the range of actual housing cost options there are, all credible studies of housing costs I examined resulted in total housing cost estimates of 30 to $33 \%$. Dr. Betson commented on this problem in the 2006 PSI Oregon report. What causes such convergences? I think that people consciously know what their budgets are and what their incomes are. They then make expenses based upon not what they need, but what they have to spend. For some reason, families consistently spend about $30 \%$ of net income on housing. And for a similar reason, families spend about $15 \%$ of income on the first child.

I am not expecting you to agree with all of the conclusions in this analysis. To the contrary, I encourage questions and critical comments as critical comments are a very important part of the problem solving process. It is my hope that you will pick out and respond to whatever sections of this analysis your feel are most in need of improvement and provide me with specific feedback of what needs to be improved and why it needs improvement. I assure you that I will respond to any and all constructive criticisms that are offered for improving this text.

Finally, I want to thank the dozens of people who have helped in providing me with the information contained in this analysis. Very few if any of these ideas are my own. Instead, they represent the consolidation of an alternate point of view that has been largely ignored in past debates over the child support question. In particular, this analysis attempts to openly deal with the question of what role both parents should play in the lives of their children after divorce. My view, and that of the Washington State legislature as reflected in the Washington State Parenting Act, is that children develop best, and are happiest, when they have both parents involved in their life to the maximum extent possible. This is true before divorce. It is even more true, and even more important, to keep both parents involved in the child's life after a divorce.

## SECTION ONE: INTRODUCTION AND EXECUTIVE SUMMARY

The Washington State Child Support Guidelines are being reviewed in accordance with a requirement of the Family Support Act of 1988 (P.L. 100-485). Federal regulations require that the review must include an assessment of the most recent economic data on child rearing costs. This report provides such an assessment, using the most credible child cost data from the State of Washington as recent as Spring, 2007. The method used in this report to estimate total child cost is triangulation, whereby multiple sources of data and multiple methods are compared to seek convergence around a center tendency. This is the "gold standard of scientific research" and this report is the first report ever to compare three different bottom up sources with three different top down sources to arrive at a consensus child rearing cost.

The following is a typical description of the rationale underlying the multi-source, multimethod approach to social science research in answering complex questions: The experience and history of evaluation methodology in the social sciences has reached the consensus that only a multiplicity of methods, which are used in a complementary fashion will eventually give a realistic estimate... Every research method has strengths and weaknesses which cannot be resolved within that method itself. Therefore, triangulating a result achieved with one method by replicating it with other methods may provide a more powerful and comprehensive approach... Rather than postulating a single "best method" this view acknowledges that there are optimal methods for answering specific questions, and that a composite of all methods constitutes best scientific evidence. (Walach et al., 2006)

Past models for developing child cost estimates have suffered from tunnel vision in that they have only used a bottom up approach (such as the USDA model) or a top down approach (such as the Betson-Rothbarth model). This focus on competing models leads to endless debates over who has the "best" model, when in fact there is no way to resolve the debate due to the black and white approaches used by the authors. Instead of engaging in rational problem solving and decision making, child support discussions boil down to a "circular firing squad." Those who fire the most bullets and come up with the most votes may prevail in getting their method adopted. But because they did not consider multiple points of view, there will always be resentment on the part of the losers and the "perception of a lack of fairness" will greatly undermine implementation of the plan. Thus, singular methodologies represent the worst kind of problem solving, and instead may increase rather than reduce conflicts.

The use of both top down and bottom up approaches is considered a "gold standard" of scientific research in that inaccuracies in one data source or method may be compensated for by other data sources and methods. Some data sources or models may be more reliable for one type of child expense or one type of family while another data sources or models may be more reliable for a different kind of child expense or a different kind of family. For this reason, the latest local bottom up information on child rearing costs was compared to two national "bottom up estimates to arrive at a consensus bottom up estimate. In addition, three different lump sum top down estimates were combined and compared with the bottom up results. The convergence of data from these six multiple approaches leads to a high level of confidence in the final results.

There are three other important differences between the "best scientific evidence" method used in this report and methods used in prior estimates.

The first difference is a consideration of all credible sources of information. A basic principal of the scientific method is to minimize exclusion of data. A common standard for generalization, also called external validity, is to minimize exclusions to insure that the sample used to build one's model is representative of the population as a whole. A problem of traditional methods for determining child support costs, discussed in greater detail in Section Two of this analysis, is a failure to represent the entire population of families for which one is trying to "generalize" one's model to represent.

It is troubling that nearly all past "traditional" models of child support were built upon only one source of data, the Consumer Expenditure Survey (CEX). The CEX relies on responders living in the same home for over a year and having the time to complete all five of the CEX quarterly interviews. This leads to elimination of poor, more mobile families who are more representative of divorced families and over-representation of wealthy, highly stable families in the CEX data base. In addition, the CEX is a self report survey and therefore suffers from inaccuracies in recall and response bias. It is therefore important to emphasis that while multi-method, multi-source analysis is the gold standard of scientific research, this report is the first time a "gold standard" process has ever been applied to the question of child costs in that this is the first report to go beyond the CEX data survey source.

The Betson methodology, in particular, further compounded the CEX problems by restricting the final sample to complete responders from intact families. By excluding, and otherwise failing to take into account the non-responders, incomplete responders, non-traditional families, and non-intact families in the CEX survey, Betson excluded over $90 \%$ of American consumer units.

The resulting "Betson families" had annual incomes that were nearly twice the median annual combined incomes of divorced families. They were twice as likely to own their home and over one quarter of these "Betson families" did not even have a mortgage payment to make. Thus, the Betson model is representative of only a very narrow group of people, namely extremely wealthy intact families who had the time to become "complete responders".

Such families bear almost no relationship to the typical families paying or receiving child support. Because the samples used by Betson to construct the Betson-Rothbarth model are not representative of the population as a whole, either locally or nationally, the Betson model should not be generalized outside of wealthy families who are similar to the "Betson" sample group.

In sharp contrast to the Betson model, which insists on excluding non-intact families and excluding non-responders and incomplete responders to the Consumer Expenditure Survey, this report attempts to include and account for all available information from all available families in order to insure the results can be generalized to all families.

A second major difference is the isolation of variables. Perhaps the single most important "technique" of the scientific method is controlling the number of variables used in the model. Therefore this analysis uses direct "marginal methods" for estimating child costs. The unit of analysis is a comparison between the same or similar families, whose spending patterns are looked at first without the child and then with the child. The difference in spending can therefore be reliability assumed to be due to the child because that was the only variable that was changed.

Some models do not properly control their variables in that they attempt to vary several things at the same time. For example, the Betson-Rothbarth model varies at least six variables at the same time. The model varies the family type (attempting to equate the spending patterns of intact families with non-intact families), the family income (using extremely wealthy families to estimate spending patterns of poor families), the family circumstances (using families who own their homes to families who rent), the ages of the parents (attempting to compare families with adults over age 50 to families with adults under age 30) and most questionable, the model attempts to compare the spending patterns of adult clothing to the spending patterns on children. In short, the model attempts to compare the spending habits on adult clothing of intact couples, who do not have children, but own their home, have a high income and are over 50 years old to the spending patterns on children of non-intact families with children who rent their home, have a low income and are under 30 years old. Even if a relationship did exist between these two distinct family groups, it would be impossible to tell whether any changes in spending patterns were due to the children, the intactness of the family, the ages of the parents, the income of the parents, the stability of the living circumstances of the parents (own versus rent) or the parents preferences for spending on adult clothing.

A third major difference between the method used in this report and other methods for estimating child rearing costs is simplicity. Simplicity leads to greater understanding and a greater perception of fairness. It therefore will encourage higher cooperation and compliance. By sharp contrast, some other methods, such as the Betson-Rothbarth method, involve logarithmic transformations to "normalize" data that is anything but normal. It is not at all clear from such models how conclusions were arrived at or how one could "double-check" the calculations.

The fourth major difference between the method used in this report and other methods for estimating child rearing costs is open transparency. A basic standard of both the scientific method and of statistical analysis is open transparency. It should be possible for reviewers of any scientific article submitted for peer review to comprehend the methods used and the statistical calculations in sufficient detail that reviewers could reproduce the study, including the exact calculations used, and achieve the same results as the original author(s). Therefore, every calculation is provided in this report so that the reader can replicate any of the conclusions. By sharp contrast, some authors have refused to release their data sets and insist that we merely "trust them' because they are the experts. In particular, Dr. Betson has refused to release his data set so his conclusions can be independently verified. It is not a common practice in science to refuse to release one's data set. This is particularly true when public policy decisions affecting millions of children and billions of dollars are riding on the accuracy of the conclusions.

The last "expert researcher" who refused to release her data set was Dr. Weitzman. It took 10 years to get Dr. Weitzman to release her data set. Hopefully, it will not take that long to get Dr. Betson to fully disclose and release his data set.

We should learn from past mistakes to not blindly trust the experts. My dad always told me, "Fool me once, shame on you... Fool me twice, shame on me." Researchers owe it to the public and to the scientific community to release their data sets and fully disclose all calculations used to arrive at their results.

A primary objection to the Betson-Rothbarth $(\mathrm{BR})$ method is a lack of transparency. Both federal and private sources (i.e., Mark Lino at USDA and Mark Rogers at Cost Shares) have attempted to replicate the Betson-Rothbarth methodology without success. The ability to replicate a study is an extremely important component of the scientific method. However, because the BR method rests upon numerous hidden assumptions and involves numerous hidden calculations, it is not possible to examine every step in their process and thus verify how the authors achieved their result. The calculations used and references to the underlying data are not listed in either the Sterling or the PSI reports.

Failure to report sample size exclusions is one example of the lack of transparency of the Betson methodology. Tracking and reporting how many family units were excluded at each stage of a study is essential for assessing the generalizability of any conclusions. This includes reporting the actual number of families excluded at each stage, the reasons for such exclusions and an estimate of the effect of the exclusion on the final sample used in the analysis. (See Westen et al., 2004, for a more complete discussion of the importance of fully disclosing sample exclusions).

As Betson failed to disclose this crucial information, and indeed has refused to disclose this information, it has been estimated from other sources. A Bureau of Labor Statistics (BLS) study (Reyes-Morales, 2003) noted that over 25,000 consumer units were contacted each year to achieve a final pool of about 7,000 competed interviews. As the Betson model is based on 6 years of CEX data, the original sample size had to be at least 150,000 consumer units. According to the BLS study, of these families, about $27 \%$ refused to participate and another $8 \%$ either moved away or had some other problem ( $35 \%$ non-responders). This left about $65 \%$ who completed at least one of the final four interviews. However, $36 \%$ were "incomplete reporters" who completed one or two interviews. 15\% completed exactly three interviews and 14\% completed all four interviews. Betson's "restrictions" first eliminated the 35\% of non-responders and 36\% of incomplete responders, bringing his sample down to about 58,500 (39\% of 150,000) Betson then eliminated all the "single person" household units (about half the sample). bringing the sample down to about 30,000. Betson then eliminated about 10,000 nonintact families and about 10,000 low income intact families, leaving a "semi-final" sample of just over 9,000 "traditional" couples with or without children that Betson describes on page 4 of his PSI 2006 Oregon report. As these 9,000 families represent less than $6 \%$ of total sample, Betson eliminated over $94 \%$ of the original sample to arrive at his "Betson" families. I have read several thousand studies during the past 40 years. The restrictions and exclusions used by Betson to construct his model were far and away the largest I had ever seen.

The problem with these restrictions is that poor families, who have to spend a higher percentage of their income on adult-related fixed expenses, such as gas, car insurance and housing, have far less money to spend in child-related expenses, such as food, clothing and toys. Elimination of these poor families therefore artificially drives up the estimate of what families actually spend on children because it only considers families with nearly unlimited financial resources.

At the December, 2007 meeting, Dr. Betson gave the rather weak excuse that the reason he did not use incomplete responders (and thereby eliminated over 54,000 consumer units) was because he was concerned about "the seasonal nature of some expenditures." Betson specifically referred to the possibility that some folks might be gone on a vacation. This claim ignores the obvious fact that incomplete responders were added to and dropped from the CEX at about the same rate for all four quarters of the year. Thus, any seasonal differences would simply average out. In fact, the only apparent reason to eliminate incomplete responders is if one is trying to artificially drive up the estimate of child rearing costs.

Even using the analysis of sample restrictions provided by the BLS 2003 study, it was still not possible to trace all the Betson-Rothbarth calculations from the base data and assumptions to the final Betson-Rothbarth Table. Studies are typically not accepted by the scientific community until they have been replicated at least once by someone other than the original author.

At the December 2007 Work Group meeting, Dr. Betson responded to this criticism by claiming that researchers at Florida State University had replicated his methodology and conclusions. I therefore obtained a copy of the Florida State study. My reasoning was that if Dr. Betson would not give me his data set, perhaps the authors of the Florida State study would give me their data set. Thankfully, the Florida State researchers were much more transparent and open about their methods than Dr. Betson has been about his.

The only internet reference to the Florida State study was on page 83 of the PSI 2005 California report, co-authored by Dr. Betson. The study was cited as: McCaleb, T.S., et al., (2004) Review and Update of Florida's Child Support Guidelines, Report to the Florida State Legislature, Florida State University Department of Economics, Tallahassee, Florida. The brief one page summary stated in part: "The researchers developed estimates of child rearing costs by applying the Engel estimator... to the 1999-2001 Consumer Expenditure Survey. The researchers found that the percentage of total expenditures devoted to child rearing is $\mathbf{2 2}$ percent for one child."

Even prior to receiving the 2004 Florida report, it was obvious that the Florida study did NOT replicate the Betson Rothbarth methodology as claimed by Dr. Betson. Instead, the Florida study used food as an (Engel) indirect proxy instead of adult clothing (the Betson indirect proxy). This difference is important because food expenses are a higher percentage of total spending than adult clothing. In relationship to total child spending, food spent on the child may be as high as $30 \%$ of total child spending and total food costs may exceed total child spending. Thus, while we would be still be comparing apples to oranges, in trying to compare spending on food to spending on children, at least the apples and oranges would be roughly the same size.

Adult clothing is unlikely to be a reliable measure of child spending, not only because it is comparing adult apples to child oranges, but because the adult apples (adult clothing) are a very small fraction of total spending (about 2\%) compared to child oranges (child spending) being 15 to $20 \%$ of total spending.

Second, food purchases are a far more stable "proxy" than adult clothing in that every person has to eat at least some food each day. However, one can go years without purchasing any adult clothing. Thus, food is an "essential cost" for both children and adults while clothing is substantially less essential, especially for adults who do not change in size over time. In short, any study using the Engel method would not be a replication of the Betson-Rothbarth method.

Third, the results of the Florida State study were actually closer to the results of the Combined Cost Share method than to the results of the Betson-Rothbarth method. Dr. Betson did use the Engel method in a prior study and concluded that the Engel method resulted in an estimated child support rate of about $30 \%$ of combined income for one child for an intact family. Betson called this an "upper bound". His own method, (Betson-Rothbarth) came in at $27 \%$ for one child using the same data set. Betson called this a "lower bound." Note that the difference between the two methods (food versus adult clothing as indirect proxies) was $3 \% / 27 \%$ or about $10 \%$.

The Florida study used a subset of the same CEX data set used by Betson. Specifically, Florida State used 1999 to 2001 CEX data while Betson used 1998 through 2003 CEX data. But the Florida State study got 22\% for the Engel method. If Engel is in fact, an "upper bound", one might conclude that using the BetsonRothbarth method would result in a $10 \%$ lower estimate of about $20 \%$ for one child. This happens to be what the current Washington Table is and what many have proposed as a "compromise" status quo solution.

As this is total child cost, if one assumes that child care and health care are about 5\%, this would drop the Florida State 2004 estimate down to $15 \%$ for one child, excluding child care and health care. This is exactly what I concluded using 3 bottom up and 3 top down methods. Thus, the results of the Florida study is in further support for the conclusions of the multi-method, multi-source analysis! In any case, it is certainly NOT a replication or confirmation of Betson's method or his conclusions.

The Florida State study, conducted by three PHD Economists, not only confirmed my $15 \%$ estimate, but also specifically agreed with my criticism of Dr. Betson's restriction of sample size and his use of a "per capita" adjustment in his equation. During my presentation in December, 2007, I criticized Dr. Betson's method, specifically referring to his insistence on only using "complete responders" and for failing to account for the "per capita one child error." Keep in mind that at the time, I had not read the Florida study (because the Florida State study is not available via the internet). My criticism of his use of a per capita adjustment was based purely on mathematical grounds in that per capita methods lead to over-estimation of child costs of about $20 \%$ for the first child. My criticism of his restriction of his sample to only complete responders was based on the fact that such a restriction is in violation of the scientific method. The principal is that data should never be eliminated unless the data has no relationship at all to what one is studying.

The authors of the Florida State study did a parallel analysis of the Betson-Engel study using Betson's techniques (only with much more transparency that Betson has ever disclosed). This parallel study clearly showed that the difference between their Engel result (22\%) and Betson's Engel result (30\%) was due entirely to two facts. First, Betson sample restrictions were substantially different from those used by the Florida State authors. In particular, the Florida State authors used incomplete responders while Betson only used complete responders. Second, Betson used a per capita adjustment that the Florida State authors did not use (The parallel study is described in detail on pages 30 to 34 of the 2004 Florida State Report). As noted above, the Florida State report is not available on the internet, but I would be happy to email a PDF of the Florida State report to anyone who is interested in reading it.

Regarding the Betson per capita adjustment, the Florida State authors noted on page 34: Following Espenshade, (the Florida State study) uses the log of total family expenditures and its square and the log of family size to control for total family spending and economies of scale. The Betson model uses the log of per capita family expenditures and its square and the log of family size to control for total family spending and economies of scale. There does not appear to be any substantive economic rationale for choosing one of these specifications over the other, but this difference in specification seems to be driving the differences in estimates.

Put in plain English, Betson added a per capita adjustment to the Espenshade (actually Williams (1987) method that increased the estimate of total child cost from 22\% to 30\% for the same set of data. Thus, there are two completely different ways of calculating "Income Shares" indirect proxy methods. The first is a "marginal method" used by Williams and Florida State. The second is a per capita method used by Betson. The difference between these two methods using the same underlying data is $30 \%-22 \%=$ $8 \% / 22 \%=36 \%$ increase in the child cost estimate!

The Florida State study confirmed my analysis as to why their estimate (22\%) was 8\% below the Betson-Engel estimate of $30 \%$. Their conclusion was that the difference was due to Betson's sample size restrictions (exactly as I had predicted) and also his use of a "per capita" adjustment (also as I had predicted). Thus, put in plain English, had Betson not so severely restricted his sample to complete responders, and had he used a marginal rather than per capita adjustment, he would have gotten an estimate of about $20 \%$, which is the same as the current table. Far from replicating Betson's methods, the Florida State authors were skeptical of Betson's methods openly stating that Betson's methods could not be justified for any substantial economic reason.

Interestingly, Williams (1987) got 24\% using 1972 CEX data. Using exactly the same method, but with the 1999-2001 CEX data, Florida State got $22 \%$. Therefore the cost
of raising a child according to the original Engel Income Shares method actually dropped $2 \%$ in the past 28 Years! Of course, the whole thing is nonsense as there is no consistent relationship between food cost and total child costs. But even if there were, the CEX data supports a drop of $2 \%$, not an increase of $30 \%$ as Betson now claims. The Florida State study was not the only study to conclude there has been no increase in total child costs. Mark Lino, with the USDA, did an analysis of CEX data from 1960 to 2000. He concluded that, excluding child care and health care, there has been no significant change in the percent of total child costs for the past 40 years.

There was a rise in housing costs during this period, However, the rise in housing cost was matched by a nearly equal drop in the cost of food and clothing. There was a substantial increase in the cost of child care related to the increase in mothers in the work force. However, this cost was highly variable and, in any case, is outside the economic table. Thus, for child costs included in the economic table, multiple highly credible studies by leading economists have concluded that there has been no real change in the percentage of child costs in the past 20 to 40 years.

## Excluding child care and health care, there has been no increase in the percentage of median child cost in the past 40 years.

The following is a quotation from Mark Lino, Senior Economist and Director of the USDA child cost project ${ }^{1}$ :
In 1960, a moderate (median) income family spent about \$146,800 (in 2000 dollars) to raise a child to age 18. A similar family in 2000 spent about $\$ 165,600$ for this purpose-a 13-percent increase. As a percentage of total child-rearing costs, housing increased slightly (from 32 to 33 percent), whereas health care and child care increased considerably over this time. Health care rose from 4 to 7 percent of total child-rearing costs in tandem with the significant increase in the costs of medical care over this time. Child care increased from 1 to 10 percent. As previously stated, in 1960, this category did not include child care because such expenses were minor. Hence, one of the major changes in child-rearing expenses since 1960 has been the addition of child care as more and more women entered the labor force.

Put in plain English, there was a total of $13 \%$ increase in child costs from 1960 when the first CEX/USDA report was made to the 2000 CEX/USDA report. However, $9 \%$ of this increase was for child care and $3 \%$ was for health care. Thus, according to the CEX/USDA data, all child costs other than child care and health care increased less than $1 \%$ (as a percentage of total child costs) during the past 40 years. As child care and health care are both considered outside of the economic table, there is no justification for increasing the percentage of child support payments as determined by the economic table.

While the USDA data can be criticized for being a "per capita" method and suffering from numerous other problems which cause it to be un-reliable and to greatly overestimate the actual cost of child rearing, those errors are the same from year to year. Since the 2000 USDA report suffers from the same statistical errors as the 1960 USDA report, one can have confidence in the conclusion that there has been no change in the percentage of child rearing costs even if the underlying data itself is not reliable. In other words, the statistical "per capita" errors will all be in the same direction and about the same degree and thus all cancel each other out when comparing one year to another. The fact that two separate and highly credible studies have confirmed that the percentage of child costs, excluding child care and health care, has not changed substantially in the past 40 years presents serious problems for the Betson-Engel and Betson-Rothbarth methodologies. How can such huge increases in the percentages used in the economic table, as proposed by Dr. Betson, be justified when there has been virtually no change in the underlying data that was used to make the table?

[^0]The following Table was constructed combining the Florida State tables on pages 30 \& 33, the California 2005 PSI study, page 17, with data described later in this analysis:

Comparison of Economic Table \% costs excluding child care and health care (Total Child Costs as a \% of Total Family Expenditures in parenthesis*)

| 14 Studies (year) | Data Years | Estimation Method | Cost of One Child | Cost of Two Kids |
| :---: | :---: | :---: | :---: | :---: |
| MARGINAL COST-BASED ESTIMATES: average 14\% |  |  |  |  |
| Pre-1980 orders | 1960-1980 | Cost Share Of actual expenses | 10\% (15\%) | 20\% (30\% |
| Australia (1999) | 1993-1994 | Engel-Income Share | 10\% (15\%) | 20\% (30\%) |
| Rogers Cost Share | 2001 | Cost Share Of actual expenses | 12\% (17\%) | 20\% (30\%) |
| Combined Cost Share | 2007 | Cost Share of actual expenses | 15\% (20\%) | 25\% (35\%) |
| New York 2002 | 2001 | Cost Share | 17\% (22\%) | 25\% (35\%) |
| Wisconsin | 1988 | Cost Share | 17\% (22\%) | 25\% (35\%) |
| Washington Awards (2003) | $\begin{aligned} & 2003 \\ & \text { Sterling } \\ & \hline \end{aligned}$ | Cost Share Of actual expenses | 18\% (23\%) | 24\% (34\%) |

MARGINAL INDIRECT PROXY ESTIMATES: average 18\% (CURRENT TABLE)

| Washington <br> Table (2007) | Espen? <br> 1988 adj | Income Share <br> Engel: Marginal | $18 \%$ (23\%) | $27 \%$ (37\%) |
| :--- | :--- | :--- | :--- | :--- |
| Florida State | $1999-02$ | Income Share - <br> Engel: Marginal | $17 \%$ (22\%) | $28 \%$ (38\%) |
| Engel (2004) | CEX | $1972-73$ | Income Share-Engel: <br> Marginal | $19 \%$ (24\%) |
| Williams <br> Engel (1987) | CEX |  |  |  |


| PER CAPITA COST BASED ESTIMATES: average 21\% |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| USDA (2005) | $90-92$ CEX | Cost-per capita | $21 \%(26 \%)$ | $32 \%$ (42\%) | PER CAPITA INDIRECT PROXY ESTIMATES: average 24\%


| Betson- <br> Rothbarth (2001) | $\begin{aligned} & 1996-98 \\ & \text { CEX } \\ & \hline \end{aligned}$ | Income ShareRoth: Per Capita | 21\% (26\%) | 26\% (36\%) |
| :---: | :---: | :---: | :---: | :---: |
| BetsonRothbarth (2006) | $\begin{aligned} & \text { 1998-03 } \\ & \text { CEX } \end{aligned}$ | Income Share-Roth: Per Capita | 22\% (27\%) | 27\% (37\%) |
| Betson-Engel (2001) | $\begin{aligned} & \text { 1996-98 } \\ & \text { CEX } \\ & \hline \end{aligned}$ | Income Share-Engel: Per Capita | 25\% (30\%) | 34\% (44\%) |
| Betson-Engel (1990) | $\begin{aligned} & 1980-86 \\ & \text { CEX } \\ & \hline \end{aligned}$ | Income Share-Engel: Per Capita | 28\% (33\%) | 39\% (49\%) |

* Costs are for $\$ 25,000$ total expenditures in 1983 dollars (\$43,050 in 2004 dollars) for one child age 8 or two children ages $8 \& 10$ per Betson (1990) assumptions. Child care and health care are determined by subtracting the Florida Table cost $\$ 43,000 / 12=\$ 3600$ per month ( $17 \%$ ) from the Florida total child cost $(22 \%)=5 \%$. In addition, the Florida table for two kids was $28 \%$ subtracted from $38 \%$ Florida total cost for two kids also yielded $5 \%$ per child combined child care and health care costs (10\% for two kids). Washington State actual awards from the 2003 Sterling report, Betson estimates taken from the Washington 2005 PSI Study (Appendix 1-2), the Oregon 2006 PSI study, page 27 and the Florida State 2004 study. Note that Betson only subtracted about $3 \%$ for child care and health care. However, the methods he used to calculate child care and health care are both highly questionable, as described later in this analysis). Thus 5\% per child for combined child care and health care costs was used to translate between all methods in order to maintain consistency.

The above table shows that estimates of child rearing costs (excluding child care and health care) can be divided into roughly four groups (as divided by the gray rows). Those based upon actual child rearing costs yield estimates ranging from 10\% to 17\%. The median of all direct cost estimators is about $14 \%$.

Studies based upon the Wiilliams/Engel (1987) income shares "marginal cost" assumptions yield estimates ranging from $17 \%$ to $19 \%$. Clearly the current Washington Table is based at least in part on the Williams/Engel (1987) "marginal" estimates. An argument could be made for retaining the current table based upon the Florida State conclusion that $17 \%$ is still the most accurate and up-to-date Income Shares estimate. However, while the Florida State study included most incomplete responders, neither they nor Williams compensated for non-responders in the CEX. Nor did they address the "low income inaccurate reporter" problem in the CEX. Had they done this, the number would have been lower. And had Williams and Florida State included nonintact families, this change would have dropped their estimate down to almost exactly the $14 \%$ number (excluding child care costs) other authors came up with from direct cost methods.

Betson's methods, based upon Betson's per capita adjustment, yield estimates of $21 \%$ to $28 \%$ with an average result of $24 \%$. Clearly the Betson "per capita adjustment" results in estimates that are much higher than the marginal-based income shares estimates used in the current Table and the marginal-based cost shares estimates.

Thus, even using all the income shares assumptions, such as the child only having one house, and ignoring tax credits to the CP, if an Income Shares study is done in a marginal rather than per capita way, the result is only slightly higher (about 3\%) than when using a cost share method. What drove the numbers up in the Betson studies was not merely the Income Share assumptions, but the way the sample size and data were manipulated. The problem with Betson's model is only partially due to Income Shares assumptions. The bigger problem with the Betson model was the unreasonable restrictions of sample size and an unreasonable "per capita adjustment".

Three variables tend to determine the outcome. First, marginal methods are about 6\% lower than per capita methods. Second direct cost estimates are about 3\% lower than indirect proxy estimates. Third, within indirect proxy methods, Rothbarth methods are lower 3\% than Engel methods. Thus, the lowest cost estimates are direct cost marginal methods. The highest cost estimates are per capita indirect proxies using the Engel (food) proxy.

## What are the true upper and lower bounds of child rearing costs?

Betson and his PSI associates claim that the Betson-Rothbarth estimate represents a "Low bound" and the Betson-Engel estimate represents an "upper bound." His claim is that total child cost is between $23 \%$ to $30 \%$ for one child. We will show in this analysis that indirect proxies are so unreliable that they have no use at all in estimating child costs. In fact, what the Florida study really shows is not that the traditional Engel method is better than the later Betson method. Rather the difference between these two methods shows the instability of results using any "indirect proxy" method. In other words, it is not a question of which proxy to use. Rather, the whole indirect proxy methodology is simply unreliable.

Using marginal direct cost methods, estimates of child cost included in the Economic Table actually range from a true lower bound of $10 \%$ to a true upper bound of $17 \%$. Thus, even making every assumption in favor of the CP would only justify retaining the current table as a "status quo option. If we "split the difference" between all credible studies and all credible estimates (specifically excluding the Betson estimates as not being based on credible assumptions), the "split the difference" option comes very close to the Combined Cost Share recommendation of $15 \%$ described in detail in Section 3 of this analysis.

## SUMMARY OF RESEARCH QUESTIONS

The research attempted to answer several questions. First was whether "per capita" or "marginal" child cost estimates were a more accurate means of estimating the additional cost of child rearing? It was concluded that marginal costs were far more accurate than per capita cost estimates.

The second question was whether direct costs or indirect proxies were more accurate estimates? It was concluded that indirect proxies were extremely unreliable estimates, and in fact, indirect proxies were the least reliable means of estimating child costs. For indirect proxies to yield an accurate estimate of child rearing costs, there would have to be a consistent relationship between spending patterns of couples with children and couples without children. There is substantial evidence that there is no relationship between the spending patters of couples with and without children. These groups are statistically different to the point that no consistent relationships in spending patterns exist between them.

In addition, Betson's version of indirect proxies assume that a relationship exists between intact families and non-intact families. There is strong statistical evidence that in fact no consistent relationship exists between the spending patterns of intact families and non-intact families. In addition, Betson's model assumes that a consistent relationship exists between the spending patterns of wealthy stable families that own their homes and poor struggling families that rent their apartments. Once again, there is no consistent relationship in the spending patterns of these two groups. To the extent that Betson's model was constructed using predominately wealthy families, it may be generalized to other wealthy families. But Betson's model is much less accurate in estimating the spending patterns of poor families. Finally, Betson's model assumes that a consistent relationship exists spending patterns on adult clothing and spending patterns on children. It was concluded that such a relationship does not exist.

The third question was whether bottom up detailed cost or top down total cost yielded more accurate estimates? It was concluded that both approaches had advantages and drawbacks. Therefore a combination of bottom up and top down estimates was used

## SUMMARY OF RESEARCH METHODS

The research for this report began with a review of all the documents from the 2005 Child Support Work Group, as posted on the Washington State Division of Child Support Website. These included the Sterling and PSI reports. Most helpful was the Minority Report jointly submitted by the NCP and CP representatives to the 2005 Child Support Work Group. All interested parties are encouraged to read the 2005 Minority Report including the articles and analysis attached to that report.

The initial research focused on the problems and financial needs of low income parents. A comparison was made between Washington State minimum wage, 125\% of the federal poverty guidelines (as published by HHS) and the Washington State Self Support Reserve requirement. Ratios between these factors were developed to produce a "low income" economic table which addressed all three issues.

The research next focused on methods used to estimate child rearing costs. This investigation made it clear that there were significant inaccuracies and other problems associated with the two "indirect proxy" methods used by Sterling and PSI (the BetsonEngel and Betson-Rothbarth estimators). Therefore, the research next examined direct, cost based estimates of child rearing expenditures.

The most commonly reported "cost based" estimate is the USDA's annual report entitled "Expenditures on Children by Families". This report, particularly the 2006 USDA report, is sharply critical of "indirect proxy" methods. However, there have also been several articles written by PSI and Rogers which were sharply critical of the USDA methodology. A common criticism of the USDA method is that it is a "per capita" method and therefore is certain to greatly over-estimate actual child rearing costs.

Therefore a fourth method, the Rogers Cost Shares method was also reviewed. (see www.guidelineeconomics.com) Like the USDA method, the Rogers Cost Shares method is a direct cost based estimate of child rearing costs. However the Rogers Cost Shares method uses the marginal, additional cost of child rearing to estimate child costs rather than a per capita estimate. This results in highly accurate estimates of child rearing costs for a variety of family income and family cost situations. However, this method is extremely complex and requires the use of a computer program to keep track of all the credits and debits.

Thus, a fifth option, which is a Combined Cost Share method, was developed using the scientific gold standard of combining bottom up and top down methods seeking convergence around a central tendency. Three bottom up approaches were used to examine several specific child cost categories. These were the Rogers Cost Share estimate, the USDA estimate and the 2007 Self Sufficiency Standard for the State of Washington. Synthesis of these three estimates yielded a minimum monthly child cost of about $\$ 360$ or about $15 \%$ of net combined monthly income for two minimum wage earners. In addition, three top down "lump sum" estimates of the total cost of child rearing were used. These also yielded a minimum monthly child cost of about \$360 (excluding child care and health care) or about $15 \%$ of net combined monthly income for two minimum wage earners (possibly as high as $20 \%$ including both child care and health care). The convergence of these six methods leads to a high level of confidence that the results are both reliable and valid.

In addition, a sixth option was examined based upon maintaining the "status quo" of the current economic table with only a slight modification to address the problems of the SSR threshold at the beginning of the table. This modification would result in a table that would have nearly a flat rate of $17 \%$ excluding child care and health care. This model turned out to be nearly identical to the New York State model. As current child support awards in Washington State are about $17.9 \%$ of combined income, the status quo option would result in virtually no change in either existing or future Court Orders.

An internet search was also conducted to examine the child support guideline methods, studies and reviews in other States. Over 20 States had reviews available on the Internet. These included, but were not limited to Alaska, Arizona, California, Georgia, Iowa, Indiana, Illinois, Kansas, Maine, Minnesota, Nevada, New Jersey, New Hampshire, New York, North Carolina, Ohio, Oregon, Texas, Tennessee, Virginia, and Wisconsin. In addition, the Florida State study (not available on the internet) was obtained and reviewed. Finally, an internet search of Residential Credit calculations was also conducted for nearly all of the States.

The goal of this research was to provide work group members and other interested readers with an overview of the current options available to the work group. Prior studies had been limited to only the first three options (Engel, Betson-Rothbarth and USDA). However, all three of these options suffer from major shortcomings. In particular, all three of these methods have been shown by clear and convincing evidence to greatly over-estimate child rearing costs.

Therefore this analysis also considered three additional options, the Rogers Cost Shares method, a combined cost share method based on combining bottom up detailed cost estimates with top down lump sum averaging of total costs, and a status quo option based upon retaining the current table. Of these three options, the combined cost share method is the closest to fairly sharing the economic burden of child rearing between the two parents after divorce.

A basic principle of problem solving is to consider all the options prior to making a decision. This analysis provides the work group with specific information on the advantages and drawbacks of nearly all existing options with the hope that it will enable the work group to make a more informed decision and thereby benefit the families who may have to live with the decisions made by this work group.

## RECOMMENDATIONS

This report recommends several specific changes to the Economic Table. Regarding low income parents, it is recommended that the Economic Table start at 125\% of the federal poverty guideline, which is also just below the minimum wage level here in Washington State. It further recommends that the self support reserve also be set at $125 \%$ of the federal poverty guideline. These changes would establish a combined obligation at the beginning of the Economic Table of $\$ 360$ per month with a presumptive minimum order of $\$ 180$ per month for the non-majority parent. However, if the parent has no ability to secure income (for example, if the parent is disabled or in prison), the minimum obligation should be zero, rather than the current minimum of $\$ 25$ per month.

It is further recommended that the Economic Table be revised using a direct "total cost" or "lump sum" estimate of actual child costs (Combined Cost Share method), rather than using an indirect "proxy" estimate, which does not consider actual child costs (Betson-Rothbarth method). An analysis of several objective measures of child costs leads to the conclusion that the existing Economic Table over-estimates child rearing costs by about 20\%, based upon a current average rate of $18 \%$ for median combined income as well as for actual Court orders.

The proposed Combined Cost Share table uses a flat rate of $15 \%$ of combined monthly net income to establish a total obligation which is then divided between the parents based upon the ratio of their income in comparison to the combined income. This method does not actually reduce the total child support obligation as child care and health care costs, which vary dramatically from one couple to the next, will lead to actual awards of $20 \%$ or more. However, this correction in the Economic Table will lead to a reduction in deviations as the Table will be much closer to the actual economic circumstances of couples coming before the court.

The Betson-Rothbarth (BR) indirect "proxy" method, which uses spending on adult clothing to estimate child rearing costs, was found to be an inaccurate method for determining child rearing costs. In addition, the BR method would result in dramatic increases of up to $30 \%$ in child support orders for the median combined monthly net income (CMNI) group. For example, the total support obligation for the a CBMI of $\$ 4000$ would rise from $\$ 681$ to $\$ 873$, This is a monthly increase of $\$ 192$ which equals a percent of CMNI increase from $17 \%$ to $22 \%$ which equals a $28 \%$ rise in the support obligation. In comparison, the proposed $15 \%$ table at the $\$ 4000$ CMNI level would result in a combined obligation of $\$ 600$ which would lower the total obligation by $\$ 82$ or $12 \%$. Given that the current table already over-states child rearing costs by about $20 \%$, further increases in the table are not justified and would only lead to an increase in failures to pay child support, thus harming both majority and non-majority parents.

A similar convergence method was used to estimate child rearing costs for two or more children. This analysis of multiply sources of data yielded an estimate of $10 \%$ for the second child and 5\% for each additional child. This estimate is also nearly identical to existing awards, thus adding further support for a status quo option.

It is further recommended that net income continue to be used on the economic table, but that the table no longer distinguish between children based upon age. In addition, child care costs and medical costs should continue to be handled separately from the table, but with more specific guidelines for both.

In summary, to the extent that there is a disagreement between the various models, the disagreement is limited to two areas. These are what the best estimate is for one child and what the best estimate is for low income families. For this select group (low income parents with one child), the mulit-source method and the status quo option estimate the cost to be about $15 \%$ to $20 \%$ while the Betson-Rothbarth method estimates the cost to be about $25 \%$ to $30 \%$. Thus, the work group and the legislature have a clear choice. Do they want to leave rates alone, or do they want to raise rates for poor parents by $30 \%$ or more and thereby cause a dramatic increase in defaults and NCP's dropping out of their children's lives?

## Two decision making trees

The variation in the data suggests that even our "best guess" has a range of plus or minus $3 \%$. Thus, even if one rejects the Betson model as having almost no possibility of being true, and believes that the best answer is $15 \%$ for one child, the true answer may still range from 12 to $18 \%$ exclusive of child care and health costs. Adding child care and health cost results in probable actual orders of 16 to $20 \%$. Thus, actual current awards may be about right (18\%).

## Splitting the difference?

One the other hand, one may believe (as Dr. Betson does) that the Betson method is the most likely model. In this case, we should simply assume the model includes all child care and health care costs, because that is how the model was developed.
A flat rate modification would also be important to address the low income problem.
These two corrections to the Betson model would result in orders of about 20 to $25 \%$.

## Should we put all our eggs in one basket?

The Betson model used only one data source: The Consumer Expenditure Survey. The Betson model assumes we must examine only one kind of family: rich, intact families. The Betson model assumes child costs can be estimated using only one method: adult clothing as an indirect proxy of child costs.
By contrast, the combined cost share model uses several data sources, several kinds of families and both top down and bottom up methods to estimate child costs.

## A third way: Seeking Consensus

Given the need to move on to other important questions, but also recognizing the importance of this decision, it may be best to permit Dr. Betson, and/or other interested parties, a chance to respond to this critique in writing. In addition, other work group members may have concerns about some of the options and methods which can also be addressed via written exchanges. Thus, it may be best to move the debate to an online forum. The hope is that this "alternate point of view" will be seen as the beginning of a dialogue seeking consensus rather than an "either/or" decision between opposing options.

## Does a child have one home or two after divorce?

Numerous highly credible studies, including meta-analysis combining several studies, confirms that children have better outcomes in shared parenting arrangements than in single parent arrangements and that either parent is equally capable of raising their child ${ }^{2}$. As a consequence, the American Psychological Association long ago adopted a gender - neutral stance regarding parents. Thus, if child care arrangements were made according to the existing scientific research on child development, about 10\% of all fathers have severe mental health problems that would make shared parenting unwise such that the child should reside primarily with the mother. In the same manner, about $10 \%$ of all mothers have severe mental health problems, that would make shared parenting unwise such that the child should reside primarily with the father. But in about $80 \%$ of the cases, it would be in the child's best interest to preserve their relationships with both parents. Washington State law, in the form of the Parenting Act (RCW 26.09.002), also encourages continuing the child's relationships with both parents to the maximum extent possible after divorce. Yet judges continue to ignore the law, ignore the scientific research, ignore the recommendation of child developmental specialists and ignore the policy position of the American Psychological Association. Shared parenting has been a reality of intact families for at least the past 20 years. Yet mothers still prevail in over $90 \%$ of all custody disputes. One has to ask why gender bias continues to be so pervasive in our legal system?

[^1]One also has to ask why gender bias is so pervasive in child support rules, regulations and guidelines. Currently $\$ 5$ billion dollars is spent annually in the U.S. on enforcing the financial-obligation sharing section of divorce agreements. By sharp contrast, only \$10 million dollars is allotted for enforcing the residential-obligation sharing section of parenting plans. That is 500 dollars devoted to one aspect of benefit to the child for every one dollars spent on the other aspect of benefit to the child. Yet all credible child developmental research shows that time spent with both parents is at least as important to the best interest of the child's development as money from both parents.

The next section of this analysis will show that the history of child support policies in the U.S. is one of fraud, deceit, distortion of data and misrepresentation of facts all motivated by individuals who are currently making millions of dollars of year from the suffering of children and families of divorce.

Section 3 will show that the data and models used to promote these failed and misguided policies are inaccurate and unreliable.

Section 4 will present data sources and models that are much more accurate and reliable.

The remaining sections provide a framework for changing the system to address at least those aspects of the system that are most harmful to children.

The votes that this work group will take in the coming months, and that the legislature will take in the 2009 legislative session are in reality votes on whether we will continue a failed system that is harmful to children and blatantly discriminatory against fathers, or whether we will instead move towards a financial system that recognizes that both parents have an equal right to maintain their relationships with their children after divorce and that it is in the best interest of the child to preserve their relationships with both parents.

In short, it is up to us, as adults who care about children and who care for children, to decide if children will be permitted the right to have two homes and two parents or only one home and one parent after divorce.

## Recommended reading:

Braver Chapter attached to 2005 Minority report.
2005 Workgroup Public Comments on DCS website.
Washington State Self Sufficiency Standard PDF
Rogers Cost Share Website.
New York State Child Support Review PDF

## SECTION TWO: OPTIONS FOR THE ECONOMIC TABLE

The next three sections address the economic table question (which is the central and most complex question this work group must resolve):

Whether the estimated cost of child rearing, as reflected in the economic table, should be based on the Betson-Rothbarth estimate, the Betson-Engel estimate, or some other basis for calculating the cost of child rearing.

Before discussing the various methods for estimating child costs, we will begin with a brief history of the current economic table, which is intended to be an estimate of all child costs excluding child care and health care. In Section Three, we will discus the inaccuracies of the CEX survey data, the inaccuracies of the USDA per capita method and the inaccuracies of indirect "proxy" methods of estimating child costs.

In Section Four, two other options for estimating child rearing costs will then be presented. The first is the Rogers Cost Share method. The second is a Combined Cost Share method which uses bottom up direct cost estimates combined with top down ratios of lump sum average costs. Finally, we will consider the benefits and drawbacks of retaining the status quo of the current economic table.

### 2.1 A brief history of the Washington State Economic Table

The unit of analysis to focus on is the ratio of combined essential spending on the child, excluding child care and health care, compared to total combined net income of the parents. For the median income non-intact family, who have much lower incomes than the median income intact family, total spending is roughly equal to total combined net income. Thus, we are concerned with the percentage of total child costs to combined net income.

A common error is to examine only the actual dollar amounts listed in economic tables. A more accurate method is to convert economic tables to percentage of total net income. The real question is whether the ratios used in the economic table are similar to the ratios in either intact families and/or non-intact families. A second important question is whether this percentage has changed over time.

1960 to 1980: Judges decided child support awards on a case by case basis An informal survey of child support orders from 1960 to 1980 revealed that child support payments here in Washington State typically averaged about 10\% of the noncustodial parents net income. Contrary to current popular myth, this rate was not set arbitrarily. Instead, judges (who were no friend of fathers and typically sided with the mother in every aspect of divorce proceedings) would examine the actual costs of the family and set an award based upon the actual cost needs of the child in each individual case.

In short, these judges were among the first "researchers" of child costs. It was common that judges in Eastern Washington would give smaller awards than judges in Western Washington. These awards accurately reflected the fact that child rearing costs were less in Eastern Washington than in Western Washington.

## 1972: Weitzman's "math error triggers the Child Support Revolution

In 1972, Dr. Lenore Weitzman, a sociologist, began researching child support payments in Los Angeles, California. Weitzman asked 114 women and 114 men to self report pre- and post-divorce income for both themselves and their spouses. According to Dr. Peterson, who was the first to actually review Dr. Weitzman's data in 1995, Dr. Weitzman's data was sketchy: income or needs data was missing for 134 of the 228 respondents, and, according to Dr. Peterson, the data for family size, age of the household head, oldest child, and other relevant variables was "problematic" with notable "inconsistencies." 3

Dr. Weitzman then compared these self-reported figures to each person's "economic need," based on the Bureau of Labor Statistics' Lower Standard Budget for an urban family of four, to arrive at an "income to needs" ratio. Unfortunately, her method ignored much of divorced women's income sources, particularly tax credits, and also ignored much of divorced men's expenses, such as paying for two houses instead of one and paying for un-credited child expenses whenever the child was staying with the dad. These oversights, together with outright math errors, led Dr. Weitzman to conclude that divorced mothers suffered a dramatic drop in standard of living whereas divorced fathers' standard of living rose. This result came as a shock to many fathers who were living out of their cars because they could not afford their child support payments.

From this flawed data, Dr. Weitzman calculated income/needs ratios with the results being labeled as the person's "standard of living." However, in the real world, standard of living is determined not simply by a ratio of income to needs, but also by a lifetime of economic choices, earnings, investments, and purchases. An accurate measure of standard of living would include property owned, savings, houses, furniture, cars, the neighborhood one lives in, most of which is divided between spouses in a divorce. It is not possible that a man would have a 10 percent higher standard of living after losing half or more than half of his marital property. Yet Weitzman claimed that divorced dads experienced a 42 percent increase in standard of living after divorce. This result was markedly different than dozens of other prior studies which had consistently found that the standard of living of both parents fell after divorce. It took more than ten years for Dr. Weitzman to admit this conclusion was wrong. She blamed the problem on a "math error." There is also the possibility that her "error" had in fact been a deliberate miscalculation of the data. Certainly, her refusal to release her data set for ten years is evidence that she was aware that her data did not actual support her conclusions.

In 1985, Weitzman published a book called "The Divorce Revolution: The Unexpected Social and Economic Consequences for Women and Children in America". In this book, on page 338, Dr. Weitzman made the now famous claim that "the average divorced father's standard of living increased by 42 percent while the average divorced mother and child standard of living fell by 73 percent." ${ }^{4}$

[^2]While Weitzman's book was not published until 1985, she had published several papers using the same data and making the same claims in writings as early as 1979. For example, in 1979, Weitzman, Lenore and Dixon, Ruth B. published Child Custody Awards: Legal Standards and Empirical Patterns for Child Custody, Support and Visitation After Divorce, 12 U.C.D.L. Rev. 473, 497-99 (1979). In 1980, Weitzman, Lenore and Ruth B. Dixon, published The Alimony Myth: Does No-fault Divorce Make a Difference?(1980) 14:3 Family Law Quarterly 141. They also published Weitzman, Lenore and Ruth B. Dixon, Evaluating the Impact of No-Fault Divorce in California (1980) 29:3 Family Relations 297. This was followed in 1981 by Weitzman, Lenore, The Economics of Divorce: Social and Economic Consequences of Property, Alimony and Child Support Awards (1981) 28:6 U.C.L.A. L. Review. These authors continued to beat the drum with two articles in 1982: Weitzman, Lenore and Ruth B. Dixon, When Husbands File for Divorce (1982) 44:1 Journal of Marriage and the Family and Weitzman, Lenore, Changing Families, Changing Laws: The Revolution in Family Law (1982) 5:1 Family Advocate and Weitzman, L. (1982) The Economic Consequences of divorce: An empirical study of property, alimony and child support awards. The Family law Reporter, Monograph No. 5 Vol. 8 (38) 4037-4057.

As documented in the Braver and O'Connell analysis attached to the 2006 Child Support Work Group Minority Report, ${ }^{5}$ Dr. Weitzman's claim that "dads standard of living rose 42 \% while moms fell by $73 \%$ after divorce" became one of the most widely cited "statistics" in American history. Weitzman's 1985 book became "required reading for all lawyers and judges in family law" and was "widely influential in the movement to change America's divorce and child support laws". Weitzman herself testified before Congress. Weitzman's book was cited in "348 social science articles, 250 law review articles and 24 appeal cases". Based largely upon her claims, Federal laws were passed, such as the Family Support Act of 1988, requiring all States to review their child support schedules. Her book was thus instrumental in the federal government passing the Act which led the State of Washington to change its own child support regulations in 1988 and form this work group in 2007.

It was in the midst of the Weitzman "hysteria" that Washington State in 1988 adopted, without critical review, the Williams/ Engel Income Shares methodology and enacted the current Economic Table which doubled child support payments of non-custodial fathers from the prior 10 to $15 \%$ of net income to the current $20 \%$ to $26 \%$ of net income to balance out the "inequity" claimed by Weitzman. Given Weitzman's figures, it would have been political suicide to oppose these recommendations. The Washington State Commentary for Divorce Reform and Child Support Guidelines - 1987, pg 3, written by Representative Marlin Appelwick, clearly indicates that Weitzman's conclusions were used to justify doubling child support rates here in Washington State "Many Washington Courts set child support at amounts even lower than the inadequate and somewhat arbitrary schedule established by the Association of Superior Court Judges Uniform Child Support Guidelines. Lenore Weitzman and Ruth Dixon found that the amount of child support awarded in Los Angeles in 1972 was only half the amount needed to raise children in low income families."

[^3]Weitzman's allegation, cited in the Appelwick article as being taken from her 1979 article, overlooked several crucial facts. First, in low income families, at minimum wage, the dad's income might only be able to provide for half of the amount needed to raise a child. If the mother is also making minimum wage, she will need to provide the other half. If the mother is not working, it may be up to the State to assist the mother in getting a job (by providing low cost child care). Second, no critical examination was done in the 1980's of Dr. Weitzman's data set to see if what she was saying was really true. Instead, her word was blindly accepted as true because she was America's leading researcher on child support issues.

In 1989, Dr. Sandy Braver pointed out that Weitzman's conclusions were inconsistent with all prior studies on this topic, including his own studies. He asked for Dr. Weitzman's data set, but curiously, Dr. Weitzman refused to provide it. Dr. Braver's concerns were dismissed as being simply the grumblings of a father's rights advocate.

However, over time, other researchers became concerned about Dr. Weitzman's conclusions and also began asking for her data set. They noted that her data was markedly different from the research of over a dozen other respected sociologists during the prior 30 years. In an effort to better understand the reason for the huge discrepancy, researchers from other Universities asked Dr. Weitzman to supply them with her data set. Standard academic and scientific policy is to immediately supply the data for peer review even before the data is published. However, Dr. Weitzman continued to refuse all requests for her data set between 1989 to 1995.

Finally, in 1995, Dr. Richard Peterson was able to obtain her data set through a third party. Peterson re-analyzed Weitzman's results using the original data and the same income-to-needs ratio as a measure of living standard. Peterson got radically different figures and published a critique of Weitzman's analysis in the American Sociology Review. ${ }^{6}$ Peterson concluded, "...it is clear that the results reported in The Divorce Revolution for the change in the average standard of living are in error. They could not have been derived from the data and methods described in the book.". (Peterson at 532-533). Peterson also found that Dr. Weitzman's inaccurate estimates and conclusions had "seriously distorted policy discussions" about child support guidelines.

In 1996, eleven years after the "Divorce Revolution" was published and 7 years after the first of her colleagues questioned her findings, Weitzman finally admitted her figures were wrong. She blamed a computer mistake made by a Stanford University research assistant. But, "I'm responsible - I reported it," Weitzman said. Her story may have been more believable had Dr. Weitzman been more forthcoming about releasing her data set seven years earlier. But given her stubborn refusal to disclosure her data set, it is reasonable to conclude that she was aware from the beginning that her data set did not actually support her conclusions. In later analysis, Dr. Braver found that there was "no appreciable difference in how mothers and fathers fared economically one year after divorce." Within two years after divorce, most women remarry or gain a stable job, thus improving their financial situation.

[^4]Meanwhile, the additional costs imposed upon fathers after divorce including remarriage tend to worsen their financial position. ${ }^{7}$

Put another way, there was no statistically significant difference in the drop in standard of living between parents after divorce. Thus, the current Washington Economic Table is based upon assumptions and upon data that have since been shown to be a complete fiction. But, for political reasons, Weitzman's downfall did not lead to a downward "correction" of child support tables.

1987: Robert Williams "invents" the Income Shares Model and makes a fortune To truly understand the history of child support guidelines, it pays to "follow the money trail." Tens of billions of dollars of taxpayers' money has been used as bribery to implement and maintain policies that are blatantly unconstitutional. Current expenditures alone are about $\$ 5$ billion dollars annually to support this massive bureaucratic infra-structure. Private businesses have made millions siphoning off a significant share of noncustodial parent income. How did it all get started?

The Washington State Economic Table, was based in part on the "Income-Shares" Model developed by Robert Williams in 1987. Robert Williams was also one of the founders of Policy Studies, Inc. (PSI) in 1984. Despite the fact that he is widely regarded as the father of child support policy in the US, Robert Williams has little training in economics or statistical analysis or the scientific method or child development. He does however have a severe conflict on interest in that his company's income (which currently makes over $\$ 120$ million dollars a year) rises as child support payments (and defaults on child support payments) rise. He therefore has a huge financial incentive to over-state child cost estimates as much as he thinks people might believe. Mr. Williams was also directly involved in creating the federal law which mandated increases in child support tables in 1988.

Robert Williams was hired by the Office of Child Support Enforcement to "provide technical assistance in development of child support guidelines." ${ }^{8}$ Williams invented and then recommended a new child support formula, known as "Income Shares." The explicit goal was to increase the average amount of child support awards $250 \%$.

Williams used a marginal Engel method (using family food costs to indirectly estimate child costs) to create a detailed economic table. Williams claimed that his "Income shares" model was based upon the research of Dr. Thomas Espenshade (1984). In fact, like nearly everything else in PSI mythology, this statement is not true. Instead, there is very little that connects the Income Shares model of Robert Williams to the research of Dr. Espenshade as Espenshade did not even use "income" as a factor in his model! Therefore an understanding of the history of the Income Shares model also requires an understanding of what Espenshade actually did and did not do.

[^5]
## 1984: Espenshade and the "marginal" Engel Indirect Proxy Method

The Williams Income Shares model was supposedly based on a national study, gathered and analyzed by Thomas Espenshade and published as Investing in Children; New Estimates of Parental Expenditures (Urban Institute Press, Washington, D.C., 1984). The national data used by Espenshade was drawn from a Cost Expenditure Survey (CEX) done by the U.S. Bureau of Labor Statistics in 1972.

A critical analysis of the Espenshade study is provided in a report written in 2002 by Dr. Ralph Frasca, a PHD Economist and professor of Economics in the Department of Economics at the University of Dayton in Dayton, Ohio. ${ }^{9}$ Dr. Frasca specializes in "forensic economics" which means he specializes in explaining the economic implications of legal decisions during legal proceedings. He is therefore very familiar with family budgets and the empirical or scientific basis for child support guidelines. On page 37, Dr. Frasca notes that "income was not even explicitly considered in the Espenshade study." Nor was there any estimate of whether percentage devoted to child costs increased, deceased or was constant with increasing income.

Dr. Frasca then described Espenshade's actual study method:
"The relationship between child support and expenditures.. is based upon only three data points in Espenshade's study. He divided families (from the 1972 CEX study) into three categories (low, medium, and high socioeconomic status). Families in each of these categories were not solely defined by income, but rather by education and occupation. The high socioeconomic group included husbands with a white collar occupation and some college. Husbands with a blue-collar occupation and a high school degree constituted the medium income group and the low income group consisted of husbands with a blue-collar occupation and less than a high school education. (Espenshade, p. 29). In fact, by defining socioeconomic categories, he explicitly permits income to vary as the parents' age and their employment status changes (Espenshade, p. 72). Accordingly, this study provides a particularly poor basis for inferring the relationship between childcare costs and family income. "

A major reason Espenshade limited his conclusions to general statements about three "groups of parents" is that the CEX data available for his study did not contain the information needed to determine what parents actually spend on children. In the end, Espenshade put a fudge factor into his equation to produce his result. The numeric result is not a statistical result based on the data. The result is not how much parents spend on children. The result does not accurately describe the cost of raising children. The result is primarily a result of his method and his fudge factor, not the data. It is clear that the results were not realistic enough for use in anything but casual conversation. Or as University of Chicago PHD Economist, Dr. Edward Lazear, put it: . . . the presumption that underlies the focus of much of the empirical research and policy debate on income distribution [spending within families] seems born of ignorance and is supported by neither theory nor fact. ${ }^{10}$

[^6]Given that Espenshade only determined three data points and did not even attempt to relate child costs to income level, one wonders how Williams was able to translate Espenshade's extremely limited data into Williams extremely detailed Income Shares model with line by line child costs as determined by precise parental incomes. Williams and PSI have repeatedly stated that the "Espenshade parameters were used to build the Income Shares economic tables." Yet according to Dr. Frasca, "it is unclear how they were used." Dr. Frasca notes: "
"Other than general references to previous studies, there seems to be no precise description of the methodology used to estimate the relationship between child care costs and income for the guidelines. For example, see "Appendix I, Technical Computations: Estimated Expenditures on children as Proportions of Parental Income and Parameters of the Income Shares Model" in Williams (1987). ${ }^{11}$

In short, according to Dr. Frasca, a leading forensic economist, Robert Williams, much like Dr. Weitzman, asks us to trust what he has done without actually revealing exactly what was done to create the Income Shares model. What is apparent is that the Williams indirectly estimates the costs of raising children in an intact family as a percentage of the combined incomes of both parents using food expenses as a marginal indirect "proxy" estimate of total child costs. Being an indirect measure, there is no way to directly examine the validity of the estimates. Indirect measures are therefore inherently unreliable and likely to be less accurate that methods which directly measure child costs. Sadly, the inaccuracies in the Williams/Engel methodology were never critically examined because Williams has never fully disclosed his methodology.

## Criticism of Williams Income Shares

Despite the lack of full disclosure, the Williams Income Shares model has received continuous criticism since its adoption as one that is arbitrarily contrived, not based on any valid economic evidence, and because it does not correspond to any set of rational principles for making a child support award. The first criticism of the Williams method is that it is based upon a single study (the Espenshade study just described) that was unrelated to the child support award question. But most of the criticism is based upon the Income Shares model itself, as this model assumes that the child only has one home after divorce and that the model assumes that indirect proxies, such as food, alcohol, tobacco or adult clothing, can be used to estimate pre-divorce spending patterns when many studies have shown that a consistent relationship does not in fact exist between any indirect proxy and actual child costs.

Superficially, acceptance of Williams' work was aided by the inclusion of a highly qualified advisory panel that made recommendations upon which the technical work should have been based. But the Income-Shares model departed so far from the advisory panel's recommendations that it earned an angry critique by panel member and law professor Harry Krause, published in the University of Illinois Law Review. ${ }^{12}$

[^7]Critics complained that increasing child support payments had more to do with increasing funding for bureaucrats than for increasing funding for children. Political acceptance of Williams' model in the States was clearly driven by the federal funding mechanism, which was tied to the amount of child support "collected." The new child support enforcement system began enrolling the best payers and counting all payments as "collections." By inflating the amount "collected" , the program received more funding. However, Braver, Fitzpatrick, and Bay (1988) showed that between 80 and 100 percent of due child support was paid voluntarily by fathers who are fully employed. ${ }^{13}$ Arbitrarily increasing the amount awarded to increase the amount paid was yet another way to increase the amount of federal funds received.

In summarizing the history of the Income Shares model, Robert Gay (2002) stated: Promoters claimed that the Income-Shares model was derived from guidelines that were already in use and that it corresponds to traditional child support law. Neither of these claims is true. They claim that the model is supported by economic data and economic studies. These claims are also false. Contradicting their claim that the Income-Shares model corresponded to established law was their claim that orders made under established law were "inadequate" and needed to be increased by a presumptively correct formula similar to the Income-Shares model. The claim of inappropriate orders under traditional law is also false. ${ }^{14}$

## 1981: History of the Melson Model and 'Ability to Pay"'

The Melson model goes back to 1981, when Maurice Franks presented a model which closely mirrored established child support law (How to Calculate Child Support, Case \& Comment, January-February, 1981 ). Franks' child support model confirmed that, prior to Williams Income Shares model, the standard method for establishing child support payments was based upon a Cost Share approach. In other words, the focus was on estimating actual child costs. Franks' paper included numerous legal citations in support of his model. Judge Melson (Delaware-Melson formula) applied the concept of "ability to pay" together with Frank's Cost Share analysis in the Melson model rather than relying merely on income in determining parental obligations. The use of "ability to pay" corresponded to both statute and case law in many states. "Ability to pay" is calculated as each parent's net income minus an amount required for sustenance of one adult. The use of "ability to pay" in place of income of both parents protects against ordering so much that the payer is unable to care for himself.

## 1981: History of the Wisconsin Flat Rate Model

The Wisconsin Flat rate model used in Wisconsin, New York, Texas and a few other states has the advantage of not being a regressive table. In other words, it does not charge poor parents a higher percentage of their income the way that the Income Shares model does. Thus, it has the primary advantage of a "perception of fairness." But is it based upon data that is more or less credible than the Williams income shares model?

[^8]While the percentages in Williams Income Shares model were derived from a single source (Espenshade... and perhaps not even derived from that source), the percentages in the Wisconsin "percentage of income" guidelines were derived from a review of more than one dozen studies of expenditures on children, conducted by Jacques van der Gaag. ${ }^{15}$

Thus, the research behind the Wisconsin model is somewhat similar to the Combined Cost Share model in that both indirect and direct cost measures, and both bottom up and top down methods were considered in constructing the estimate. This multi-source method determined that child costs were about $17 \%$ for one child, $25 \%$ for two children and $29 \%$ for three children. At the time the report was written, child support payments averaged $13 \%$ of average male income. ${ }^{16}$ Thus, the Wisconsin study appears to imply that child support rates needed to be raised slightly from $13 \%$ to $17 \%$. However, the $17 \%$ child support rate determined by this study was not based on combined income, but only on the income of the NCP father. As the study was focused not on child support per se, but rather on trying to solve the welfare problem of extremely poor families, the combined household income used in the study averaged $\$ 12,000$ in 1982 dollars (\$24,286 in 2005 dollars). The custodial parent was assumed to care for the children and not make any income outside of the home. The noncustodial parent was assumed to be the sole income earner and, in trade for providing over half of the child's support, the NCP would receive all child-related income tax benefits. Finally, the guidelines assumed that the non-custodial parent was absent from the home, and incurred no visitation expenses and that the child was with the nonworking custodial parent $100 \%$ of the time. Thus, the Wisconsin model is clearly based on the traditional one wage earner-one caregiver family model. The study author specifically noted that if both parents work, then the percentage charged to the NCP should be lower than $17 \%$. ${ }^{17}$

The study author also stated that if the NCP spent time with the child, then the percentage charged to the NCP should be lower than $17 \%$. ${ }^{18}$ Thus, if one takes the modern two wage earner-two caregiver family model, in which the custodial parent works, and the NCP spends time with the child, then what the Wisconsin study really found is that the flat rate charged to the NCP should not exceed the 13\% that over $80 \%$ of employed NCP's were already voluntarily paying. In other words, the Wisconsin Flat Rate model actually recommended retaining the 13\% status quo not the 17\% flat rate current assessed.

[^9]By the mid-1980's, the Washington State Association of Superior Court Judge's "Uniform Child Support Schedule" had created two Tables. The lower table, applied outside of the three most popular counties, retained the $10 \%$ rate. The higher Table, used in urban areas, was about 15\%. Thus, the Washington State average was about $13 \%$ by 1985 and closely reflected this credible scientific research.

Like the Income Shares model, the Wisconsin Flat rate model determined their estimates based upon studies estimating the proportion of their incomes that parents in intact families spent on their children. In short, the Wisconsin $17 \%$ estimate was derived by combining direct cost estimates of child rearing and concluded that child costs, excluding child care and health care, are about $17 \%$ of net monthly income for traditional one care giver-one wage earner families and 13\% for modern two-wage earner two care giver families. Thus, the Wisconsin median rate may have been close to the Combined Cost Share estimate of $15 \%$.

Given that the Wisconsin model was based upon many more sources of data than the Williams/PSI Income Shares model, one might wonder why more States selected the Income Shares 19\% variable rate model instead of the $13 \%$ to $17 \%$ flat rate Wisconsin model in the late 1980's as a basis for their economic tables?

There are two likely reasons most States, including the State of Washington chose the Williams model over the Wisconsin model. The first is that the Income Shares model was slightly higher (19\% instead of $17 \%$ ). Given the Weitzman-created hysteria that prevailed in the late 1980's, it would have been political suicide for any legislator to vote for a lower model when a higher rate model was being promoted, even if the higher model was supported by much less scientific data. The second reason States tended to select the Williams model was because Williams had his own private company (PSI) pushing his model. He also had connections within the federal government (which he was also a part of) pushing his model. Thus, the reason the majority of States are using the Income Shares model today is not because of any "normative value" decisions. Rather it is because of Weitzman's "math errors" and Williams "snow job."
1991.. Hayner versus Gardner... Rural Washington told to put up and shut up ${ }^{19}$ After passage of the Child Support Act in 1988, Washington's noncustodial parents obligations suddenly doubled from an average of $13 \%$ to an average award of $26 \%$ of their income (1991 Senate Digest of SB 5120). The fact that child support rates doubled in States all across America as a result of the federal Family Support Act of 1988 is also confirmed by a study conducted by Comanor in 2004. This "doubling" of child support rates came as a financial shock to NCP's and was particularly hard on lower time parents in rural Washington. Almost overnight, their child support payments more than doubled in rural areas as the former Washington Judge's Rural Table was replaced by the Washington State Child Support Act of 1988 and Federal Law which required that there could only be one Child Support Table for the whole State.

[^10]Keep in mind that this rate of $26 \%$ was based on a Table rate of $20 \%$ plus about $6 \%$ for expenses outside the Table (child care, health care and education expenses). In 1991, after a firestorm of protest from her Eastern Washington constituents, State Senator Jeannette Hayner, and leader of the Senate Republican caucus, offered the Hayner Amendment to try to address this problem. This language allowed Judges in each (rural) County the option to reduce Child Support Guidelines up to $25 \%$, for that one County. This would lower the Economic Table for that county from about 20\% to about $15 \%$, and lower the average award from about $26 \%$ to about $20 \%$ for those rural counties who wished to adopt it. This would still have been a substantial increase over the prior rural Table and a windfall profit for rural moms given the much lower child costs in rural areas. A survey of Eastern Washington judges, and judges in western rural counties found that most were strongly in favor of this amendment.

However, Washington State Governor, Booth Gardner vetoed the Hayner Amendment on May 21, 1991, stating that he felt it violated federal law and therefore jeopardized federal funding. At the same time, Gardner also vetoed aspects of Senate Bill 5120 (which had also passed the House) that would have removed overtime from the definition of income, limited the court's ability to order post-secondary education and changed the way parents pay for day care and travel expenses. It is no wonder that Democrats have had a hard time getting elected in Eastern Washington ever since.

## 1993... P.O.P.S. versus Gardner.. "Needs of the child are irrelevant" and can be replaced with instructions from the State

Between 1980, when the Weitzman hysteria began and 1990, when the Income Shares model was firmly established in most States, it is likely that average child support court awards rose from about 10\% of combined monthly net income to about $26 \%$ of combined monthly net income. Put another way, child support rates more than doubled in less than a single decade. Bitterness rose dramatically between divorced couples. In addition, the divorce rate itself rose sharply as mothers could now get a much better economic deal after divorce than they had during their marriage. As a consequence, children lost their fathers by the millions. This dramatic (and unjustified) increase in child support rates led to law suits in several States, most based upon violations of constitutionally protected "equal treatment." For example, in Fitzgerald v Fitzgerald [566 A 2d 719 (D.C. App. 1990] the D.C. Court of Appeals declared a guideline unconstitutional because it substantially deviated from established child support law.

In 1993, P.O.P.S. v. GARDNER, 998 F.2d 764 (9th Cir. 1993), Ninth Circuit U.S. Court of Appeals No. 91-36118, D.C. No. CV-90-5344-RJB, P.O.P.S. (Parents Opposed to Punitive Support), P.O.P.S. challenged the constitutionality of the Schedule, claiming that it violated the Due Process and Equal Protection Clauses of the Fourteenth Amendment. P.O.P.S. also claimed that the Schedule's economic table creates an irrebuttable presumption that violates the plaintiffs' right to procedural due process. P.O.P.S. maintained that no litigants have obtained a deviation by attacking the assumptions underlying the economic table. P.O.P.S. introduced declarations from economists, practitioners and judges, stating that in practice the economic table is irrebuttable. They testified that courts simply will not consider the argument that individualized child care costs differ from those assumed by the economic table, because they do not know the underlying assumptions of the table.
P.O.P.S. maintained that the Fourteen Amendment (procedural due process) prevent the State from ordering its citizens to pay child support without affording them an opportunity to demonstrate that the award does not reflect the "actual" cost of rearing their particular child. P.O.P.S. noted that the Supreme Court has long disfavored irrebuttable presumptions.

In response, the Federal Court stated: "P.O.P.S. 's contention that parents cannot demonstrate that the economic table overstates their actual child-rearing costs misses the point. The table does not purport to provide merely for the child's subsistence, rather it is designed to sustain the child at a standard of living concomitant with her divorcing parents' income. The measure of that standard is subjective. Washington state declares it to be irrelevant whether the noncustodial parent actually spent less than the amount indicated in the economic table to support their children before divorce; the table tells parents what they ought to spend."

Thus, the federal court ignored State law that child support was intended to meet "the basic needs of the child." Instead, the purpose of child support is to tell parents what they ought to spend on children and does not need to have any other rational basis. It would be interesting to see how parents in intact families would feel if the State told them how much money they "ought to spend" on their children; and if parents failed to comply, those parents would have their wages garnished, their Driver's License taken away and that they could be thrown in jail. We should not hold divorced parents to a higher standard than we hold non-divorced parents.

1990: Betson creates the "Per Capita Adjustment" raising the Engel estimate Despite this dramatic rise in child support obligations, Williams was not satisfied with the $100 \%$ to $150 \%$ increase in child support rates. Williams stated that the goal of his recommendations was to increase child support orders by 250 percent. ${ }^{20}$ However, what Williams lacked was any kind of data, analysis or method that might support raising child support payments beyond 20\%. After all, the direct cost estimates were all between 10 to 15\%. Even his own marginal Engel (1987) method only recommended $19 \%$. So how could Williams get rates to rise any further?

Remarkably, just as it seemed Williams would not be able to reach his goal, Dr. Betson rode to Williams rescue. In 1990, Betson showed that, child support rates could be increased sharply simply by making a "per capita adjustment" to the Williams-Engel method and making some additional restrictions to the sample size that Williams did not make, Betson was able to get the estimated cost of the child up to 33 percent (Betson-Engel 1990 estimate as described in the 2004 Florida State report).
By also manipulating (and basically underestimating child care and health care cost), Betson was able to create an Economic Table estimate of about $30 \%$ for one child exclusive of child care and health care costs. Since real child care and health care costs were typically at least $5 \%$, this meant that actual awards based on Betson's new model would be about $35 \%$ of combined income for one child.

[^11]Thus, what Williams had asked for in 1985, Dr. Betson provided in 1990, namely a new way to raise child support payments from $10 \%$ to $35 \%$, exactly $250 \%$ increase!.
We are now asked to believe this whole thing was merely a lucky coincidence. But since Dr. Betson has been intimately involved in writing PSI reports ever since (for example see the PSI 2005 California report and the PSI 2006 Oregon report), it is reasonable to wonder how much of this was coincidence and how much was planned.

Around this same time, numerous economists started questioning the wisdom of basing child support policies on the Engel "food share" method. They pointed out the obvious fact that it was unlikely that all other child related costs would be shared according to the same percentages as food costs. They also pointed out (correctly) that the BetsonEngel method had resulted in a per capita (33\%) estimate for one child. Finally, a few questioned how Betson could come up with a result of $33 \%$ using the Engel method when just four years earlier, Williams had come up with $19 \%$ using the same method and nearly the same data???

What was not realized until the Florida State study in 2004, was that the increase from $19 \%$ to $33 \%$ had been accomplished by changing the control adjustment factor from a marginal method to a per capita method. This subtle but brilliant statistical trick employed by Dr. Betson went essentially un-noticed for 14 years. No one noticed that Betson was no longer using the traditional method to make his estimate. What was noticed was that Betson's resulting estimate was almost identical to a per capita estimate of $33 \%$ for one child. In other words, critics attacked Dr. Betson's results when they should have been attacking his method. However, this pretty obvious criticism threatened Williams entire Engel's based Income Shares model. Unfortunately for Williams, he had placed all his Income Shares eggs in the Engel basket. What would Williams do once folks realized that the Engel method was nonsense?

Once again, Dr. Betson rode to Williams rescue. Dr. Betson dusted off a method that had been used in World War II for estimating child costs based upon adult spending on alcohol and tobacco. The method, called the Rothbarth method, assumed that adults who drank more and smoked more cigarettes had a higher standard of living. This assumption alone should be enough to show the foolishness of the whole indirect proxy scheme. However, after some serious arm twisting of the data (including adding a per capita adjustment to the original Rothbarth Method), Betson was able to come up with an total estimate of child costs of $30 \%$ of combined net income for an intact family based upon the Rothbarth assumptions (Betson-Rothbarth Estimate, 1990).

The result was also in total contradiction to all past research on indirect proxies. For example, Williams had used the Engel method in 1987 and gotten 19\%. Deaton et al., (1986) had shown pretty conclusively that Rothbarth estimates will always come up with estimates lower than Engel estimates. So how can Williams come up with a 19\% Engel estimate and Deaton (1986) come up with an 11\% Rothbarth estimate (lower bound) and then Betson come up with a 30\% Rothbarth estimate and still call $30 \%$ a lower bound?

The answer was only revealed in 2004 by the Florida State authors who confirmed that Betson has in fact used per capita adjustment to dramatically raise his Rothbarth estimate just as he had used a per capita adjustment to raise his Engel estimate.

Thus, beginning in 1990, there was now two ways to determine an indirect proxy estimate. One could either calculate results the traditional marginal way and get a lower estimate. Or they could use Betson's per capita adjustment and get a much higher estimate. Significantly, no other economist, other than Dr. Betson himself has ever used a per capita adjustment to alter their indirect proxy result. All nine other economists without exception have used marginal proxy methods and only one (Dr. Betson) has used the per capita proxy method. Here are the lists:

Proxy studies using a marginal method: 4 non-Betson studies, all marginal Williams (1986) Engel result 19\% (US CEX sample)
Deaton \& Muelllbaur (1986) Rothbarth result 11\% (Sri Lanka sample)
Percival, R. Harding, A. \& McDonald P. (1993) Engel result 11\% (Australia sample). ,, This group of PHD Economists specifically commented on Betson's method and rejecting it as giving too high a result.
McCaleb, T.S., Macpherson, D.A., \& Norrbin, S.C., (2004) (Florida State) Engel result $17 \%$ (US CEX sample)..this group of PHD Economists specifically commented on and rejected Betson's methodology concluding that the high result was due directly to Betson's per capita adjustment.

Proxy studies using a per capita method: 5 Betson studies all per capita Betson, D (1990) Engel result 33\% using US CEX sample.
Betson, D. (1990) Rothbarth result 30\% using a US CEX sample.
Betson, D. (2001) Rothbarth result 26\% using a US CEX sample.
Betson, D. (2001) Engel result 30\% using a US CEX sample.
Betson, D. (2006) Rothbarth result 27\% using a US CEX sample.
Clearly no one in the field of Economics other than Dr. Betson and his associates at PSI believe that the per capita indirect proxy is a valid method. So why has Dr. Betson become the most popular economist in America? The simple answer is that politicians and bureaucrats wanted to raise child support as much as possible. Dr. Betson gave them and Williams and PSI exactly what they were looking for. In other words, the whole movement to raise child support rates have nothing to do with any increase in the underlying data. Instead, they have everything to do with bringing huge windfall profits of hundreds of millions of dollars annually to Child Support bureaucrats and huge windfall profits of 120 Million dollars annually to Williams and PSI. This is why Dr. Betson became America's leading expert on Child Support in the 1990's. It was because Dr. Betson told bureaucrats exactly what they wanted to hear.

Even though Betson clearly used a "per capita adjustment" as part of the arm twisting of data, the difference was apparently far enough away from the magic per capita number of $33 \%$ to hide the fact that the Betson-Rothbarth estimate was in fact still a per capita estimate with only minor modifications. All that was needed now was some kind of explanation to provide the masses for why Williams Income Shares model suddenly had two estimates, the Betson-Engel estimate and the Betson-Rothbarth estimate.

The cover story became that the Betson-Engel estimate of $33 \%$ represented an "upper bound" and the Betson-Rothbarth estimate of $30 \%$ represented a "lower bound" of child costs. That PSI was actually able to sell this story to anyone outside of Hollywood shows that there was very little interest in verifying the truth in the 1990's.
The only interest was in raising child support payments as high as possible in order to "protect children." What was overlooked was that there was very little help for children of low income parents as higher child support rates only led to dramatic increases in defaults from the low income NCP dads. What was also overlooked was that PSI's primary business and real goal in raising child support rates came from making collections on defaults. The more dads that went into default, the more money PSI stood to make. By 1998, PSI's income had risen to $\$ 4$ million a year. By 2003, PSI was up to $\$ 21$ million a year. According to the PSI website, their 2006 income was $\$ 120$ million a year. Not bad for a privately held company. By the way, the PSI webpage has postings for dozens of jobs in case anyone is interested in helping them extract more money from fathers and thereby drive still more dads out of their children's lives.

Betson switches over from heavy drinking and smoking to buying adult clothing. There were still a few rough edges on the Betson-Rothbarth per capita method. The biggest problem was that the method used adult consumption of alcohol and tobacco to determine child costs. Many legislators complained about basing child support rates on the Rothbarth assumption that "the more booze and drugs moms and dads took, the higher their standard of living was." This objection was primarily due to the fact that the surgeon general of the United States was campaigning hard that parents and even potential parents should not be doing a lot of drinking and smoking as these things were "harmful to children." Legislators therefore wanted something more "politically acceptable" to use as an excuse for raising child support rates. Once again, Dr. Betson was up to the task. He managed to "substitute" spending on adult clothing as a proxy for child costs instead of spending on alcohol and tobacco as a proxy for child costs. What is most amazing about this switching of proxies is that there was only a slight change in the estimate of child spending. This amazing feat of switching proxies without changing the result confirms that Betson is truly a magician when it comes to manipulating numbers. This adjustment did lead to a $4 \%$ lowering of the "lower bound" (from $30 \%$ to $26 \%$ ). But apparently no one questioned why the prior "lower bound" was not really a "lower bound" after all. Instead, they were just happy they did not have to deal with all the critics complaining about the Betson-Rothbarth method's assumption that "the more one drank and smoked, the higher their standard of living was." The new assumption was "the more adult clothing one bought, the higher one's standard of living was." While this assumption was more politically acceptable, the real question is whether there is any truth to this assumption. As we will see later, there is no statistical or scientific proof that this assumption is true. In fact, to the contrary, there is a mountain of evidence that it is not true.

In 1998, Carlucci and Zelli ${ }^{21}$ did an analysis of spending patterns of clothing and found that clothing was in fact a "comfort" good, rather than a "necessity" good. While some clothing is a necessity, many adult clothing purchases were done not based upon need.

[^12]Thus, clothing purchases do not follow a regular pattern of consumption, like food and housing, but instead follow an essentially random pattern. Later in this analysis, we will present information taken from the 2000 to 2005 CEX which also shows that there is no consistent relationship between adult clothing purchases, child clothing purchases and total purchases.

## Is the Betson-Rothbarth method really a "lower bound"?

Deaton \& Muelllbaur ${ }^{22}$ (1986) calculated that the degree of over-estimation of child costs by the Engel method was quite substantial The authors stated, "We can construct no plausible defense for the belief that the food share correctly indicates wellbeing between households of different size, and we do not believe that credence should be given to estimates based upon that belief."

However, these authors did an analysis of the Rothbarth estimate and found that it produced much lower results than their Engel estimate. They then engaged on a rather complex argument to conclude that, while they were certain that the Engel method produced extremely high estimates, the Rothbarth estimate might under-estimate child rearing costs under certain conditions. Williams (and later Betson) used this Deaton 1986 study as "proof" that the Rothbarth estimate is a "lower bound." However, a review of the Deaton and Muellbaur study confirmed that Williams and Betson greatly misrepresented what the Deaton study actually concluded.

First, the study was about child costs in Sri Lanka and Indonesia. Even if there were a relationship between the Rothbarth method and children in these countries, the authors specifically warned that "such corrections (as their Rothbarth method)... would not be appropriate for developed countries" (page 741). The authors note that "the food share in this particular survey ranges from $95 \%$ to less than $20 \%$ of total outlay" (page 729). Clearly there is not a single family in the U.S. in which the food share constitutes $95 \%$ of the family's total budget. As a consequence of food expenses totally dominating the family budget, the authors found that, using the Engel (food based) method, "children are estimated to cost as much as adults" (page 730). The authors example was a typical family with two adults and one child. If each adult costs $X$, then the child cost would also be $100 \%$ of $X$. Expressed as a percentage of total family spending, the child cost (1.0) (X) where $X+X+X=100 \%$, thus $3 X=100 \%$, thus $X=33 \%$. In short, the Engel method with this very poor population, led to a per capita result. The authors then became more specific noting that "the Sri Lanka figures give one child as costing $82 \%$ of an adult. Expressed as a percentage of total family spending, this child cost would be (.82) $X$ where $X+X+(.82) X=100 \%$. Thus, $X=100 / 2.82=35.5 \%$ (the cost of one adult) and the child cost would be (.82) $\times(35.5 \%)=29 \%$ of total family spending. The authors noted that this figure (29\%) was "implausibly large, and would be so even for a developed country" (page 730). This statement was the basis of Betson's conclusion that the Engel method was an upper bound. Note however that was Deaton was really saying was not that the Engel method was an upper bound, but that $29 \%$ was "implausibly large."

[^13]The authors then went on to use the same Sri Lanka and Indonesia data but using the "Rothbarth method" to show that the change in methods (the change in proxies from food to adult expenses) resulted in a dramatic lowering of the estimated cost of the child. However, what Williams and Betson failed to point out is that Deaton and Muellbuer did not use tobacco, alcohol or clothing as their "adult good. Instead, the authors used "non food as the adult good" (page 734). Using this as a proxy, the authors concluded that "children cost about one quarter of an adult" (page 734). Thus, the cost of the child as a percentage of total family spending would be (.25) X where $X+X+(.25) X=100 \%$. Thus, $X=100 / 2.25=44.4 \%$ (the cost of one adult) and the cost of the child $=(.25)(.44 .4)=11 \%$.

In plain English, the Engel method concluded that the child cost 29\% (implausibly large) and the Rothbarth method concluded the child cost $11 \%$. For a variety of reasons, the authors concluded that $11 \%$ was likely to be too low as an estimate of the cost of the child. Based upon this difference, the authors concluded that "Clearly, for these examples, the differences between the Engel and Rothbarth procedures are very large" (page 735). In plain English, they concluded that 29\% was much greater than $11 \%$ and they did not believe that $29 \%$ could possibly be the correct answer. Thus, they concluded that the correct answer was somewhere in between the estimate of $11 \%$ (Rothbarth) and 29\% Engel. Importantly, they believed the answer was much closer to their Rothbarth result (11\%) than to their Engel result (29\%).
Thus, these authors never endorsed either the original Rothbarth method (tobacco and alcohol as a proxy) or the Betson-Rothbarth method (adult clothing as being a lower bound. Nor did they endorse any kind of estimate for developed countries such as the U.S.. Instead, they endorsed $11 \%$ of total family spending as being a lower bound for extremely poor populations living in developing countries.

The authors specifically noted that "the inconsistency between the estimates is entirely due to assumptions and not to measurement... (since) the same empirical evidence is used for both calculations" (page 733). We will return to this point in Section Two when we discuss the general unreliability of proxy measures. For now, we conclude with the authors observation that their Engel model was only able to explain $13 \%$ of the total variation in family spending (listed as R squared on page 729). The authors did not report explained variation for the Rothbarth model. However, it was likely not much greater as we will discuss further in Section Two of this analysis. Put in plain English, this means that neither the Engel nor the Rothbarth method is a reliable or consistent method for determining family spending on children.

The Deaton study was not the only study which was compared the Engel to the Rothbarth methods for the same set of data. Three other studies are worth examining. In the mid-1990's, Bradbury criticized the Rothbarth method on the grounds that it relies on the assumption that all household goods are private (i.e., all are either adult or child goods). Given that many goods are jointly consumed, Bradbury shows that the Rothbarth method in fact will always overestimate the cost of children ${ }^{23}$

[^14]In 1999, Percival et al., published a study of the cost of children using the 1993-94 Australian version of the CEX. Percival used the Engel method and found that the cost of raising one child ranged from $10 \%$ for high income families to $13 \%$ for low income families. Percival concluded that the Rothbarth method was simply too unreliable (which was why he used the Engel method instead). While it is possible that the cost of raising children is less in Australia than in America, given the close correspondence between this estimate and direct cost estimates, it is also possible that Percival simply did a more honest analysis. Percival also analyzed their data using the Rothbarth method and several other methods and found that, for the youngest age groups, the Rothbarth method was "the highest estimates of all the estimators." 24 Percival thus concluded for that "the Rothbarth estimates should be discounted."

In 2004, McCaleb et al. at Florida State conducted an analysis of child costs using the Engel method and got a total cost of $22 \%$ ( $17 \%$ excluding child care and health care). This result was substantially less than the Betson-Rothbarth estimate. McCaleb then analyzed the Betson-Engel estimate and found that the difference had nothing to do with the CEX data itself and instead was due to a per capita adjustment that Betson had added in 1990 and that had not been used by Williams, Deaton or McCaleb. ${ }^{25}$ The obvious conclusion is that the Betson-Rothbarth over-estimates child costs because it is in fact a per capita method.

Finally, there are numerous other methods of estimating child costs, nearly all of which have yielded estimates far lower than the Betson-Rothbarth method. Later in this analysis, we will present a summary of a half dozen of these methods. It is therefore not at all accurate to claim that the Betson-Rothbarth estimate represents some kind of "lower bound." In fact, given the un-reliability of indirect proxy methods, and the other problems specific to the Betson-Rothbarth method (as described more fully later in this analysis), it would be more accurate to state that there is no consistent relationship between spending on adult clothing and spending on children.

## Recent opposition to Betson and PSI

In the late 1990's, R. Mark Rogers, in conjunction with some economists, became concerned about problems with Betson's model, indirect proxies, Rothbarth assumptions and income shares assumptions. Rogers argued that child costs should be determined directly rather than indirectly through proxies. Rogers further argued that a child typically has two homes after divorce and that there are costs associated with both homes. Rogers view was supported by three studies on this topic. The first was a 2001 study which confirmed that child costs in the non-majority time parent's house were typically greater on a per day basis than child costs in the majority time parents house. This was because the lower time parent was paying for costs, such as a bedroom for the child, even on days when the child wasn't there. ${ }^{26}$

[^15]Murray Woods and Associates (1999) found that, of non-custodial parents who had visitation with their children, about 90 percent of these parents provided a separate bedroom for the child. Given that housing is the single greatest component of child costs, this is a very surprising result that casts the "no NCP expense" assumption of the Betson-Rothbarth model into doubt.

The third study, in 2003, reached conclusions identical to the 1999 and 2001 study. Conducted by Fabricius and Braver, this study provided more detail on how much nonmajority fathers actually spend on their children while the children are in their care. Rather than asking majority mothers for this information (as the CES does) or nonmajority fathers for this information, the authors deliberately sought out a less biased source of information... the children of divorce. In a survey of several hundred children of divorce, the authors found that fathers direct expenses on children increased in a linear fashion according to the amount of time the fathers spent with their children.

Contrary to the standard assumption of the Betson-Rothbarth model that lower time parents do not incur child costs, even fathers who were given very little residential time with their children still incurred significant direct expenses. For example, even when children only spent an average of $10 \%$ of their time with their father, $40 \%$ of those fathers provided a bedroom for the child. Equally surprising, of children who only spent $25 \%$ of their time with their fathers, $77 \%$ of those fathers provided the child with a bedroom of their own. This result suggests that most non-majority parents incur not only significant un-credited child costs, but child costs that are comparable to the child costs incurred by majority parents on an annual basis and much higher than majority parent costs on a per day basis! On page 12 of their report, the authors concluded, "The current findings suggest that the typical assumptions about the economics of noncustodial fathers may simply be wrong". ${ }^{27}$

Based upon these studies and other concerns expressed by the Children's Rights Council (a group that advocates that children have a right to retain both parents after divorce), Rogers built a "Cost Share" model for estimating child costs by taking into account all actual costs of both families after divorce and using a systematic way of dividing up all costs fairly between parents (including all child tax credits). Rogers "Cost Share" method is described in detail on his website: www.guidelineeconomics.com.

Rogers has also written reports for several States. However, his recommendations have not been adopted for two reasons. First, his method is very complex and cannot be represented on a simple table. Second, his research indicates that actual child rearing costs are typically only about $12 \%$ of total combined net income. As most States, like Washington State have a table at about 20\%, adopting Rogers model would require a major reduction in child support awards. Few politicians have the courage to do this, even if they agree with Rogers that child costs really are only $12 \%$. Nevertheless, Rogers data and methods are highly credible and very fair to both parents and to the child. This analysis therefore used Rogers Cost Share estimate as one of the six sources of information used to construct the combined cost share estimate of $15 \%$ for one child.

[^16]The assumptions of the income shares model are all biased in favor of the custodial parent. It should therefore come as no surprise that the estimated cost of child rearing and the associated child support payments of non-custodial parents increased dramatically here in Washington State when the faulty data from the Williams model were adopted into the Washington State Child Support Economic Table in 1989.

The current Economic Table, using a 19\% estimate, is based upon the Williams-Engel "marginal" method noted above. The Betson-Engel and Betson-Rothbarth "per capita" models described in more detail below would make this inequity in the current table much worse. As discussed below, poor CP's who most need help would get little to no help from either model. However, typical middle class NCP parents (in families with combined annual net incomes of $\$ 40,000$ and one child under the age of 12) would see their child support payments increase by $72 \%$ with the Betson-Engel method and $30 \%$ with the Betson-Rothbarth method! (See Tables provided with the 2006 Child Support Work Group Minority Report).

Remember that these numbers are not measures of inflation. The Tables have a built in inflation adjustment in that as income rises, so do child support obligations. Thus a $30 \%$ increase is the equivalent of a $30 \%$ rise in the tax rate. What Betson is claiming is that parents today spend $30 \%$ more of their net income on their children than parents did 20 years ago.

The 2004 Florida State study, using the same data as Dr. Betson, confirmed that his "increase" in child support rates is not the result of any increase in the underlying CEX data. Rather it is due directly to Dr. Betson's unreasonable addition of a per capita adjustment to the Williams- Engel method and also due to Dr. Betson's unreasonable subtraction of CEX incomplete responders from his data set.

Thus, the history of the Washington State Table is one of distortion of data and misrepresentation of facts. The very same people who brought us the original economic table in 1988, Williams and Betson and their PSI friends, are back again with a different method, the Betson-Rothbarth Per Capita Proxy method, which they claim is more accurate than their former method, the Williams-Engel Marginal Proxy method. However, as we will shortly see, the new method suffers from problems that are much greater than their former methods.

But before analyzing the Betson-Engel and Betson-Rothbarth Per Capita Indirect Proxy methods, we will first take a look at the legal problems associated with Williams Income Shares model as well as inaccuracies of the CEX/USDA "per capita" data and methods that underlie the Betson-Engel and Betson-Rothbarth methods.
(For a more detailed analysis of the economic realities of non-intact families, see Standards of Living by Sanford L. Braver and Diane O'Connell (1998) which is attached to the 2006 Child Support Work Group minority report. For a more detailed analysis of the drawbacks of Income Share models, see the analysis by Mark Rogers, also attached to the 2006 CSWG. Also see guidelineeconomics.com).

### 2.2 Legal problems of indirect proxy methods

Federal law requires that child support payments be based upon the "best available estimate" of child rearing costs (for example, see 45 CFR 302.56). It has been argued that this phrase means that the method for calculating child support must be based upon methods that directly calculate the cost of raising a child (such as the USDA method and the Cost Share method described below). Indirect proxy methods do not examine the actual child costs. Instead, they are indirect estimates based upon the cost of things, like adult expenses on adult clothing, alcohol and tobacco.

Federal law also requires that child support awards must be in the form of a "rebuttable presumption". If the actual circumstance in any given case is markedly different than the economic situation used to calculate the "presumed combined obligation", then the Court must use the actual economic circumstances of the family rather than the presumed economic circumstances used to create the economic table. However, it is impossible to "rebut" indirect "proxy" estimates, such as the BetsonRothbarth method, because with indirect proxies, there are no specifically assigned child costs which one can rebut. In addition, the actual economic circumstance of divorced families will always be different from the circumstances of the intact families used by Betson to create his table.
"A statute creating a presumption that is arbitrary or that operates to deny a fair opportunity to repel it violates the due process clause of the Fourteenth Amendment. " Bailey v. Alabama, 219 U.S. 219, 233 et seq. ... Thus, the B-R method is clearly in violation of the federal law requiring that estimates be "rebuttable"; and the B-R method is likely in violation of the federal requirement that child support awards be based upon estimates of the actual costs of raising a child.

## Requirements of the Washington State Child Support Act

The Washington State Child Support Act (1988) states in part:
RCW 26.19.001 states: The legislature intends, in establishing a child support schedule, to insure that child support orders are adequate to meet a child's basic needs and to provide additional child support commensurate with the parents' income, resources, and standard of living. The legislature also intends that the child support obligation should be equitably apportioned between the parents.

The Betson model assumes that child support should be based on the parents' past (intact family) standard of living. However, Washington State law requires that child support be based upon the parents' current (non-intact family) income and standard of living. After divorce, if either parent's standard of living goes up, such as one wins the lottery, the judge will use the current circumstance to determine the child support award. For the same reasons, equity requires that if the parents standard of living goes down, then the child's standard of living should also match the parents current standard of living and not their past standard of living. To base current awards on past circumstances is simply not fair to the parent whose circumstances has changed. To the extent that the Betson-Rothbarth method ignores tax credits to the majority parent and also ignores child non-credited expenses incurred by the non-majority parent, it does not meet the "equitable" standard in that it unfairly places a heavier burden on non-majority parents. The Betson-Rothbarth method is thus not in compliance with State law.

## Requirements of the Washington State Parenting Act

In November, 2007, Dr. Betson emailed the Washington State Child Support Work group an article in which he explained why we may want to "split the difference" between the Betson-Engel and Betson-Rothbarth estimates. One of his claims was that, in the absence of information, and in the face of uncertainty, it was better for the child to shift the financial burden to the NCP than to the have that burden fall on the CP and the child. However, this point of view is not only contrary to Washington State law, it is also not in the best interest of the child for several reasons.

First of all, according to the Washington State Parenting Act, (RCW 26.09), the child typically does not reside solely with the CP. Instead, the child resides with both parents and has two households. It is not fair to the child to try to maintain an unrealistically high standard of living in one of the child's households at the expense of depriving the child of the second household. The Washington State Parenting Act states:
"The State recognizes the fundamental importance of the parent/child relationship to the welfare of the child; and that the relationship between the child and each parent should be fostered unless inconsistent with the child's best interest." RCW 26.09.002

Washington State Law thus assumes that the child will have two households after divorce and that the relationship between the child and each parent should be fostered. In other words, State law recognizes that both households are important to the child. Washington State law, in the form of the Parenting Act, does not support the concept of a "single parent" family. A child always has two parents.

Washington State law also does not support the concept of a custodial parent. The legislature believes that children are NOT objects to be owned, but instead, children are people with an emotional need for a life-long relationship with both of their parents. In 1987, when the Washington State legislature adopted the Parenting Act, they eliminated the concept of "custody" as not being in the best interest of the child. RCW 26.09.285 precludes use of custody designation with any statute that does not require a designation of custody. RCW 29.06.285 states:
Solely for the purposes of all other state and federal statutes which require a designation or determination of custody, a parenting plan shall designate the parent with whom the child is scheduled to reside a majority of the time as the custodian of the child. However, this designation shall not affect either parent's rights and responsibilities under the parenting plan.

In re Marriage of Kimpel , 122 Wn. App. 729, (2004), Division III stated: The "state and federal statutes" likely referred to in RCW 26.09.285 include the Food Stamp Program, 7 U.S.C. § 2015; the Criminal Code (Kidnapping), 18 U.S.C. § 1204; federal regulations issued on Veterans' Benefits, 38 C.F.R. 3.24, 3.57, and 3.850; Social Security, 42 U.S.C. § 1396r-la; and Juvenile Justice and Delinquency Prevention - Missing Children, 42 U.S.C. § 5773 and § 5775. None are argued here. Thus both case law and State law prohibit the use of the concept of custody except in those narrow cases where designation of custody is required. The Child Support Act is not one of those Statutes. Therefore it is against Washington State law to use designation of custody as a basis for forcing one parent to have a higher burden to support the child than the other parent or to place one parent in a privileged financial position just because they are the "custodial" parent.

Until we achieve equal shared parenting in this State, the most accurate term to describe the difference between two parents after divorce is a descriptive term such as majority of time parent, majority parent or higher time parent. Just as we may describe one parent as being a "higher or lower income" parent, we can also describe a parent as being a "higher or lower" time parent. This set of terms recognizes that the child has both financial income needs and emotional time with parents needs that are being met differentially by the parents after divorce.

If a child has lost contact with a parent for whatever reason, the child still does not reside in a single parent household. Instead, the child has temporarily lost one of the child's households. It is in the best interest of the child to reunite the child with the lost parent. This is the best way to help a child. And this is also the best way to increase child support payments is to increase time and improve the relationship between the non-majority parent and the child.

### 2.3 Drawbacks of over-estimating child support obligations

Dr. Betson for some strange reason ignores all the research on child development and the modern pre-divorce family circumstances of two fulltime wage earners who are both highly involved caregivers. Instead, he claims that his assumption that the child will only reside in one house after divorce is a "normative judgment" and thus not open to discussion.

The basis for Dr. Betson's thinking is most clearly revealed in his letter entitled "Why I Prefer the Income Shares Model" (Betson, 2008B) emailed to the Washington State Child Support Work Group on January 4, 2008. On page 7, Betson quotes a Chicago judge who once remarked "the child and the mother eat out of the same sugar bowl." Betson then adopts this extremely tunnel vision view of a family by claiming "There aren't separate sugar bowls for the child and the mother." Such simplistic views of child development are extremely misguided and disappointing. It is obvious that child developmental research, in particular, the child's absolute need to retain significant relationships with both parents after divorce, simply have no reached the legal field, the economic field or the general public. Such "sugar bowl" views of child development are not substantially different from that of a Texas judge who, in explaining why he always gave custody of the child after divorce to the mom, stated, "I never seen a calf yet who goes to the bull for milk. The calf always goes to the cow".

It is not merely that such "maternal bias" views are extremely gender discriminatory and therefore illegal. It is that such views do not accurately reflect the true developmental needs of human children. Raising a child is not about sugar bowls. Nor can the developmental needs of a child be equated with the developmental needs of a calf. It would be helpful to deeply reflect upon what makes human development radically different from any other animal. Bowlby's attachment view is that humans for internal representations in their brains of their significant caregivers which act as a lens through which a child views the world (Bowlby, 1988). Schore (1993) explains in very precise terms how relationship stress harms various areas of the child's neural development. Vygotsky $(1978,1987)$ explains how a child's important social relationships are directly connected to the child's development.

Together these three independent lines of child development research converge in agreement that, unlike calves and hamsters, human children essentially are their social relationships. Thus, depriving a child of their relationship with either parent is in fact severely harmful to the child's development. This is especially true in light of the transition during the past 40 years from a more traditional family structure to the modern two wage earner-two caregiver model.

Despite this research, Dr. Betson insists on maintaining the outdated notion that a child's well being is related solely to the well being of a single caregiver, the mother. For example, on page 7 of Betson 2008B, Betson states, "We will have to assume that the child and their immediate caregiver (the oblige) share the same level of well being." Dr. Betson here assumes that the child only has one caregiver. We know this is now rarely the case before divorce. Thus, what Dr. Betson really advocates is a radical change from the child's pre-divorce circumstances (two significant caregivers) to the child's post divorce circumstances (only one significant caregiver). Thus assumption ignores the fact that neither parent divorced the child and the child certainly did not divorce either parent.

It is essential that child support orders reflect only the post divorce changes that are needed to accommodate the divorce itself. Thus, the only divorce between pre-divorce and post divorce is that the parents and child will have two households instead of one. As parental income typically remains about the same, the added expense of the second household will result in a lower standard of living in both households. However, a lower standard of living in itself will have little effect on the child's development. What would have a huge adverse effect on the child would be to lose either parent.

Dr. Betson and others have repeatedly expressed a concern about a child falling into poverty and a mom going on welfare as a reason for setting child support payments as high as possible. While child support laws were originally enacted as a solution to the welfare problem, these laws have harmed low income mothers far more than they have helped them. This is because most low income mothers were never married in the first place. In addition, the low income fathers are either unknown or have incomes so low they can barely support themselves. As very few low income mothers even have child support orders, "higher support guidelines could not and cannot help these children" (Garfinkel \& McLanahan, 1986, 24-25).

Therefore welfare cases account for only $17 \%$ of all child support cases and account for only $8 \%$ of the child support payments collected. The remaining $83 \%$ of cases and $92 \%$ of collections go to middle and upper classes mothers as a windfall profit taken from fathers who likely were involuntarily removed from their children by those mothers filing for divorce (U.S. HHS, 2003, figs. 1 and 2).

The solution to the child welfare problem is not increasing child support profits for wealthy divorced mothers, but providing jobs with reasonable incomes for low income moms and dads. 80\% of all dads with stable jobs voluntarily pay their child support provided that child support amount does not exceed 20\% of their total income (Braver et al., 1988).

Jo Michelle Beld, a consultant to the Minnesota Child Support Enforcement agency observed that "high child support orders, in combination with other child support enforcement policies, have a negative effect on contact between non-custodial parents and their children" (2003, page 715).

A lower time parent who falls into default is more likely to drop out of the child's life altogether. There are at least four reasons why overcharging minority time parents may result in less time with the child. First, time spent working (particularly working two jobs) is time that cannot be spent with the child. Second, money given to the majority parent is less money the minority parent has to provide a bedroom, food, toys and clothes for the child in the child's second home. Third, if the minority parent falls behind on payments, he or she may simply give up and withdraw physically and financially from an "impossible" situation. Fourth, overcharging leads to a "perception of unfairness" which leads to a lack of compliance (see NY State Child Support Guidelines website for a study on this "perception of fairness" concern). In addition, a majority time parent who does not have a minority time parent helping with the care of the child is less likely to receive needed "breaks" away from the child and therefore more likely to become "overwhelmed."

Over-estimation increases defaults and therefore might actually reduce the amount of support received by the majority parent. According to a study published by the Washington State Division of Child Support: "If the obligor's support obligation exceeded $\mathbf{2 0 \%}$ of the obligor's gross income, especially obligors in the lower economic echelons, the less likely the obligor would be able to pay even the current support obligation, which in turn results in increasingly large accruals of back-support., ${ }^{28}$

The federal Office of Child Support Enforcement (OCSE) has also recognized that more than $\$ 90$ billion dollars in arrears (the vast majority of arrears claimed in 2004) is based upon awards that are beyond the parents' ability to pay: "The best way to reduce the national child support debt is to avoid accumulating arrears in the first place. The best way to avoid the accumulation of arrears is to set appropriate orders initially... Designing a system that establishes appropriate orders will encourage payment of child support" (U.S. HHS, 2004).

## High Child Support Orders Promote Divorce

Providing benefits to majority parents after divorce they do not have in marriage (high child support rates, guaranteed child care payments, guarantees health insurance payments, no need to consult with the other parent on financial decisions) may encourage divorces. There is substantial evidence that increasing child support awards in fact increases divorces. First there has been a rise in the rate of divorces since child support awards were dramatically increased in the 1980's. Second, States that have adopted Shared Parenting laws, including credits for shared parenting and associated reductions in child support, have seen dramatic decreases in divorce rates.

[^17]States with high levels of joint custody have significantly lower divorce rates on average than other states. States that favored sole custody had more divorces involving children. These findings indicate that public policies promoting sole custody may be contributing to the high divorce rate. (Kuhn \& Guidubaldi, 1997).

Third, it is known that mothers are twice as likely to file for divorce as fathers. In the present gender-biased judicial system, mothers receive "custody" of the child nearly $90 \%$ of the time despite the fact that numerous studies have shown that both parents are equally capable of raising the child. If judges awarded custody equally between parents, and if parents shared equally in raising the child and if the burden fell equally on both parents, one would expect that both parents would be equally likely to file for divorce. Clearly the fact that mothers file for divorce twice as often as dads is strong evidence that our current system is extremely biased in favor of mothers.

The Income shares model promotes divorce in that it requires that the level of spending and standard of living be maintained in the mother's household, but not in the fathers household. The Income shares model takes into account the income of both parents after divorce, but fails to consider the expenses of both parents after divorce. Thus, fathers are financially penalized for divorce and mothers are not.

The doubling in child support rates in the late 1980's resulted in "windfalls to the custodial parents" (Christensen, 2001, page 66), most of who are middle-class and upper-middle class divorcing women. Excessively high child support rates created an incentive to create more fatherless children, through either divorce or unwed childbearing. Current child support rates are so high that, according to a study by Robert Willis (2004), less than one third of child support payments are actually spent on children; the rest is profit for the custodial parent. Willis concluded that support levels that greatly exceed the actual cost of child rearing have created "an incentive for divorce by the custodial mother" (page 42).

As an example, let's suppose that extensive research confirms that the actual child cost in a median income intact family is $\$ 360$ per month excluding child care and health care. Let's also assume that the family cannot afford child care during marriage and therefore each parent cares for the child while the other parent is at work. Let's also assume that the father's income is twice the mother's income and that before the divorce costs are shared between parents according to their net incomes. Thus, the mother pays $\$ 120$ of the child cost each month and the dad pays $\$ 240$.

Then after divorce, the mother insists on taking the child to the maternal grandmother's house for child care and demands $\$ 500$ a month while at the same time depriving the father of the right he used to have to care for the child while the mother was at work. Also, as the economic table is set at doubled the actual cost of the child, the Table is lists an estimated cost of $\$ 720$ per month exclusive of child care. The total "estimated child expense listed on the mother's work sheet is $\$ 720$ plus $\$ 500$ equals $\$ 1220$. The father's child support obligation according to the Income Shares model advocated by Betson, Williams and their PSI associates is $\$ 1220$ times $67 \%$ equals $\$ 817$ per month.

Assuming the grandmother kicks back the $\$ 500$ per month in child care payments, the mother's financial incentive to divorce the father equals $\$ 817-\$ 240=\$ 577$ per month. Of the father's $\$ 817$ monthly payments, only $\$ 240$ or $29 \%$ is actually spent on the child.

According to PHD Economist, Robert McNeely and legal scholar, Cynthia McNeely, "This recent entitlement has led to the destruction of families by creating financial incentives to divorce" (2004, page 170). Kimberly Folse and Hugo Varela-Alvarez, also concluded that even if child support rates were set at an atypically low percentage of $17 \%$, there would be an "economic incentive for middle class women to seek divorce" and thereby "increasing the likelihood of divorce". (2002, page $283 \& 284$ ).
Baskerville summarizes this incentive by stating "A mother can simply escape the uncertainties, vicissitudes, and compromises inherent to a life shared with a working husband, by divorcing, whereupon the police function as a private collection agency who will force him, at gun point if necessary, to pay her the family income that she alone then controls" (2008, page 413-414).

Baskerville (page 214) also explains how excessively high child support rates promote harmful conflict-ridden and expensive custody battles over which parent will get the financial prize of being designated the child's "primary" parent and thus claim the reward of financial windfall child support profits for the next 18 years.

There are numerous other "incentives for divorce" hidden in the current child support laws and practices. During marriage, the mother had to consult with the dad on financial decisions regarding the child. After divorce, the mother gets all the money intended for the child and does not have to consult with the dad about how any of it is spent. Even if the parenting plan called for "joint decision making", the mother in fact can make nearly all major financial decisions without consulting the dad. The only way to address this problem is to make sure child support awards are limited to actual child support needs and to equitably divide the cost of child rearing between parents.

With married couples, if the couple cannot afford child care, the mother and father have to jointly work out a child care schedule such that one of them is always available to care for the child while the other is at work. After divorce, the mother no longer has to be concerned about the fathers work schedule. She can put the child in a child care center and force the father to pay for child care, even if the couple never used child care while married and even if the father was fully available to care for the child and had a long history of caring for the child while the mother was at work during the marriage. The only way to end this incentive for divorce is to provide a "right of first refusal clause" to balance out the responsibility to pay for child care.

The current system also gives the mother the right to insist that the father work over time and/or two jobs to meet the mother's financial demands. Clearly no parent during marriage has the right to force the other parent to work two jobs. The only way to end this incentive is to only require after divorce what we also require of intact families. Income imputation must be limited to a minimum wage job at 40 hours per week. The current system also gives the mother the right to demand health insurance, college tuition and a host of other benefits she would not be entitled to if the couple were still married. Given how harmful divorce is on children, it is extremely important to eliminate the current gender-biased "incentives" which contribute to decisions to divorce.

What is the cost to society of creating financial incentives for divorce and allowing mothers to drive fathers out of the life of their children? According to HHS assistant secretary Horn, "If one goes down the list (of all HHS programs)... the need for each is either created or exacerbated by the breakup of families and marriages" (2005). Since HHS has a budget of 500 billion dollars, the cost to taxpayers of promoting fatherless children may exceed a half trillion dollars. Horn himself, along with other advocates for fatherhood and marriage, has assembled impressive and unrefuted documentation that clearly connects fatherlessness with virtually every major social pathology today, including violent crime, truancy, school failure, drug and alcohol abuse, unwed pregnancy and teen suicide (Horn \& Sylvester, 2002).

There is a final more troubling drawback to over-estimating child support. According to K.C. Wilson "costs of child support enforcement include an estimated 5,000 additional suicides a year and 100,000 additional men in jail at any point in time." (Wilson, K.C., (2003) The Multiple Scandals of Child Support, Second Edition, Richmond, VA: Harbinger Press). In fact, the rate of suicide among divorced men is higher than the rate of suicide among any other demographic group. According to Los Angeles divorce consultant Jayne Major:" What we routinely, overwhelmingly see in America is that women get services and programs, while men get sentences and prison for the same behavior."

Ironically, the 100,000 incarcerated divorced dads will continue to fall still further behind on their child support payments while they are in prison due to a crazy loophole in the law that allows judges to impute income to jailed dads even though it is not possible for those dads to make income while in jail. Recently, a Washington State father spent a year and a half in jail for violating a restraining order. The crime he had committed was trying to see his two kids and threatening to commit suicide when his ex refused to allow him any contact with his children. While the dad was in jail, a judge imputed $\$ 108,000$ in income to the dad for his year and a half in jail. The judge also ruled that money given to the dad by his parents to pay his bills was "income", while money given to the mom by her parents to pay her bills was an $\$ 8,000$ loan the dad was required to pay back. The dad was allowed to participate in the divorce trial by phone from his jail cell. The amount in child support awarded by the judge during the dads 18 months in jail $(\$ 22,700)$ was coincidentally, just the right amount in arrears the judge needed to give all of the proceeds of the sale of the family home to the mom outright (over $\$ 50,000$ ) with no compensation to the dad. The dad was also required to pay the mom's attorney fees of $\$ 3,000$ and numerous other expenses. The dad appealed the judge's imputation of $\$ 108,000$ in income during his year and a half in jail. The Court of Appeals affirmed the trial court decision noting that the trial court has "broad discretion" to impute income even when the father is in jail! Meanwhile, the children had not been allowed to see their father in over two years. (In re Marriage of Bort, Washington State Court of Appeals, Division II, 34626-5, October, 2007).

When one adds up the 5 billion spent annually on enforcement and the billions lost in incarcerating divorced fathers, and the lost lives through suicide and the children who will never get to spend time with their fathers, and the half trillion dollars the government spends on social programs each year to address the problems created by driving fathers out of the lives of their children, one wonders what more will it take to get people to change the hearts and minds of those who set public policy and to change this evil system currently destroying so many families.

## SECTION THREE: PROBLEMS WITH EXISTING INDIRECT PROXY OPTIONS

### 3.1 Overview of Ten Options for estimating the cost of child rearing

The 2005 Work group, under the guidance of Policy Studies, Inc (PSI) only considered three options, the Betson-Rothbarth estimate, the Betson-Engel Estimate and a "split-the-difference" option between these two estimates. The 2005 Work group was told, as Dr. Betson has told the 2007 Work group, that the Betson-Rothbarth estimate was a "lower bound" and the Betson-Engel estimate was an "upper bound." In fact, there are at least seven other options for estimating child rearing costs. As the following Table shows, the three Betson options are all among the highest options. Six of the remaining options not considered have "lower bounds" than the Betson-Rothbarth estimate.

| 10 METHODS FOR ESTIMATING CHILD COSTS | $\begin{aligned} & \hline \text { PER CAPITA } \\ & \text { OR } \\ & \text { MARGINAL } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { DIRECT COST } \\ \text { OR } \\ \text { INDIRECT } \\ \text { PROXY } \\ \hline \end{array}$ | $\begin{aligned} & \text { DETAILED } \\ & \text { COST OR } \\ & \text { TOTAL } \\ & \text { COST } \end{aligned}$ | ```TABLE % OF 40K FOR 1-2 KIDS (TOTAL COST)``` |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { ROGERS } \\ & \text { COST SHARE } \end{aligned}$ | MARGINAL | DIRECT COST | $\begin{aligned} & \text { DETAILED } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & 12-20 \\ & (17-25 \%) \end{aligned}$ |
| $\begin{aligned} & \text { COMBINED } \\ & \text { COST SHARE } \end{aligned}$ | MARGINAL | DIRECT COST | $\begin{aligned} & \text { TOTAL \& } \\ & \text { DETAILED } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & 15-25 \\ & (20-35 \%) \end{aligned}$ |
| NEW YORK FLAT RATE OPTION | MARGINAL- | DIRECT COST | $\begin{aligned} & \text { TOTAL \& } \\ & \text { DETAILED } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & 17-25 \\ & (23-35 \%) \end{aligned}$ |
| CURRENT ORDERS (CURRENT TABLE) | MARGINAL- | LEGISLATIVE COMPROMISE | $\begin{aligned} & \text { TOTAL } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & 18-26 \\ & (23-36 \%) \end{aligned}$ |
| FLORIDA STATE ENGEL (2004) INCOME SHARES | MARGINAL | $\begin{aligned} & \text { INDIRECT } \\ & \text { PROXY } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & 17-28 \% \\ & (23-38 \%) \end{aligned}$ |
| WILLIAMS-ENGEL INCOME SHARES | MARGINAL | $\begin{aligned} & \text { INDIRECT } \\ & \text { PROXY } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & 19-31 \\ & (24-41 \%) \end{aligned}$ |
| USDA 1 , 1 PITA DIRECT |  |  |  |  |
| USDA | PER CAPITA | $\begin{aligned} & \text { DIRECT } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & \text { DETAILED } \\ & \text { COST } \end{aligned}$ | $\begin{aligned} & 21-32 \% \\ & (26-42 \%) \\ & \hline \end{aligned}$ |
| BETSONROTHBARTH | PER CAPITA | $\begin{aligned} & \text { INDIRECT } \\ & \text { PROXY } \end{aligned}$ | TOTAL COST | $\begin{aligned} & 21-27 \% \\ & (31-37 \%) \end{aligned}$ |
| BETSON ENGELROTHBARTH AVE | PER CAPITA | $\begin{aligned} & \text { INDIRECT } \\ & \text { PROXY } \end{aligned}$ | TOTAL COST | $\begin{aligned} & 23-31 \% \\ & (28-41 \%) \end{aligned}$ |
| BETSON-ENGEL | PER CAPITA | $\begin{aligned} & \text { INDIRECT } \\ & \text { PROXY } \end{aligned}$ | TOTAL COST | $\begin{aligned} & 25-34 \% \\ & (30-44 \%) \end{aligned}$ |

Ironically, the 2005 Work group only considered the three least credible estimates of child rearing costs. This section will begin with a review of the short comings of the CEX data file used to construct the USDA and Betson estimates. We will next address the problems inherent in the USDA, Betson-Engel and Betson Rothbarth estimates. Section Three will then present three more accurate estimates of child rearing costs, the Rogers Cost Share method, Combined Cost Share method and the NY option.

### 3.2 Concerns about the Consumer Expenditure Survey

USDA child cost estimates as well as all "Income share" estimates (Williams-Engel, Betson-Engel and Betson-Rothbarth) are based almost entirely on data from one single source, the Consumer Expenditure Survey (CEX) taken by the Bureau of Labor Statistics. Thus, any problem with CEX data will affect the reliability of all three methods. The CEX data is repackaged by the United States Department of Agriculture (USDA) in their report, "Expenditure of Children By Families" which is updated with the Consumer Price Index and published each year. Thus, Betson data and USDA data is actually CEX data. There are numerous known problems with the CEX data that are typically ignored in the Income Share and USDA models.

## First, there is the known unreliability of self report survey methods.

"Results vary depending on the traits and instruments examined, but studies report correlations of 0.50 to 0.70 between self reports and objective criterion measures. "Self reports are particularly unreliable when answering questions which might "threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to answer in socially desirable, rather than truthful, ways." 29

In plain English, many studies have been done comparing self report answers to objective measures wherein the answer was also determined in an objective way. As much as half the time, respondent answers on self report surveys do not match the objective truth. This is particularly true when the respondent feels their privacy is being violated. It is likely that many respondents to the CEX may have responded in less than truthful ways. It is impossible to know if they over-reported or under-reported either income or spending. But it is known that this data is not reliable.

Imagine we were trying to establish the ages of all adults in America, but we only used a self report measure, asking a thousand adults how old they were (as opposed to using birth certificates and other objective measures). Given our cultural bias towards youth, it is likely the self report survey would tell us everyone in America is just under age 30. This is why scientists advocate using multiple methods and multiple sources of information. It is because some sources of information tend to be unreliable. Self reports are known to be the least reliable of all sources of information. Thus, the Betson models are based upon the least reliable of all sources of information.

Even well meaning parents may over-estimate costs or under-estimate income. This appears to be a particular problem among low income parents. For the lowest income groups, the CEX consistently reports that total household consumption exceeds total household income by more than $200 \%$. The problem of expenses exceeding income is quite familiar to poor parents. However, it is not possible for expenses to exceed net combined income by more than $200 \%$. Therefore the CEX either over-reports expenses and/or under-reports income. Either way, CEX data dramatically over-states the ratio of child expense to income for low income parents and thus results in child cost estimates that are certain to be way too high for low income parents. In addition, the CEX often results in values less than zero for certain categories of expenses.

[^18]The CEX also reports a high percentage of Americans with No Income at all and yet a huge amount of expenses. This is particularly a problem of self employed individuals. While Dr. Betson eliminated huge numbers of families from the CEX sample when calculating his results (a subject we will take up later in this section), he retained this group of zero income reporters. As the ratio we are interested in determining is the ratio of expenses to income, adding people with high reported expenses and no reported income artificially inflates the final results. The existence of dozens of known errors in the CEX data base is strong evidence that the CEX self report data is not reliable.

## Second, the CEX is not accurate for low income groups

For the lowest income groups, the CES consistently reports total household consumption to be $200 \%$ or more greater than total income. Example: A poor parent reports net income of $\$ 12,000$ per year, and total expenses of $\$ 24,000$ per year. We know this is not possible. Thus we can be certain that the CES is not accurate for low income groups and overstates the percentage of child costs to total costs for families with incomes under \$30,000 per year.

## Third, the CEX does not clearly separate spending on families from spending on children.

Because CEX was not intended to measure child costs, it lacks the data for which it is being used. CEX makes few clear distinctions between child costs and adult costs.

Gay and Palumbo (1998) summarized the problems with the CEX as follows: THE CEX is not a valid source of data for determining child support costs:
The data used in these "estimates" is the national data on family expenditure that comes from the Consumer Expenditure Survey. Nearly all of the data is on what families spend as opposed to what is spent on individual family members. In other words, it does not provide a statistical view of what is spent on children and adults in households but what is spent in total on different items of expenditure. One can get a reasonable view of what households spend on housing and transportation for example. But no amount of witchcraft can transform that cost into how much is attributable to children. ${ }^{30}$

## Fourth, the CEX is known to over-estimate essential child costs

CEX does not separate essential child expenses from optional child expenses. It simply assumes all expenses are essential. However, it is certain that all families make numerous non-essential purchases for their children. Thus, we can be certain that the CEX over-estimates essential child costs. Per Capita estimates, such as USDA, and Betson-Rothbarth, conclude that spending on children is about $26 \%$ to $28 \%$ of total family spending for married couples living in one house. If one assumed that only half of the spending on children reported by the married couples in the CEX survey was intended to meet the basic needs of the child, then the actual percentage to meet the basic needs of the child might be as low as $14 \%$ for couples living in one house.
${ }^{30}$ The Child Support Guideline Problem by Roger F. Gay, MSc and G. Palumbo, Ph.D. (1998)

## Fifth, the CEX is not representative of Low Income, Non-intact Families

In addition, CEX suffers from "sampling" problems. For example, less than 20\% of the families surveyed in CEX are non-intact families compared to roughly $30 \%$ of all US families being non-intact families. The reason for this under-representation of non-intact families is likely due to "refusal to respond" problem of poor over-stressed, low income, non-intact parents. Even the $20 \%$ non-intact families who do agree to participate are likely to complete only one or two of the four cost surveys (incomplete responders). Thus, we can be certain that the CEX is not representative of non-intact families.

In addition to under-representing low income, non-intact families, the CEX overrepresents high income intact families. This problem is so extreme that, based upon CEX data, the USDA and Betson both assume an "average family" of two children. However, the median number of children in non-intact families is one child Thus, the CEX under-represents the very group of parents it is used to estimate.

### 3.3 Concerns about the USDA per capita method.

The primary problem with the USDA method, other than its reliance solely on the CEX report, is that it uses a per capita method to divide housing costs and other items. This leads to further over-estimation of child costs. The USDA Expenditure Categories are: Housing; Food; Transportation; Clothing; Health care; Child care; and Miscellaneous (Lino, Mark (2001). Expenditures on Children by Families, 2000 USDA Annual Report).

USDA Expenditures for Housing, Food, Transportation, and Miscellaneous goods and services are allocated on a per capita basis (divided equally among the members). This has the effect of minimizing the costs to adult members, while raising the level of expenditures on children. As these four categories account for about $70 \%$ of the USDA estimate of child rearing, the USDA estimate as a whole should be considered a "per capita" method of estimating costs. In the Appendix to the USDA annual report, it estimates that if marginal methods were used instead of per capita methods, this single change would lower the estimates for Housing expenditures by 28-44\%. Thus, converting the typical USDA estimate for one child (26\%) to a marginal estimate would result in a marginal estimate of about $20 \%$ total cost (15\% excluding child care and health care). It would therefore be almost identical to the current table and almost identical to the Combined Cost Share estimate described in the Section Three.

Over-estimation of housing costs: The following example shows that dividing housing costs on marginal rather than a per capita basis results in an actual reduction of as much as 50\%: If a childless couple lives in a one bedroom apartment costing $\$ 500$ per month and moved to a two bedroom apartment costing $\$ 600$ per month after having a child, USDA would estimate the child cost to be $\$ 600 / 3=\$ 200=33 \%$ of total costs. By contrast, the true additional cost, or marginal cost of the child, would be \$600$500=\$ 100=20 \%$ of total costs. But the error in estimation is not $33 \%-20 \%=13 \%$, Instead it is $\$ 200-\$ 100 / \$ 100=100 \%$ difference in estimation. Thus, if the per capita estimate of child cost is $26 \%$, the marginal estimate might only be $13 \%$. Since the USDA applies per capita to $70 \%$ of costs and since the USDA estimate for one child is $26 \%$, adjusting the USDA estimate to a marginal estimate results in a marginal child cost estimate of almost exactly $15 \%$. For this reason, the USDA bottom up method, adjusted to a marginal basis, is also one of the six examples supporting the Combined Cost Share estimate of $15 \%$ for one child.

Transportation costs are also divided by USDA on a per capita basis. Thus a family of two without a child whose annual car expense is $\$ 6,000$ the day before a baby is added to an expectant family, is allocated at $\$ 3,000$ for each parent. The next day, with baby arrived, the cost of the car attributed to the baby suddenly on the scene is $\$ 2,000$ ! Certainly the mileage directly associated with transporting children would be more accurate than USDA estimate, which is an obvious exaggeration.

Miscellaneous costs are also divided by USDA on a per capita basis. However, miscellaneous costs in the CEX data base specifically include such things as manicures, make-up, hair styling, health club memberships, country club memberships, etc. Surely, many of the expensive costs associated with maintaining adults should not be equally distributed amongst all family members including children since they are not costs associated with raising children. Certainly none of these things are basic essential costs of child rearing. Thus, per capita estimation of the misc. category also greatly over-estimates child rearing costs.

## The "per capita single child effect" leads to greatly over-estimating the cost of the first child in comparison to subsequent children.

The difference in family size used by the USDA (2.0 in their survey versus 1.0 in real divorced families) is particularly disturbing given the USDA reliance on per capita estimates of expenses. In a family without children, the per capita child cost is $0 / 2$ or zero. In a family with one child, the per capita cost of the child is $1 / 3$ or $33 \%$. In a family with two children, the per capita cost of the second child is $2 / 4$ or $50 \%$ minus the per capita cost of the first child ( $33 \%$ ) for a net of $17 \%$. In a family with three children, the per capita cost of the third child is $3 / 5$ or $60 \%$ minus the per capita cost of the first two children (50\%) for a net of $10 \%$.

Assuming an actual child cost of $15 \%$, and a second child cost of $10 \%$, and a third child cost of $5 \%$, the greatest over-estimation of per capita estimates occurs at ONE CHILD. This over estimation would be $33-15=18 \%$. Two children would be an over-estimation of $17-10=7 \%$. For the third child, the over-estimation would be $10-5=5 \%$. Thus, the greatest over-estimation of per capita estimates occurs at ONE CHILD. This explains why disagreements between the various methods lessen as the number of children increases. As per capita costs were $70 \%$ of the total USDA estimate, the total cost over-estimation is about $70 \%$ times $18 \%=13 \%$. Put another way, child cost estimates based upon USDA per capita estimates result in cost estimates that are at least $13 \%$ higher than actual costs for the first child even ignoring all other factors.

The CEX/USDA data fail to include the standard deviations (or an estimate of the spread of the distribution). It is thus impossible to estimate the reliability of the data. Since the standard deviations were not reported by either CEX or USDA, it is impossible to verify whether the data in any given expense is a normal or skewed distribution. This is an important distinction because nearly all statistical comparisons rely upon an assumption of a normal distribution. However, it is likely that the CEX/USDA distributions are NOT normal, thus leading policy makers to draw incorrect conclusions about the data. The following is one example of the problems created by ignoring non-normal distributions (note that the following data is taken from the USDA "Expenditures of Children by Families, 2006" Report (Lino, Mark, USDA publication 1528-2006).

On page 3 of the 2006 USDA report, it states that "about $50 \%$ of the families in the study had no expenditures on child care". Thus, the distribution is extremely skewed in that half the values are zero. If one merely takes the mean expenditure on child care (of about $\$ 400$ per month), one might conclude that the median family had $\$ 400$ in expenses on child care. In fact, the median family had no expense on child care. But of those who did have child care expenses, the median expense was likely to be closer to $\$ 800$ than $\$ 400$. This information is only known from reading the text. It could have also been known from the tables had the standard deviations been reported in the table (as an extremely large standard deviation would warn readers that the distribution was not normal and the results therefore were not reliable).

Given the likelihood that many of the values in the CEX/USDA data base were skewed distributions, it would have been very helpful to have the standard deviations reported, in that readers could have then been able to judge the reliability of each piece of data used in the tables as well as the range and reliability of the tables themselves.

## Per Capita estimates are not an "upper bound".

Instead, they are better described as inaccurate.
In describing the shortcomings of the USDA "per capita" method, Dr. Venohr (in the 2003 PSI Arizona Report, page 12) wrote:

The USDA estimates are not deemed suitable because they rely on an average (per capita) cost approach. The division of some expenditures between parents and children assumes a conclusion about the real allocation of those expenditures, which is particularly bothersome for setting child support awards. Child support is commonly understood to provide for the additional cost of children. It seems unlikely that the costs of children would proportionately equal the adult's costs in those categories of expenditures. For purposes of child support, a marginal cost approach to estimating costs of child rearing is a more appropriate method. (emphasis added).

Unfortunately, while PSI acknowledges that a "marginal cost" approach is the most accurate estimate of child costs, they go on to endorse a method (the BetsonRothbarth method) which is not a "marginal cost" approach but instead is a per capita estimate not substantially different in result than the USDA estimate (in other words, both came up with an estimate of about $26 \%$ for one child, but using different "per capita adjustments" at different parts of their equations. .

## Why Betson-Engel and Betson-Rothbarth indirect proxies are not marginal cost estimates

Marginal costs estimates require the direct comparison of the same or similar items for the same or similar families, first without and then with a child. Thus, only one variable changes: the addition of the child. ( $p=50 \%$ ?). Thus the Rogers and Combined Cost methods are marginal cost approaches. However, the Betson-Rothbarth method uses different items from different families (non-child items of families without children as an indirect proxy" for child items of families with children). Thus, three variables are changed: the child, the family and the items. Thus, the BR method is not a marginal method, but rather is an indirect "proxy" method. ( $\mathrm{p}=.5 \times .5 \times .5=12.5 \%$ ?). This is why a basic principle of scientific research is to minimize the number of variables being changed.

On page 10 of the USDA "Expenditures of Children by Families, 2006" Report (Lino, M. USDA), the authors correctly noted that neither the Williams-Engel or the BetsonRothbarth methods are true marginal cost approaches: Although the Engel and Rothbarth estimators typically are labeled marginal cost approaches, they are not true marginal cost approaches. A true marginal cost approach examines additional expenditures a family makes because of the presence of a child in the household how much more a family spends on housing, food, and other items because of the child. (Engel and Rothbarth proxy methods) do not do this. (Instead) they examine (different items in) two different sets of families, those with and without children (and attempt to draw comparisons between them).

Finally, the authors of the Florida State (2004) study also concluded that the BetsonEngel and Betson-Rothbarth methods used a "per capita adjustment" and that it was this adjustment rather than any change in the underlying data which caused a major increase in the estimate of child rearing costs in comparison to the Williams-Engel method which the Florida State authors used in their Engel analysis.

### 3.4 Inaccuracy of all indirect proxy methods: Is it possible to check the veracity of "normative statements"?

Dr. Betson, at the Child Support Work Group meeting, on November 30, 2007, stated: "The Income Shares Approach actually creates one normative statement, and it says what we should aim for, if possible, is to maintain the level of spending on the children to the level that would have occurred had the family remained intact... What I want to talk about today is if we agree with this normative statement how would we implement it?"

Thus, the goal of "income shares" is to maintain the level of spending on the child as if the family was still was still intact and living in one household. However, if we recognize that the child now has two households instead of one, and if we count the cost of the extra bedroom as "spending on the child", then we must also recognize that spending on the child in each household must decline in order for total spending on the child in both households to be maintained at a constant rate. Thus, the "normative statement" of income shares does not require that the spending on the child only remain the same in only one household.
"Clearly, those economies of scale are lost, when those families or their individuals split and form two new households. Which means that if the total amount of resources that are available to these two households remains exactly the same, one of them, at least one -- maybe both -- but at least one of those households has to be worse off in economic terms." Dr. Betson, Child Support Work Group meeting, November 30, 2007

Is the "income shares" assumption that the child only has one house and that all child expenses occur in only one household? The "hidden goal of income shares" is to maintain the pre-divorce level of spending on the child only in the custodial parents house. The method is to count the incomes of both parents after divorce, but not ount the actual expenses of both parents after divorce.

But what if we believe that intact-family spending patterns on children can only be maintained after divorce by recognizing that spending on the child is occurring in both households? Only if we recognized that there is a need for a second bedroom for the child after divorce, and a need for two homes for the two parents after divorce, is it possible for total spending on the child to be maintained after divorce. Given this fact, the "equitable division of child costs" required by Washington State law requires that we recognize the reality of expenses in both households after divorce.

## Why do all Income Shares Models use Indirect Proxies to estimate child costs?

 Even if one agreed that child costs can be maintained after divorce in a way that is "fair" to both parents, there is still a need to determine what those child costs actually are. One obvious method is to directly examine marginal costs by comparing the increase in cost of the same or similar shared goods in the same or similar families with one child compared to without one child. The extra cost would be the cost of the child. There is nothing about the Income Shares "Normative statement" that prevents direct comparison of costs. Yet Williams and Betson refuse to use a direct cost estimates. Instead, they insist on going the long way around, using different, and even non-shared goods from different families as indirect proxies for other shared goods and then attempting to use these different goods as "indirect proxies" to calculate child costs.To understand why Williams and Betson made this choice, one has to go back to the 1980's and consider the existing research on child costs. Prior to Williams Income Shares analysis in 1987, the most widely accepted research was the Wisconsin model, which had examined about a dozen prior child cost studies, including the Espenshade study and arrived at an estimated child cost of $17 \%$ of total costs. It is important to understand that the Wisconsin study had used Espenshade's "indirect proxy" estimate of $19 \%$ as one of the dozen "sources" in arriving at its estimate of $17 \%$. Therefore the remaining direct cost estimates must have been lower and most likely in the $15 \%$ range. Also prior to 1987, Weitzman was traveling the U.S. making a good living claiming that child support payments needed to be double. Certainly Williams knew that actual child support awards were about $10 \%$ and that Weitzman therefore was advocating for a jump to 20\%.

All Williams had to do was read the Wisconsin study to realize that the only way to achieve Weitzman's goal, given that direct cost estimates were only $15 \%$ would be to ignore direct cost estimates and use only the indirect proxy cost estimate of 19\% arrived at by Espenshade. Thus, the historical purpose of using indirect proxies had nothing to do with the "difficulty of direct cost estimates", and instead had everything to do with raising child support payments as high as possible. For the same reason, most States blindly went along with Williams tunnel vision approach, ignoring all lower estimates of child rearing costs, for the same purpose of raising child support payments as high as possible.

This political "gender-biased" reality still exists today. There is no political support for lowering child support rates even when all credible evidence confirms that rates are already too high. Thus, the reason all income shares models use indirect proxies is because no direct cost estimates have ever produced such high results. The only way to get high child cost estimates is to use indirect proxies.

This gender-bias in child support awards mirrors the gender bias in custody determinations The public accepts, and is blindly indifference to the injustice that judges routinely deprive children of their fathers, yet there is a public outcry whenever a judge gives the child to a dad and makes the mom an "every-other-weekend" parent. As another example of this "double standard" is that we willingly pass laws protecting women from gender discrimination in the workplace, yet refuse to end the blatant gender discrimination against men that occurs every day in the area of family law and child support determinations.

## Comparing Adult Apples to Child Oranges

Many different indirect "proxy" estimates of child rearing costs have been used over the last century. However, all of these methods are extremely inaccurate predictors of actual child rearing costs. All indirect methods of estimating costs rely upon the selection of one category of expenses, for which data is assumed to be available, as a "proxy" to estimate a different category of expenses, for which data is assumed to be more difficult to obtain. For example, the Betson-Rothbarth method attempts to use spending on adult clothing to estimate spending on child costs. In fact, accurate data is not more available for adult clothing than for child costs. Even if it were, there is strong evidence that there is no consistent relationship between spending on adult apples and child oranges. It is ironic that we are cautioned from childhood not to "compare apples to oranges." The implication of this statement is that goods should only be compared to similar goods. Apples should only be compared to other apples. Yet the use of indirect proxies is in direct violation to this basic advice.

## All indirect proxy methods make several crucial (and invalid) assumptions:

Indirect proxy models suffers from several invalid assumptions, all of which result in the obligor (or NCP) parent being over-charged:

First, indirect proxy methods assume a consistent relationship exists between spending on two different kinds of things (the apples and oranges problem). For example, Betson-Rothbarth method assumes there is a consistent relationship between family spending on adult clothing and family spending on children. Below we will present evidence that a consistent relationship does NOT exist between spending in these two areas. Instead, family spending is highly variable such that some families spend less on some items as a result of children while other families spend more depending more on the value choices of the given family than on any other factor.

Second, indirect proxy methods assume that a consistent relationship exists between life styles and spending habits of adults with children and adults without children. Inherent in all indirect proxy methods is the assumption that the lifestyles of adults without children are the same as those with children, except for the cost of children and the effect this has on consumption. Thus it is assumed that adults with or without children would have the same value system, and the same spending patterns were it not for the effect of the children. For example, Betson assumes that a consistent relationship exists between spending patterns of older, wealthy couples without children and younger poor couples with children. Yet we know for certain from highly credible economic data that this is not a valid assumption.

For example, studies have shown that adult consumption of alcohol and tobacco decreases after a family has children. (Some parents have been known to give up smoking entirely after the arrival of a baby.) Thus the consumption of adult goods is clearly affected by lifestyle decisions which are unrelated to economics.

After describing a variety of problems associated with the Betson-Rothbarth and Engel proxy methods, on page 17 of the 2006 USDA Report, Mark Lino concludes:
These methods (The Betson-Engel and Betson-Rothbarth proxies) have limitations that are equal to or exceed those of the per capita method. As previously explained, each version of these (proxy) methods assumes a "true equivalence (proxy) measure." The assumption that families who spend the same proportion of their total expenditures on food are equally well off has never been proven, nor has the supposition that families behave according to a specific utility function (that adult clothing can be used as a proxy for child costs). Also, the (indirect proxy) method theorizes that the differences in total expenditures between couples with and without children can be attributed solely to the children in a family. This has never been proven either.

Third, indirect proxies assume that spending patterns on children can be maintained after divorce". This assumption requires that there be no change in income or expenses after divorce. In fact, there is often a reduction in income as well as an increase in non-child related expenses related to divorce (paying for the second apartment).

Fourth, indirect proxies assume there is no reduction in income associated with the divorce. It is common that separated families experience a major fall-off in income either just before or just after separation. In fact, one parent losing a job often triggers the financial crisis that leads to the breakup. While intact families also must endure job losses, they do not suffer this problem as often as divorced parents. If a father loses his job, the current system gives the mother a strong incentive to file for divorce as then she will be entitled to child support payments based upon the father's former employment history rather than the father's current economic status.

Fifth, indirect proxies assume that there is no increase in non-child related expenses after divorce. As seen in the analysis of low income parents in Section 4, this difference in efficiency is at least $\$ 700$ per month ( $\$ 2480-\$ 1780$ ) or $40 \%$. Since two single-parent households are forced to spend much more on housing, they also are forced to spend less income on children than one two-parent household.
In addition, divorced parents often have extremely high legal bills associated with the divorce. While intact families also may have legal bills, they are nowhere near as high as the legal expenses forced upon couples going through divorce by the current child support system which rewards the winner (custodial parent) and places 18 years of economic and emotional hardship on the loser (the non-custodial parent). .

Sixth, indirect proxies assume that spending patterns of intact families can fairly be used to establish spending patterns of non-intact families. This assumption fails to account for the economic reality of divorce in that the standard of living and spending patterns after divorce are dramatically lower than for intact families. This assumption also fails to account for numerous other differences that are known to exist between intact families and non-intact families.

For example, non-intact families are more likely to suffer job losses, housing losses, relocations, mental health problems, and many other problems that impact their financial burdens. All of the above factors make the economics of divorced families much different than the economics of intact families. It is thus not appropriate to base child support obligations of divorced parents on the spending patterns of intact families.

Seventh, indirect proxy methods assume that the child brings no financial benefits to the higher time parent. The child tax credit and other tax benefits which are evenly divided between parents in an intact family are typically not evenly divided after separation. Tax benefits that accrue to only the higher time parent after divorce include head of household status, dependent care deductions (even when the lower time parent is ordered to pay for day care, only the higher time parent can deduct the expense), child tax credits, earned income credits, and tax free income in the form of child support. In a perversion of the English language, the lower time parent is required to pay income taxes on child support payments, but the higher time parent is not required to pay income taxes on child support income).
Failure to account for these tax differences in the Betson-Engel and Betson-Rothbarth methods results in over-charging the lower time parent by about $\$ 289$ per month for the median family with two children. This represents about $20 \%$ of the total child support obligation meaning the median lower time parent is overcharged by at least $10 \%$ just due to the failure to equalize tax credits.

| CHILD RELATED TAX BENEFITS ${ }^{31}$ (2 children) | Custodial Parent With Tax Benefits | Custodial parent Without Tax Benefits |
| :---: | :---: | :---: |
| Annual Gross Income | \$36,000 | \$36,000 |
| STD Deduction (2005 Tax Code) | -7,300 | -5,000 |
| Exemptions | -9,600 | -3,200 |
|  |  |  |
| Federal Taxable Income | 19,100 | 27,800 |
| Federal Income Tax | -2,346 | -3,809 |
| Child Tax Credits | +2,000 | +0 |
| Social Security Tax | -2,232 | -2,232 |
| Medicare Tax | -522 | -522 |
| After Tax Annual Income | \$32,900 | \$29,437 |
|  |  |  |
| After Tax Monthly Income | \$2,742 | \$2,453 |
| Monthly Tax benefit of the child | \$289/2= | \$145 per child |

Eighth, indirect proxy methods assumes that the higher time parent pays for $100 \%$ of all child costs and that the lower time parent does not have any direct costs associated with the child. This includes the assumption that the lower time parent fails to buy the child presents, clothing, food, and has no transportation costs associated with visitation and does not pay for an additional bed and bedroom for the overnight visits of the child. For example, after advocating the Betson-Rothbarth method, the PSI 2003 Arizona report noted on page 36: (7) Visitation costs are not factored into the schedule. Since the Schedule is based on expenditures for children in intact households, there is no consideration given for visitation costs.

[^19]However, a study of several hundred divorced families by Fabricius and Braver (2003) found that the actual direct expenses of lower time parent's on their children were significant even for lower time parents who only saw their children a few days a month. For example, even when children only spent $25 \%$ of their time with their fathers, $77 \%$ of those fathers provided the child with a bedroom of their own. As housing and food are the two greatest child costs in the economic table, child costs for the lower time parent are greater than child costs for the higher time parent on a per day basis. Thus, the assumption that lower time parents have no direct expenses is invalid and results in the lower time parent being overcharged, typically by hundreds of dollars each month in un-credited child-related expenses. ${ }^{32}$

Ninth, and perhaps most important, indirect proxy methods also assumes that the choice of proxy will not have an effect on the estimate of the target good. In fact, the choice of proxy has such a dramatic effect on the resultant estimate that the results are unreliable to the point of being rendered statistically invalid.

Different Indirect proxies yield different results: a comparison of 4 proxies
To illustrate the lack of accuracy of indirect proxy methods, we will use examples of several proxies for standard of living to demonstrate that the specific choice of proxy greatly affects the results achieved.
Proxy variation in high income families
(assuming average or median childless couple surveyed by CEX has same standard of living as average or median couple with one child surveyed by CEX)

| Data from 2006 Oregon PSI report Page 7, Table 3 | \% of Total Expenditures Average childless couple | \% of Total Expenditures Average couple with one child | Proxy Ratio= Difference/childless couple $\%=$ |
| :---: | :---: | :---: | :---: |
| Total Annual Expenditures medians from pg 6 | $\begin{gathered} \$ 44,728 \\ (\text { Median }= \\ \$ 38,759) \end{gathered}$ | $\begin{gathered} \$ 46,140 \\ (\text { Median }=\$ 40,175) \end{gathered}$ | \$1412/12 months= $\$ 118$ per month \$118/1412=8\%(up) |
| \% spent on housing | 36.6 | 36.1 (after deleting babysitting, see page 8) | $\begin{aligned} & 0.5 / 36.6= \\ & <1 \%>\text { (down) } \end{aligned}$ |
| \% on spent food (Engel) | 16.0 | 16.7 | $\begin{aligned} & 0.7 / 16.0= \\ & 4 \% \text { (up) } \end{aligned}$ |
| \% on spent clothing (Betson-Rothbarth) | 3.6 | 4.1 | $\begin{aligned} & 0.5 / 3.6= \\ & 14 \% \text { (up) } \end{aligned}$ |
| \% spent on tobacco and alcohol (Old Rothbarth) | 2.2 | 1.8 | $\begin{aligned} & 0.4 / 2.2= \\ & <18 \%>\text { (down) } \\ & \text { Or +18\% if inverse } \end{aligned}$ |

The above chart shows that if housing is used as a proxy of child costs, the cost of having one child is actually negative. For this reason, housing cost is never used as an indirect proxy of child costs.

[^20]For this particular high income group, food also under-estimates the cost of the child as the typically high income family with one child only spends $4 \%$ more on food than the typical high income family without a child. Total clothing appears to be a better proxy to estimate spending on children, but only for this income group. As the next example shows, different income groups yield different estimates for different proxies. Spending on booze and cigarettes drops for the family with one child, so BetsonRothbarth would claim that that the cost of the child might be $18 \%$. However, this result also varies depending on income as the following example confirms. The inconsistency of these results confirms that there is no consistent relationship between the spending patterns of intact families with children compared to the spending patterns of intact families without children. Instead, the choice of different proxies yields radically different results. The extreme variation shown by the following examples confirms that indirect proxies are not an accurate way of estimating actual expenses.

## Proxy variation in low income families

The following is another example, this time using data from the CEX to show how proxies yield different results in low income families:
Consumer Expenditure Surveys (CEX) for low income are approximately the following:

| Expenditures | Family without Family with Difference <br> children two children |
| :--- | :--- |


| Housing | $28 \%$ | $28 \%$ | $0 \%$ |
| :--- | :---: | :---: | :---: |
| Transportation | $31 \%$ | $25 \%$ | $-6 \%$ |
| Food at home | $8 \%$ | $13 \%$ | $+5 \%$ |
| Food away from home | $5 \%$ | $3 \%$ | $-2 \%$ |
| Clothing | $5 \%$ | $5 \%$ | $0 \%$ |
| Health care | $3 \%$ | $4 \%$ | $+1 \%$ |
| Entertainment | $6 \%$ | $6 \%$ | $0 \%$ |
| Child care | $0 \%$ | $2 \%$ | $+2 \%$ |
| Alcohol \& tobacco | $2 \%$ | $2 \%$ | $0 \%$ |
| Misc. | $12 \%$ | $12 \%$ | $0 \%$ |

These numbers are accurate for young, low income families: (See Family Economics Review Vol 5, p 12, 1992) What we are illustrating is the inaccuracy of the indirect proxy method, rather than an analysis of the actual child rearing costs (which is discussed later in Section Two).

Engel method: Using food as an indirect proxy estimator of child costs
Using food as an "inverse" proxy, the family which spends more on food is assumed to have a lower standard of living. Thus, the family which spends $13 \%$ on food is assumed to have a lower standard of living than the family without children that spends $8 \%$. The difference of $5 \%$ as a percentage of $8 \%$ means that the estimated additional cost of the child is $62 \%$ based solely on using food as an indirect proxy for total child costs. As this "estimate" is for two children, each child would be a $31 \%$ increase. While this "WilliamsEngel Estimator" has been called an "upper bound" estimate, it instead should simply be referred to as a completely un-reliable estimate, in the same way that per capita estimates are known to be unreliable.

Rothbarth method: using alcohol and tobacco as a proxy estimator of child costs Using CEX percentage of expenditure on alcohol \& tobacco as a measure of the standard of living, the two low income groups of families spent the same amount on alcohol \& tobacco and thus have the same standard of living as measured by this proxy...thus the additional cost of the children is zero; obviously an absurd result.

## Betson-Rothbarth (BR) method: using adult clothing as a proxy estimator of child costs

Suppose we take CEX percentage of expenditure on adult clothing as a measure of the standard of living. The two families spend the same amount on adult clothing. They thus have the same standard of living as measured by this proxy...thus the additional cost of the children is zero. Even though this is the same as the Rothbarth result above, it is also still an absurd result. Therefore just because there is a match or consistency between two "proxies" does not mean that either proxy is a reliable or valid measure.

It is interesting to examine the history of when and why PSI, Williams, and Betson decided to use various proxies. This history reads much like a "Three Stooges" comedy. As noted above, Williams first advocated the Engel method in the 1980's. As this method fell into disrepute, Betson revived the "Rothbarth" method (first used in the 1940's). However, by the 1990's spending habits on alcohol and cigarettes had changed dramatically, particularly in families with children. Thus, the Rothbarth method was severely criticized and quickly fell by the wayside. Betson rescued the Rothbarth method by choosing adult clothing as an "equivalent expense" to alcohol and tobacco. However, merely changing from one un-reliable proxy to another un-reliable proxy does nothing to address the underlying problem, which is that all proxies and all indirect measures are simply not accurate or reliable estimates of child rearing costs.

If one did want to rely on a particular choice of proxy, adult clothing presents numerous concerns. First, the CEX unfortunately groups expenses for clothing for 17 and 18 year olds into the adult clothing category. Dr. Betson has attempted to adjust for this problem. In some reports, the adjustment was subtracting the percentage of teen clothing from the adult estimate using a "per capita" amount. This assumes that teens and adults spend the same amounts on clothing. This assumption may not be valid. However, in other communications, Dr. Betson stated that he used the clothing expense of 15 year olds and added this amount. This assumes that older and younger teens spend the same amount on clothing. This assumption also may not be valid. A second problem is that there is huge variability in adult spending habits on clothing that are not related to income or having children. Rather some people value appearance more than other people and thus spend more on adult clothes.

A third problem is the relatively small percentage of total expenses devoted to adult clothing. Because spending on adult clothes is only about $2 \%$ of total spending, all it takes is a $1 \%$ increase in spending on adult clothes to result in a $50 \%$ increase in the estimate of child rearing costs! For example, Dr. Betson found that his "average" family, which makes about $\$ 50,000$ per year spends about $\$ 1,000$ per year on adult clothing. The difference between a family with and without a child was only $\$ 200$ per year. This $\$ 200$ per year is translated into an estimated child cost of $26 \%$. However, if this difference were only $\$ 100$ per year, then Betson's model would predict that child cost would only be $13 \%$. Thus, the model is highly unstable.

A fourth problem with this method is it assumes there is a relationship between spending on adult clothes and spending on children. This relationship has never been proven. Instead, there are good reasons to conclude that spending habits among adults in terms of buying clothes is highly variable such that a consistent relationship between spending on adult clothes and spending on children does not exist.

## Using other expenses as proxies:

Using "Food away from home" as a proxy estimator of child costs:
Suppose we use CEX "food away from home" as a proxy for the standard of living. The family with children would have to have an income of $\$ 41,666$ to spend the same on food away from home as the family without children. ( $5 \%$ of $\$ 25,000=3 \%$ of $\$ 41,666$ ) (Again making the simplification of no change in percentages with income.) Using this "proxy", the additional cost of two children is $\$ 41,666-\$ 25,000$ or $40 \%$ of expenditures.
Using "Transportation" as a proxy estimator of child costs:
Suppose we take CEX expenditure on transportation as the proxy for the standard of living, The family without children spends $31 \%$ of $\$ 25,000=\$ 7,750$ on transportation; the family with children would have to have an income of $\$ 31,000$ to spend the same amount. ( $25 \%$ of $\$ 31,000=\$ 7,750$ ) Thus with transportation as a proxy we could deduce that the additional cost of children is $\$ 31,000-\$ 25,000$ or $19 \%$ of expenditures. It has been determined from various studies of actual child rearing costs that child rearing costs for two children are $20 \%$ to $30 \%$ of a families income.
Thus, for this set of data and for this income group, it might be tempting to choose "transportation' as the "best estimate" of child rearing costs. However, had we used the CEX percentages for middle or high income families, the results would be much different. But they would be equally un-reliable because the problem is not in which proxy is chosen. Rather the problem is the unreliability of the indirect proxy method.
Using housing cost as an indirect proxy of child costs: As the housing costs are identical, housing also yields a value of zero for the estimated cost of the child. Since three "estimators" yielded values of zero, should we use this number? Or should we "split the difference" and average all six of the numbers? Or should be instead conclude that the high variability of all other proxies also supports the conclusion that indirect proxies should not be substituted as estimates of child costs. Instead, one should look at studies which directly measure child rearing costs. Two examples of such methods will be given in Section Three, after we consider in greater detail the additional drawbacks of the two indirect "proxy" methods being proposed.
Cost of raising a child using different proxies:
(for the low income families used in the CEX data listed above).

| Proxy <br> method | Proxy used | Cost of raising <br> two children | Cost of Raising <br> one child |
| :--- | :--- | :---: | :---: |
| Engel | Inverse Food | $\mathbf{6 2 \%}$ | $\mathbf{3 1 \%}$ |
| Rothbarth | Alcohol and <br> Tobacco | $\mathbf{0 \%}$ | $\mathbf{0 \%}$ |
| Betson- <br> Rothbarth | Adult Clothing | $\mathbf{0 \%}$ |  |
| Other proxy | Food away from <br> home | $\mathbf{4 0 \%}$ | $\mathbf{2 0 \%}$ |
| Other proxy | Transportation | $\mathbf{1 9 \%}$ | $\mathbf{1 0 \%}$ |
| Other proxy | Housing | $\mathbf{0 \%}$ | $\mathbf{0 \%}$ |

The preceding chart confirms that the choice of the proxy substantially determines the estimated cost of the children. Thus, the resultant estimate has little to no real connection with the true cost of raising children. This is why all proxy methods have failed to be reliable predictors of actual child rearing costs.

The choice of proxies has varied over the last century. The inverse percentage of expenditure on food (Engel methodology) was first chosen, but this has since been shown essentially equivalent to the per capita method of attributing equal shares of the expenditure to each family member. The Rothbarth methodology (adult expenditures) typically produces results slightly lower than per capita estimates, but still much higher than actual child rearing costs.

### 3.5 Shortcomings of the Engel method.

The Engel method for estimating child rearing costs is based on century-old findings of an economist, Ernst Engel, that as a family's income rises, total spending on food increases, but the percentage of income spent on food decreases. Thus, according to the Engel method, if two families of different size spend the same proportions of their incomes on food, they are deemed to be equally well off. According to the Engel method, a family earning $\$ 100,000$ per year who spends $\$ 10,000(10 \%)$ on food, is "equally well off" as a family who earns \$20,000 per year and spends \$2,000 (10\%) on food! Clearly this assumption is not correct. However, the main reason the Engel method has been abandoned by all economists, including Dr. Betson, is that food costs are no longer a reliable measure of economic well being in that they are a much smaller percentage of a families spending on children than they were 100 years ago. Thus, the Engel method dramatically over-estimates the cost of child rearing and therefore results in NCP's being dramatically over-charged.

In 1990, Dr. Betson wrote the following comment on the Engel method:
The use of economies of scale in food consumption to estimate the average economies on other goods seems on the surface unrealistic in today's society. .. Given the high estimates that result from this methodology, ... the estimates from the Engel method should be discounted. ${ }^{33}$
Certainly the fact that the Williams/ Espenshade model was based on the Engel method calls into question the basis for the current Washington State Economic Table. In short, the current Washington State table is clearly based upon data has since been conceded by Dr. Betson to be inaccurate and out-dated. Given that there is no support for the Engel method, it is a "red herring" and a waste of the work group's time even discussing it. In fact, since this method is obviously outdated and inaccurate, one wonders why this option was even presented to the Work Group in the first place. We know for certain that food ratios are not the same as other ratios of family spending (food being too close to a per capita ratio). Therefore we know for certain that food is not an accurate "indirect proxy" to estimate total child costs.
But is adult clothing any better?

[^21]
### 3.6 Shortcomings of the Betson-Rothbarth method.

Criticism of the Engel method caused Dr. Betson to search for a new method to estimate the cost of child rearing. In 1990, after recognizing the drawbacks of the Engel method, Dr. Betson selected a method that was originally developed in 1943 by Erwin Rothbarth to estimate the well being of a variety of intact families during World War II. The primary assumption of this method is that family well being can be estimated by looking at the level of spending on cigarettes and alcohol. (This may say more about the priorities of Erwin. Rothbarth than the wisdom of his method). Responding to intense criticism about using drinking and smoking habits of adults as an estimate of the cost of child rearing, Dr. Betson eventually modified the Rothbarth method, changing the selected goods to "adult clothing", which supposedly had similar spending ratios as alcohol and tobacco. .Ironically, the use of tobacco and alcohol spending as a measure of family well being was not criticized because it encouraged drunkenness by being based upon the absurd assumption that parents who spend a lot more on booze and cigarettes had a "higher standard of living" than those who do not spend money on these items. Instead, the Rothbarth method was criticized because the consumption of tobacco and alcohol by adults had decreased significantly since 1943. Dr. Betson therefore modified the Rothbarth method by using family expenditures for adult clothing as the basis of family well being. (See footnote 13 on page 11 of Chapter One of the 2005 Washington PSI report). This new method of indirectly estimating the cost of raising a child based upon the parents spending on adult clothing is now called the Betson-Rothbarth (B-R) method.

## Inaccuracy of the Betson-Rothbarth Model

Comparing the Betson-Rothbarth method to the Williams-Engel method, one might argue that the Betson-Rothbarth method is even less accurate than the Engel method. At least the Engel method was based in part on something actually shared with and consumed by the child (i.e., food). Thus it was based upon shared family expenses which rose as the number of hungry children rose (although there is a limit on how much any one child can eat on any given day). By contrast, the Betson-Rothbarth method is not based on any costs actually related to the child.
In addition, the original Williams-Engel method, upon which the current Washington State Table is based used a "marginal method" in its calculations. In 1990, Betson replaced the "marginal" income shares method with a "per capita adjustment." This statistical manipulation of the data lead to a dramatic rise in the estimated cost of child rearing without any change in the underlying data.

## A third problem of the Betson-Rothbarth model is that Betson families are not typical U.S. families

Betson assumes his families are typical. However, "Betson" families are not typical US families. Betson made three critical "restrictions" to the CEX:

- Only complete responders were included... at least 3 of final 4 interviews.
- Only married couples were included ... no non-intact families.
- Only couples without other adults living in the house were included.

These three restrictions reduced his sample (based upon over 6 years of CEX data) to 9,245 consumer units of which 3,338 were married couples without children and 5,907 were married couples with children, but with no other adults living in the house. (See 2006 Oregon PSI report, page 4).

The CEX is a rotating panel, meaning when one family is dropped a new one is added. Also after a family has completed a full four quarters of "cost interviews" they are dropped and replaced with a new family. While the USDA cost estimate, by Mark Lino, used all quarterly surveys, Betson deleted from his sample any family units that completed less than three of the four quarterly surveys. (2006 Oregon PSI report, page 4). Thus, the Betson model assumes that the spending habits and demographic characteristics of CEX "complete responders" (those who complete 3 or 4 quarterly surveys) are the same as those who completed less than three interviews. We know for certain that this assumption is not valid*.

In 2003, the BLS conducted a study comparing CEX complete responders to incomplete responders (1997-2000): The goal of the CEX for the first two years was to complete 5,500 interviews per quarter and 7,700 interviews per quarter for the last two years (averaging about 6,600 for four years). One might think that a reasonable yearly estimate of interviewed families would be 6,600. But from January 1997 through December 2000 (4 years), about 100,000 consumer units ( 25,000 per year) were interviewed in order to get the average of 6,600 per quarter! ${ }^{34}$

Of these 100,000 families, 27,000 (27\%) refused to participate and another 8,000 (8\%) either moved away or had some other problem ( $35 \%$ non-responders). This left about 65,000 who completed at least one of the final four interviews. However, 36,000 (36\%) were "incomplete reporters" who completed one or two interviews and 15,000 (15\%) completed exactly three interviews. Only 14,000 (14\%) completed four interviews. 14\% $+15 \%=29 \%$ completed at least three interviews. Thus, USDA estimates, while being per capita estimates, at least used data from $36 \%+29 \%=65 \%$ of the total sample.

Failure to address the Non-responder problem has the potential to significantly distort results. According to Tuckerman (1999),
"If fewer than 80 percent of the people who received the questionnaire complete and return it, the researcher must try to reach a portion of the nonrespondents and obtain some data from them. Additional returns of all or critical portions of this questionnaire by 5 to 10 \% of the original nonrespondents is required for this purpose. This additional procedure is necessary to establish that those who have not responded are not systematically different from those who have. Failure to check for potential bais based on nonresponse may introduce both external and internal invalidity"(1999, page 267).

Since Betson's study was 6 years instead of 4 years, and since the interview goal was changed from 5,500 to 7,700 family units one year into his data base, a reasonable estimate is that Betson's sample was well over 150,000 household units. Betson first eliminated the 35\% of non-responders (over 50,000 consumer units) bringing his sample down to about 97,5000. He next eliminated another 54,000 incomplete responders who only completed one or two interviews (36\% of total), bringing his sample down to about 58,500. Betson then eliminated all the "single person" household units (about half the remaining sample) bringing the sample down to about 30,000.

[^22]Betson then eliminated all the non-intact and low income intact families, which were about 21,000 families leaving a "semi-final" sample of just over 9,000 "traditional" couples with or without children (less than 6\% of total sample). Thus, Betson eliminated over 94\% of the original sample to arrive at his "Betson" families. I have read several thousand scientific studies during the past 40 years. Eliminating over $94 \%$ of the original sample was far and away the largest sample size restriction I have ever seen. But the real question was whether these sample restrictions had any effect on the final result. To answer this question, we need to compare the demographic characteristics of the non-responders to the incomplete responders and to the compete responders.

## Differences between complete responders and incomplete responders*:

** Single parent households
should have been about 20\% of sample. (non-responders were not included in the study)

CEX used only 4 interview group as "complete".
Expenditures not adjusted for inflation.
Where did all the non-intact families go???
They were heavily represented as initial non-responders.
Betson's "3 restrictions" greatly compounded this problem by eliminating most of the remaining non-intact and other poor families who did make it into the CEX survey.

| Family <br> Characteristics | Complete <br> Responders | Incomplete <br> Responders |
| :--- | :---: | :---: |
| Age of <br> reference <br> person | 51 | 41 |
| Annual <br> Expenditures | $\$ 36,000^{*}$ | $\$ 30,000^{*}$ |
| Homeowner \% <br> Renter \% | $73 \%$ | $41 \%$ |
| Husband and <br> wife with or <br> w/o kids | $57 \%$ | $59 \%$ |
| One parent <br> Own children | $5 \%$ of <br> responders** | $8 \%$ of inc- <br> responders** |

The average Betson family (as described in detail in the 2005 California PSI report and the PSI 2006 Oregon report) has two teenage children. The parents are 51 years old, they own a home and spends $\$ 50,000$ per year. The income of the typical Betson family was about $\$ 72,000$ per year (See page 127 of the 2005 California PSI study). By sharp contrast, the median non-intact family has one child, age 6. The parents are under 30 years old and rent two apartments. Net income of NCP is about $\$ 18,000$ and CP is about $\$ 15,000$ per year for a total of $\$ 33,000$. (2003 Washington Sterling Report, page 5 and 2005 Washington Sterling report, pgs 50,56). Thus, the income of the typical Betson family is about twice as high as the combined income of the median Washington non-intact family. It is obvious that there is no possible relationship in the spending patterns between families that are this different. The CEX survey itself is heavily biased towards older families due to a non-responder rate of about 20\% (see Appendix II for a more complete list of CEX Responder Characteristics). In 2002, the average after tax income of CEX complete responders was $\$ 47,000$. The age of the reference person was 48 years old. Their annual expenses were $\$ 41,000$. The savings rate of $14 \%$ was higher than the known savings rate of this income group. 66\% of these responders owned their own home. $\mathbf{2 6 \%}$ of CEX responders did not even have a mortgage payment to make. The family typically consisted of two adults, one of whom worked part-time.

Dr, Betson claims that it was okay to eliminate over 20,000 families because he was only interested in studying the spending patterns of INTACT families. If this were truly the case, then why did Dr. Betson eliminate over 36\%/29\% x 9,000 = over 11,000 low income intact families from his sample? The answer is obvious. Had Dr. Betson included these 11,000 INTACT families (who were incomplete responders instead of complete responders), not only would his model have resulted in a much lower estimate of child support, but far worse, would have resulted in Dr. Betson's model being rendered statistically invalid (see Analysis of Variance section below).

The Betson-Rothbarth model suffers from several shortcomings in addition to the shortcomings of the CEX data and the shortcomings listed above.

First, the Betson model assumes that the spending patterns of intact families can be maintained after divorce, even though it is known that the spending patterns after divorce are significantly different than for intact families. The Betson model ignores the obvious fact that fixed expenses (in particular housing costs) are much greater after divorce than before divorce due to the need to pay for two houses instead of one.

To address this problem, Betson simply considers the spending patterns of intact families. By deleting all 10,000+ non-intact families from his sample, he ignores the economic realities parents face after divorce. The failure to account for the differences in economic realities between intact and divorced families means that the BetsonRothbarth method does not give an accurate result of spending for divorced parents. The B-R method is particularly inaccurate for low income parents. The BetsonRothbarth estimate over-charges the minimum wage NCP such that they are forced well below the SSR. The Betson-Rothbarth model states that parents with combined incomes below the poverty level spend $27 \%$ of their income on one child (see Exhibit 11 in the 2005 PSI report, Appendix 1). However, the Federal poverty guideline uses a figure of $20 \%$ of an intact family of three with one child (360/1780=20\%). For a divorced family with one child, but living in two homes, the \% is even lower $(360 / 1060+1420=360 / 2480=15 \%)$. Thus, the Betson-Rothbarth estimate of $27 \%$ for one child is almost double the federal estimate of $15 \%$ as shown on the $125 \%$ of poverty level guidelines.

Second, the Betson model assumes that families can arbitrarily increase their income when in reality, most families do not have the option of increasing income and therefore must reduce expenses to match income.
A basic fallacy of the Betson-Rothbarth method is that adults can arbitrarily increase their income after divorce in order to maintain the pre-divorce pattern of expenses in the face of post-divorce additional expenses. Instead, what happens, is that the same income must be re-distributed after divorce. Because total expenses cannot exceed total income, total expenses must remain the same after divorce. Thus, some "essential expenses" (such as paying for two apartments instead of one) will take priority over non-essential expenses such as taking the child to Disneyland.

Third, the Betson model assumes that the spending patterns of families with children can be compared to the spending patterns of families without children. On page 15 of the 2006 Oregon report, Betson states: "By comparing the consumption decisions of parents with children and married couples without children, the economic costs of the children can be indirectly observed from the differences in consumption patterns... (by finding) an observable proxy for the family's standard of living". Betson's model is thus an "indirect proxy" method. However, it is known that the assumption that spending in families with children can not reliably be compared with spending in families without children. There are numerous areas where spending patterns do not show a consistent relationship between these two groups. For example, savings patterns are different, income patterns are different. Even housing shows a surprising lack of relationship. For example, a family with a child spends exactly the same percent of income on housing as an unmarried couple (about 36\%.. see page 8, 2006 PSI Oregon report). Thus, if one were to use housing as an "indirect proxy" for child costs, one would falsely conclude that children have no "housing cost" at all!

Fourth, the Betson model assumes that families that spend the same amount on adult clothing have the same standard of living. Even if one family makes $\$ 30,000$ a year and lives in a shack while another family makes \$100,000 a year and lives in a mansion, if both spend $\$ 1,000$ a year on adult clothing, Betson assumes they have the same standard of living. If a family spends nothing on adult clothing, does this mean they have no standard of living?

Fifth, the Betson model assumes than any reduction in spending on adult clothing after having children is due directly to the cost of having children. In fact, there are several other reasons parents may reduce their spending on adult clothing after having children. First, is that much of the spending on adult clothing is discretionary. In other words, the adult already has a closet full of perfectly good clothes. After having a child, an adult may simply not have as much time to go shopping for new clothes. Second, the adults priorities may change and new clothes may no longer be as important. Third, adults may simply reduce spending on new clothes as they age, to create more savings for retirement. Thus, trying to use spending on adult clothes as a proxy for spending on children by comparing families without children to families with children makes no sense at all.

Sixth, the Betson model assumes that the mother does not work. It is thus not reliable with families where the mother does work (see footnote 7 at the bottom of page 20 of the 2004 Oregon PSI report). As nearly all moms work after divorce, the Betson model is not a valid model to use to estimate child costs for non-intact families. In fact, it is not a valid model to estimate child costs for intact families since the mother typically works full time even in intact families. For example, the 2006 Washington State Self Sufficiency Study concluded that $70 \%$ of all mothers with children under the age of 18 work full time. However, Betson apparently had to make this assumption in order to claim that his model was more reliable than the USDA study. The problem with couples in which the mother worked (based on the chart on page 19 of the 2006 PSI Oregon report) appears to be that such couples have more erratic spending patterns and these patterns do not conform to Betson's model. It is unclear from the table whether they are spending more on the children than his model predicts or more on adult clothing.

But whatever they are doing, they had to be eliminated from his sample for his model to yield "significant results". This was despite the fact that Betson also lowered his significance standard from the commonly accepted 95\% confidence threshold to the more dubious $90 \%$ confidence threshold. However, in being forced to make this additional assumption, it is likely that Betson got rid of well over half of his remaining sample. This one assumption likely reduced his sample size to less than 3,000 couples. (see Table 7, page 19 of the 2006 Oregon PSI report for a full list of conditions that affect the Betson model).

Seventh, Betson model assumes the two parents in the intact family are between the ages of 36 to 45 . Once again, this is not a valid assumption for the majority of families with child support orders. Instead, it is known that the ages of the median family subject to child support orders is in the age range of 25 to 30.
This choice in ages was apparently made to reduce the standard error of measurement so the claim could be made that the model was more reliable than the USDA model. The problem with younger couples (based on the chart on page 19 of the 2006 PSI Oregon report) appears to be that younger couples have more erratic spending patterns and these patterns do not conform to Betson's model. It is unclear from the table whether they are spending more on the children than his model predicts or more on adult clothing. But whatever they are doing, they had to be eliminated from his sample for his model to yield "significant results". This was despite the fact that Betson also lowered his significance standard from the commonly accepted 95\% confidence threshold to the more dubious $90 \%$ confidence threshold.

However, in being forced to make this additional assumption, it is likely that Betson got rid of over half of his remaining sample, thus reducing his sample size even further to under 2,000 units. (see Table 7, page 19 of the 2006 Oregon PSI report for a full list of conditions that affect the Betson model).

Eighth, the Betson model assumes that spending on adult clothing has some relationship to spending on children. Yet the CEX data shows that this is a false assumption. As just one example, 595 families in Betson's data set reported spending no money at all on adult clothes. Does this mean that these families spent no money at all on their children? To address this problem, Betson simply ignores these families by dropping 595 more families out of his sample. Had he instead attributed one dollar of spending to these families, the variation between families would have increased, thus rendering the entire model to be even less reliable than it was. _(see page 19 of the 2004 PSI Oregon report).

Betson's model is highly unstable and therefore not internally consistent. Betson's model is based upon the assumption that the family is making roughly $\$ 50,000$. The CEX data then spits out the result that adult clothing cost for the 50K family without children is about $\$ 1,055$ and the adult clothing cost for the family with children is about $\$ 860$. Specifically, Betson states at the bottom of page 16 of the 2006 Oregon PSI report: Couples without children spend an average of \$1,055 on adult clothing, while parents with one, two and three children spend \$860, \$803 and \$677 respectively. The difference in cost (\$195) is assumed to be due to the "cost of child rearing".

Since $195 / 860$ is $23 \%$, Betson concludes that one child cost the 50K family $23 \%$. (This is an over-simplification of what he did, but it should help you understand where his ratios are coming from). However, the above statement ignores the fact that the average couple without children makes about 2000 less than the couple with one child and the couple with one child makes about 3000 less than the couple with two children. (See page 6 of the 2006 Oregon PSI report). In other words, couples who have less income elect to have fewer children.

Is there a consistent relationship between spending on adult clothing and total spending on children?

| Data from 2006 Oregon PSI report Page 6 \& 16 | "Average" Childless Couple | "Average?" Couple with One Child | "Average?" Couple with Two Kids | "Average?" Couple with Three or more |
| :---: | :---: | :---: | :---: | :---: |
| "Average" Total Expenditures (pg 6) | \$44,728 | \$46,140 | \$49,834 | \$48,341 |
| Adult clothing \$ (from page 16) | \$1,055 | \$860 | \$803 | \$677 |
| What couple with kids would have needed to spend to spend as much on adult clothing as childless couple | $\begin{aligned} & 1055 / 1055 \\ & \times \$ 44,728= \\ & \$ 44,728 \end{aligned}$ | $\begin{aligned} & 1055 / 860=1.23 \\ & \times \$ 44,728= \\ & \$ 54,870 \end{aligned}$ | $\begin{aligned} & 1055 / 803 \\ & \times \$ 44,728= \\ & \$ 58,764 \end{aligned}$ | $\begin{aligned} & 1055 / 677 \\ & \times \$ 44,728= \\ & \$ 69,701 \end{aligned}$ |
| Increase in spending due to kids compared to childless couple | 0\% | $\begin{aligned} & 23 \% \\ & \text { 1st kid =23\% } \end{aligned}$ | $\begin{aligned} & 31 \% \\ & \text { 2nd kid=6\% } \end{aligned}$ | $\begin{aligned} & \text { 55\% } \\ & \text { 3rd kid=24\% } \end{aligned}$ |
| Amount in Betson Table (adding cc \& hc) | 0\% | $\begin{aligned} & 26 \% \\ & \mathbf{1 s t} \text { kid = 26\% } \end{aligned}$ | $\begin{aligned} & 36 \% \\ & \text { 2nd kid = 10\% } \end{aligned}$ | $\begin{aligned} & 41-45 \% \\ & 3 \text { rd kid=6\% } \end{aligned}$ |

Thus, using Betson's calculations, the first child cost 23\%, the second child 6\% and the third child $24 \%$. Not only do these figures not line up with each other, they do not line up with Betson's reported conclusions that the first child cost $26 \%$, the second child cost $10 \%$ and the third child cost $6 \%$ (see PSI 2005 Washington report, page A1-2 for the 50K income level). Instead, the numbers appear to be essentially random, because the underlying relationship is essentially random (in other words there is no consistent relationship between the spending on adult clothing and the spending on children).

What is also interesting about the CEX survey is the actual reporting of expenses on clothing. Since the Betson- Rothbarth method assumes there is a relationship between spending on adult clothing and total spending on children, it is useful to note what the CEX actually reports in this area. The following Table was taken directly from the CEX website.

CEX 2000 through 2005 Average annual expenditures of all consumer units.

| Item (from the CEX website) 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Apparel and services.........1,856 | 1,743 | 1,749 | 1,640 | 1,816 | 1,886 |
| Men and boys............ ...... 440 | 423 | 409 | 372 | 406 | 440 |
| Men, 16 and over... .......... 344 | 335 | 319 | 282 | 317 | 349 |
| Boys, 2 to 15.................. 96 | 88 | 90 | 89 | 89 | 91 |
| Women and girls.......... .... 725 | 677 | 704 | 634 | 739 | 754 |
| Women, 16 and over.... . 607 | 562 | 587 | 529 | 631 | 633 |
| Girls, 2 to 15........... ...... 118 | 115 | 117 | 106 | 108 | 121 |
| Children under 2....... ....... 82 | 81 | 83 | 81 | 79 | 82 |
| Footwear................ ......... 343 | 302 | 313 | 294 | 329 | 320 |
| Other apparel products/ service.. 266 | 259 | 240 | 258 | 264 | 290 |

Several things are revealed from studying this Table. First, CEX does not actually separate spending on adult clothing from spending on child clothing. Thus, for families with children between the ages of 16 to 18, Betson had to make an adjustment. The way this adjustment was made was to do a per capita subtraction from the adult clothing amount for families with children between 16 to 18.

But this leads to the second problem. Spending on adult clothing is much greater than spending on children's clothing on a per person basis. So attributing an adult level spending to a 16 year old child will artificially depress spending on the remaining adults, but only in families with children. This increases the difference in spending on adult clothing between these families and families without children and therefore dramatically inflates the estimate of total cost on child rearing.

Which leads to the third problem. Spending on women's adult clothing is about twice spending on men's adult clothing. So a different adjustment would have to be made depending on whether the teenage child is a girl or a boy.

Which leads to the fourth problem. Spending on boys and girls under 16 is relatively stable from one year to the next, but spending on adult clothing is highly erratic. Clearly spending on adults is more erratic than spending on children.

For example, from 2002 to 2003, spending on adult men's clothing increased $\$ 35$ and spending on women's clothing increased by $\$ 102$ (a 19\% increase in one year!). Meanwhile during that same year, spending on boys and girls clothing combined did not change at all. So how can there be a consistent relationship between spending on adult clothing and spending on children? Clearly spending on children is much more stable (and related to the child's needs), while spending on adult clothing is much more discretionary (and likely to be higher for higher incomes).

Which leads to the fifth problem. This Table does not report standard deviations, or the spread of numbers. Yet we know that human spending patterns are not normalized. Instead, they are highly skewed with some people spending lots of money on some items while other people spend next to nothing on those items. Adult clothing is no different. Of Betson's 9,000 intact families, nearly 600 spent nothing on adult clothing. Betson dropped them from the sample. But doing so artificially inflated spending on adult clothing by the rest of the sample.

Thus, instead of two adults spending about $\$ 1,000$ on adult clothing, had the 600 families who spent nothing been added back in, it is likely that spending would have dropped down to $\$ 900$ per family. Just as bad, given the highly skewed nature of income in the U.S. (with $10 \%$ of the adults earning as much as $50 \%$ of the total income), it is likely that this extremely rich $10 \%$ spent far more on clothing than everyone else (by doing things like buying 20 pairs of shoes). This would put a big difference between the mean or average level of spending and the median level of spending. This is why it is essential that non-normal data be reported in terms of medians and standard deviations. Otherwise the data is meaningless in terms of generalizing to "typical" families.

This is what the critics mean when they say the data is simply not present in the CEX data base to support the model proposed by Betson. This is also why Betson had to eliminate so many families (eliminating $94 \%$ of all consumer units) in order to get any kind of relationship at all.

## Is there a consistent relationship between spending on adult clothing and total spending on children?

Ignoring for the moment the CEX problem with lumping spending on older teenagers with adults, if we compare total spending on adult clothing with total spending on child clothing, and using spending on child clothing as a proxy for total spending on children, the chart is as follows:

| Spending on | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Adults, 16 and over | 951 | 897 | 906 | 811 | 948 | 982 |
| Children under 16 | 296 | 284 | 290 | 276 | 276 | 294 |
| Total Spending | 38,045 | 39,518 | 40,677 | 40,817 | 43,395 | 46,409 |
| \%Change Adult <br> spending | Base <br> Year | $-5.7 \%$ | $+1.0 \%$ | $-10.5 \%$ | $+16.9 \%$ | $+3.6 \%$ |
| \% Change Child <br> Spending | Base <br> Year | $-4.0 \%$ | $+2.1 \%$ | $-4.8 \%$ | $-0.0 \%$ | $+6.5 \%$ |
| \% Change Total <br> Spending | Base <br> Year | $+3.9 \%$ | $+2.9 \%$ | $+0.3 \%$ | $+6.3 \%$ | $+6.9 \%$ |


| Women, 16 and over... | 607 | 562 | 587 | 529 | 631 | 633 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men, 16 and over... ...... | 344 | 335 | 319 | 282 | 317 | 349 |
| Boys, 2 to 15.................. | 96 | 88 | 90 | 89 | 89 | 91 |
| Girls, 2 to 15. | 118 | 115 | 117 | 106 | 108 | 121 |
| Children under 2. | 82 | 81 | 83 | 81 | 79 | 82 |

Total annual expenses..... \$38,045 \$39,518 \$40,677 \$40,817 \$43,395 \$46,409
Looking at the percentage changes in the above chart, in the first year, there appears to be a relationship between spending on adult clothing and children's clothing, but no relationship between these two and total spending as total spending declined while spending on clothing rose. In the second year, spending on clothing and total spending rose slightly. However, by the third year, it becomes apparent that there is no consistent relationship. Now, total spending rises slightly, while spending on child clothing falls $5 \%$ and spending on adult clothing falls 10.5\%.

The fourth year shows yet a different pattern, with a rise of $6 \%$ in total spending and a rise of $17 \%$ in spending on adult clothing, but no change in child spending.
The fifth year sees still a different pattern. Now the increase in child spending is higher than the increase in adult spending and nearly the same as the increase in total spending. Thus, in five years, we see five different patterns. Put another way, there is no consistent relationship between spending on adult clothes, spending on children's clothes and total spending. While total spending rose each year, adult spending and child spending went up or down in essentially a random manner.

Is there a consistent relationship between spending on adult clothing and total spending on children? ANALYSIS OF EXPLAINED VARIATION
Models are supposedly based upon actual data and are used to predict results (or generalize) to other samples (like to the general population. Consistency in statistics is measured by "confidence levels" and "percent of explained variation." The common standard for a confidence level is $95 \%$. However, Betson was not able to achieve this. He therefore used a 90\% confidence level. In plain English, this means that the odds of Betson's data being "completely random" is less than 10\%.

Real consistency however is \% of explained variation which can be thought of as the predicting power of a model based upon the difference between the model and actual data. If a model can predict results $100 \%$ of the time (in other words, the data matches the model perfectly), then the percent of explained variation (called Explained Variance, and depicted in graphs as R2 or RxR) is $100 \%$. On the other hand if the pattern of the data bears no relationship at all to the proposed model, the explained variance may be as low as zero. In theory, if the complete outcome of an event were controlled entirely by three variables, then those three variables would account for $100 \%$ of the explained variation. When a model only explains part of the variation in the data, then it is assumed that other unknown and unaccounted for factors explain the rest of the variation. Models that explain less than $50 \%$ of the variation are not considered to be very reliable.

The Betson estimates were developed by carefully selecting less than 9,000 highly stable intact families from 6 years of CEX data, a sample of over 150,000 family units. The Betson model also eliminated more INTACT families $(11,000)$ than it used. The reason these intact families had to be eliminated was likely that they were low income and highly variable. Including these families therefore would have further reduces to percent of explained variation. Even taking this extreme step, the Betson-Rothbarth model" was then only able to explain 32\%* of the variation in spending in these married and highly stable families. (See Adjusted R-squared in Data Table 7, PSI 2006 Oregon report, page 19).

Since Betson's model only explained 32\% of variation in spending, other unknown factors accounted for 68\%. What would have happened to his model had Betson been willing to include data from the 6,000 or more non-intact (but complete responder) families, and the other 11,000 partial responder intact families he deleted from the CEX data base? (USDA included them). A reasonable guess, based upon what is known about these families, is that the variability in spending patterns would be so high as to render the Betson model's ability to predict anything "statistically insignificant."

Had Betson included either the 11,000 low income intact families or the 18,000 low income non-intact families, it is likely his model would have fallen well below $90 \%$ CL and the \% of explained variation may have dropped below $10 \%$. This may explain why Betson insists on assuming that pre-divorce spending patterns can be maintained after divorce... His model requires this assumption even though we know this assumption is not true.

Percival et al., (1999) compared numerous proxies in terms of their predicting power to estimate the cost of children. While no proxy was found to have a high predicting power, several were found to have a relatively higher predicting power than adult clothing (see chart below). The only proxies with lower predicting power than adult clothing was health care, alcohol and tobacco. Thus, even if one was comfortable using proxy methods to predict child costs, adult clothing would be one of the poorest choices. ${ }^{35}$

| Reliability (predicting power) of various indirect proxies | $\%$ of Explained <br> Variation |
| :--- | :---: |
| total family consumption expenditure | $52 \%$ |
| family consumption spent on food at home (Engel estimator) | $37 \%$ |
| expenditure on recreation and entertainment | $34 \%$ |
| expenditure on miscellaneous goods and services | $26 \%$ |
| expenditure for transport (car) | $23 \%$ |
| expenditure on clothing and footwear | $22 \%$ |
| expenditure on adult clothing, coffee, tobacco and alcohol <br> (Rothbarth estimator) | $19 \%$ |
| expenditure on medical care and health | $13 \%$ |
| expenditure on alcohol | $1 \%$ |
| expenditure for tobacco | $0 \%$ |

A reasonable question is how was Betson able to explain 32\% of the variation in his sample using the Rothbarth method, while Percival was only able to explain $19 \%$ of variation using nearly the same method? Part of the answer lies in the fact that Percival added tobacco and alcohol to the adult clothing proxy. Since alcohol and tobacco have no explaining power, this addition likely lowered the adult clothing prediction a little bit. However, a more important factor was likely the samples themselves. Betson made more sample restrictions than Percival. The whole point of these sample restrictions, eliminating thousands of families in the process, was to artificially create a uniform sample that matched the characteristics Betson was looking for. However, even after making these restrictions, these "Betson families" still had significant variation in their spending habits such that Betson's model was only able to account for 32\% of the variation in this highly selected sample. Had Betson not made these restrictions, it is likely that the percentage of explained variation would have been even less.

[^23]Looking at the above chart, one might be tempted to conclude that the Engel method is the best way to estimate child rearing costs. This would not be the correct conclusion. The primary reasons the Engel model is more reliable than the Betson-Rothbarth model is that it is based upon an essential cost (food) which is spent more consistently that adult clothing (which is a highly variable luxury cost).

The best proxy estimator found by Percival was total family spending. In other words, there was a consistent relationship between spending on children and total family spending. As one rose, so did the other. But even this relationship only explained about $50 \%$ of the variation. Thus, it was not as consistent as most people might believe.

## Ninth, the Betson Model Incorrectly calculates child care costs to be deducted from the total cost in determining the Economic Table Cost

The Betson model uses an estimate for child care costs of only about 1\% (PSI 2005 Washington Report, Appendix Exhibit 1-1). Thus, for a typical family income of $\$ 36,000$, Betson predicts child care costs to be less than $\$ 360$ per year or less than $\$ 30$ per month! The problem of this extremely low estimate is that his model predicts total spending on the child of $25.9 \%$. Betson then only subtracts $.7 \%$ for child care to yield an estimate of 25.2 \% to construct his table... a table which is then applied to ALL CHILD CARE COST LEVELS. As actual child care cost is outside the Economic Table,, the lower time parent can be "double charged" $12 \%$ just for child care by being forced to pay $\$ 400$ per month for child support when the table was constructed on the assumption that child support was only $\$ 30$ per month. The lower time parent is being credited with an assumed expense of less than $1 \%$ to construct the Economic Table from which he must pay. But then the lower time parent is being billed at an average rate of $12 \%$ ! In fact, what should happen is to explicitly acknowledge this $0.7 \%$ assumption and then if child care payments are more than $0.7 \%$ per month, then the percentage used to make the order would be lowered for that couple. For example, if the couple's actual child support payment were $\$ 360$ per month (i.e. $12 \%$ of combined monthly income), this $12 \%$ should be subtracted from the $26 \%$ total cost derived from the Betson method to yield a non-child care estimate of 14\%.

## How did Betson arrive at $0.7 \%$ child care cost?

One explanation is that his model assumes the couple with the child was married (thus both parents were fully available to care for the child whenever the other was at work). This assumption would only be equally valid after divorce if we adopted a "right of first refusal clause" for divorced parents so that either could care for the child while the other was at work. A second possible explanation was that Betson assumed that the mother did not work and thus was fully available to care for the child. (See PSI 2006 Oregon report, page 20). A third possible explanation is that Betson assumed that the children are 6 to 12 years old and have virtually no child care costs. The chart on page 19 of the 2006 PSI Oregon report confirms that this limitation was not motivated by a need to reduce the standard error (the 5 child age ranges show about the same "P" values). So why else would Betson make this assumption? The underlying motivation for this assumption appears to be to make child support orders as high as statistically possible. Using this age range raises child support payments because the Betson model starts off with a "lump sum" (top down) estimate and then subtracts child care costs. Using this age range reduces the estimate for child care costs and therefore maximizes the estimated cost of raising the child.

Tenth, the Betson model incorrectly calculates the child's health care costs to be deducted from the total cost in determining the Economic Table Cost.
Exhibit 1-1 of the PSI 2005 Washington report indicates that Betson model assumes the child has health care costs of about $3 \%$. However, the text below the chart incorrectly multiples this $3 \%$ by the estimated percentage of total child costs (26\%), in order subtract less than one percent from the total cost. In fact, Betson notes this average cost to be about $\$ 250$ per month ( $8 \%$ for the median non-intact family). The result is that the Betson model predicts that an intact couple making \$36,000 will spend about $25 \%$ of their income on the child excluding child care costs and medical costs. If the cost for the child's medical insurance and other major medical expenses is $\$ 250$ per month (as Betson acknowledges at the bottom of the page), then this represents about $8 \%$ of the combined monthly net income. Again, the lower time parent is being credited with an assumed expense of less than $1 \%$ to construct the Economic Table from which he must pay. But then the lower time parent is being billed at an average rate of $8 \%$ !

When one considers the cumulative effect of all ten of these "false assumptions", together with the many general problems of indirect proxies and the many general problems of the CEX survey, one is left with the conclusion that the Betson model does not apply at all to non-intact families and does not even apply to intact families.

## Are Betson-Engel and Betson-Rothbarth really Upper and low bounds?

It has been claimed that the Engel model represents a "ceiling" which over-estimates the cost of child rearing and the Betson-Rothbarth model represents a "floor" which under-estimates the cost of child rearing. While there is substantial data supporting the conclusion that the Engel model is outdated and way too high, there is no data supporting the conclusion that the Betson-Rothbarth model under-estimates child rearing costs. Instead, all the credible data supports the conclusion that the BetsonRothbarth model also dramatically over-estimates the cost of child rearing. Thus, Engel and Betson-Rothbarth methods do not form upper and lower bounds of child rearing costs. Instead, like all indirect proxy methods, they are simply inaccurate and unreliable.

As for "upper bounds", some high income parents may lavish their children with gifts. But this is not what basic child support should be about. As for "lower bounds", many parents are highly creative in finding ways to reduce child rearing costs in order to achieve a balance between income and expenses. For example, most families tend to spend about the same fraction of their income (about 30\%) on housing regardless of the number of children. This does not however, mean that additional children are without additional housing costs. Instead, it means that parents with more children somehow find additional cost saving ways to make the same housing cost meet the needs of more children.

## Averaging the Betson and Engel estimates of child rearing costs: Is splitting the difference really a rational choice?

A small majority of the 2005 Washington Child Support Work Group, at the suggestion of Judge Wickham, endorsed a proposal to "split the difference" between the Engel estimate and the Betson method for estimating child rearing costs. As the Betson method proposes to raise child support payments about 30\% and the Engel estimate proposed to raise child support payments about $50 \%$, the "split the difference" option would have raised child support payments by about $40 \%$. Thankfully, the 2007 Washington State legislature noted the lack of agreement on the prior workgroup and rejected the "split the difference" recommendation. The legislature instead mandated that this new 2007 work group be formed to come up with a clearer recommendation.

More recently, on November 18, 2007, Dr. Betson sent a the members of the 2007 work group a letter explaining his belief that splitting the difference may be a "rational option". Betson's reason essentially was that when does not know the answer to a question (ie what child rearing actually costs), splitting the difference between two options may make sense.

To support his argument, Betson uses an analysis of "the cost of choosing the wrong value". Betson claims that it would be more harmful to the child to chose an option that was too low than to choose an option that was too high. After all, if the option is too low, the child might starve to death, but if the option is too high all that will happen is that the lower time parent will pay the higher time parent too much money. This argument reveals Betson's true motives, which is to use whatever statistically trickery is needed to drive child support payments as high was possible. Betson sees absolutely no downside to the child of excessively high child support payments.

However, Betson's argument makes several invalid assumptions and ignores a great deal of crucial information.

1. Betson assumes there is no downside to the child of high child support payments. Sadly, Betson ignores the fact that a child has emotional needs that are every bit as important to the child's development as the child's economic needs. Driving up child support payments requires that the NCP dad spend more time at work, often working two jobs to support two households. Some dads simply give up and drop out of the child's life altogether. The child loses both the economic benefit of an involved dad and the emotional benefit of time spent with their dad. Thus, there is a huge potential harm to the child of excessively high child support payments.
2. Betson assumes that it is impossible to directly estimate the true cost of raising a child. The USDA and the Rogers Cost Share data both refute this assumption. In addition, the University of Washington, the University of Minnesota and numerous other sources now provide detailed and direct information on child rearing. All of these direct estimates confirm that indirect proxy estimates are both unreliable and un-necessary.
3. Betson assumes that there is agreement that his method represents a "low estimate" and the Engel estimate represents a "high estimate" and thus that the truth is somewhere in between. This argument ignores the fact that there is no proof that his estimate is a low estimate or even any estimate at all of child rearing costs.
4. Betson ignores the fact that there are many other items that could be used to yield indirect proxy estimates of child rearing costs. Besides adult clothing and food, one could use housing, transportation or any other items labeled in the CEX. If one used housing as a proxy, we would conclude that children have no cost as families spend about the same percent on housing whether they have kids or not. If we use transportation as a proxy, the value would be low because families with kids spend only slightly more on transportation than families with kids.

Earlier we discussed the problems inherent in all proxy methods. We presented tables showing that high income and low income families yielded different estimates. These tables also showed proxy estimates ranging from zero percent to $60 \%$. If all we had was this information, would it be rational to "split the difference" of these various proxy estimates??? Or would the more rational choice be to recognize that the high variability of indirect proxy methods makes them all intrinsically unreliable, and thus dump the whole nasty business of indirect proxy measures in favor of more direct and therefore more reliable estimates of child rearing costs?

Finally, Betson ignores the fact that our main obligation as a State-mandated Workgroup is to uphold State and Federal law, both of which require a "best estimate" and "equitable distribution" of the cost of child rearing. Betson's argument that it would be "rational" to shift the burden towards the lower time parent is not only unwise, it is also not in keeping with either Washington State or Federal regulations.

Conclusion: Indirect proxies are not a valid measure of child rearing costs The Sterling and PSI reports presented to the 2005 and 2007 Child Support Work Group ignored all of these shortcomings of the Engel and Betson-Rothbarth methods. Instead, Engel and BR methods were presented as representing the consensus of the economic community. In fact, this is clearly not the case. Instead, as the Chief Economist for the USDA has noted, there has been no credible scientific study that supports either the Engel or the Betson Rothbarth method. Instead, like all other indirect proxy methods, they are both completely unreliable and tend to greatly overstate actual child rearing costs. Any kind of indirect proxy method cannot be recommended as these are essentially arbitrary and use a host of assumptions that have never been validated. In fact, indirect proxy methods have instead been shown to be extremely unreliable for estimating child costs.

Although the Betson method uses an equivalence scale (or indirect proxy) to compare how much income a married couple with one child needs to enjoy the same standard of living as a childless couple, Betson has elsewhere been extremely critical of the use of equivalence scales: "Their estimation requires assumptions that can never be independently verified... equivalence scales are inherently arbitrary and as such are in reality subjective judgments masquerading as science." (Betson, 2004, page 1).

For all the above reasons, the Betson-Rothbarth method is not a valid or accurate estimate of child rearing costs in non-intact families, and likely is not a valid or accurate measure for intact families. Thus, the next section will examine direct marginal cost estimates of child rearing.

## SECTION FOUR: DIRECT MARGINAL ESTIMATES OF CHILD REARING COSTS

## Alternatives to the inaccurate models described above:

All of the models described above are inaccurate because they fail to take into account at least five categories of expenses that place a heavier burden on NCP's (typically fathers). In addition, the models described above are inaccurate because they attempt to indirectly calculate child costs by using the costs of adult goods as a "proxy" for child costs. In addition, they are inaccurate because they use data from intact families rather than families living with the economic reality of divorce (i.e., having to support 2 households instead of one). So what are some other alternatives that might be more accurate and more reliable?

There are at least three reasonable, and more accurate options that were not considered in the PSI reports. The first is the "Cost Shares" method which is a model based directly on studies of actual costs of child rearing in divorced families and focused specifically on the cost of raising a child rather than indirectly basing child costs on adult income or adult expenses on solely adult goods. We will cover this option next.

Another option, is the "Combined Cost Share" model which follows the Cost Share model in some respects, but is indexed upon a known reliable "lump sum" base estimate of child rearing" (such as the marginal increase for one child at 125\% of the federal poverty guideline). The Combined Cost Share method also compares and combines three bottom up estimates of child with three top down estimates of child costs in order to overcome the problems inherent in any one method by using multiple forms of data.

A third and final option is preservation of the Status Quo. The Cost Shares data confirms that NCP's are currently being overcharged by $20 \%$ or more by the current Washington State Economic Table. One reason to stay with the current Table is to preserve economic stability for children of divorce and for custodial parents. While this option is certainly unfair to NCP's, it would be much less unfair than adopting the Betson-Rothbarth methodology (which would actually raise child support payments such that NCP's would be overcharged by $30 \%$ or more). The New York model (identical to the Wisconsin model) is backed by substantial research and would address the biggest problem with the current table (over-charging low income NCP's) while leaving the rest of the table unchanged.

### 4.1 Advantages and Drawbacks of the Rogers "Cost Shares" method

The Cost Shares method attempts to directly measure child rearing costs ${ }_{2}$ rather than indirectly estimating child costs.
-The Cost Shares estimates are actual measured costs in household surveys of divorced parents rather than intact families.
-The Cost Shares method shares child cost offsets (child tax credits) between the parents.
-The Cost Shares method assumes the child has two households instead of one after divorce.

While the Cost Shares estimate is accurate and reliable, an objection to the Cost Share model is that it is complex and cannot be presented on a simple economic table the way the Betson method can. It takes a lot of effort to fill out the Rogers form. This effort is nearly identical to filling out the long version of the federal income tax form, a task most people abhor. The method also requires a specialized computer program.

The Cost Shares method is based upon the assumption that the most accurate way to determine child costs is to use data which directly measures child costs. This method first appears in Child Support Guidelines: the Next Generation, by the Office of Child Support Enforcement, 1994, U.S. Department of Health and Human Services, chapter 11, pages 104 to 125 in an article by Donald Bieniewicz.

It was subsequently refined and developed further by R. Mark Rogers in collaboration with Bieniewicz. The latest update was published as part of conference proceedings in "Child Cost Economics and Litigation Issues: An Introduction to Applying Cost Shares Child Support Guidelines," by R. Mark Rogers and Donald J. Bieniewicz, Southern Economic Association Annual Meeting, Section for National Association of Forensic Economics, Alexandria, Virginia, November 12, 2000.

The Rogers Cost Shares method corrects nearly all of the fundamental economic errors of the Income Share models discussed above. The Rogers Cost Shares Method is a model or formula for sharing the expenses of one or more children that is based on actual child costs, rather than on indirect estimates of child costs.

This child support model is based on the parents sharing child costs, with the costs based on actual measured costs in household surveys of divorced parents. Child expenditures are taken from surveys of single-parent households rather than of intact households. The cost shares model focuses on sharing the "marginal" costs of children. This means the additional costs parents incur by having children. For example, housing cost would use how much more it costs to rent a two-bedroom house than to rent a one bedroom house. If it costs $\$ 600$ a month to rent a two bedroom house and $\$ 500$ a month to rent a one bedroom house, the marginal cost for housing one child would be $\$ 100$ or $20 \%$ more due to the addition of the child. This marginal estimate is appropriate since the adult household would incur the earlier costs with or without the child.

However, as discussed earlier, there are also other ways to estimate costs. Another common way is to divide up expenses on a per capita basis. For example, for the same two bedroom house just described, one can assert that the house costs should be divided evenly between the parent and the child. This would yield an estimate of the cost of housing a child of $\$ 300$ instead of $\$ 100$.

As another example, it typically costs about $\$ 400$ a month for health insurance for one adult. Assuming it costs about $\$ 100$ to add a child to this policy, the marginal cost for the child would be $\$ 100$ or $20 \%$ of $\$ 500$. However, the per capita cost would be $\$ 250$ or $50 \%$ of the cost of the total insurance policy. It is obvious that per capita estimates over-estimate the real costs of raising a child.

Sometimes, there is a lack of data available in a given area of the cost associated with a child. In such cases, the child cost can be estimated using a "proxy" as an indirect substitute index. For example, there is little information on the costs of child clothing. But there is information on what adults spend on clothing. If it is known that adults spend $\$ 100$ per month on clothing, one can multiple this amount by an "index" to estimate the cost of child clothing. The index is often merely an assumption or guess. Indexes have ranged from a high as much as $80 \%$ to a low as little as $30 \%$ for the same item. It is also common to use higher indexes for the first child and lower indexes for later children. An example of this would be to use $50 \%$ for the first child, $40 \%$ for the second child and $30 \%$ for the third child. The rational for variable indexing is that the parents have a limited amount of money and tend to spend less on clothing for each child when they have more children. (However, many other parents have a firm policy of spending the same amount on each child and will refrain from making any purchase unless the same purchase can be made for all of their children).

One could also use the cost adults spend on alcohol, tobacco and clothing to estimate what divorced parents spend on child costs. This is exactly what the Betson-Rothbarth method attempts to do. However, because it is an indirect estimate, indirect cost indexing is the least accurate method for estimating child costs.

One can also use lump sum averages as an index. Instead of substituting one item for another to extrapolate cost, one uses estimates of total costs as the unit of analysis. For example, if one looks at the federal poverty guideline table shown later in this section, one might conclude that a reasonable index for all children costs combined for a poor family is $15 \%$ of the combined family cost (360/2480). (In fact, this kind of "lump average indexing" is exactly the approach adopted in the Simplified Cost Share method described in the next section of this analysis).

Thus one can have exactly the same data, but depending on the assumptions one makes, one can come up with several different estimates. In fact, the Rogers Cost Share estimates are often based on exactly the same CES and USDA data used by in the Betson Indirect proxy methods. The difference was that Rogers used a marginal method to estimate child cost while Betson used an indirect proxy method and USDA used a per capita method. .

The Cost Shares methodology also explicitly shares both child costs and child cost offsets (child tax credits) between the parents. An explicit measure of child-related tax benefits is used for the offset as an intermediate step in determining the economically appropriate child support award. This is a procedural advance over income shares models (and USDA models) which ignore tax benefits in estimating net child costs.

## The two household assumption versus the one household assumption

The Rogers Cost Share method also uses the average net income of both parents, instead of their combined income. This reflects the economic reality that after divorce, there are two separate households and therefore the need for two average incomes rather than one combined income. This assumption (that the child has two households instead of one after divorce) is in stark contrast to the "one household assumption" used in the USDA per capita estimates and the indirect proxy estimates.

The Cost Shares model recognizes that the child's emotional need to retain two parents is more important to the child's development than the child's financial need to stay in the same size house after divorce. The Cost Shares method therefore challenges the premise that the child's pre-divorce "standard of living" can be maintained after divorce since the child will now have two houses instead of one.

The traditional income share models consider the combined incomes of the two parents, but does not consider the combined expenses of the two parents. There is no consideration for the expenses of the non-majority parent. It is as if the non-majority parent no longer actually exists in any form other than a pay check. Even the very term "single-parent" household implies the child now has only one parent. In fact, as long as the second parent is still alive, the child still has two parents and deserves to retain both parents. This issue will be discussed further in the final section of this analysis when we consider the issue of residential credits.

## Determination of actual child costs

Like the USDA method (but unlike the Betson "proxy" method), the Cost Shares method has components for various major child cost categories: housing, food, transportation, clothing, health, child care and education, and "other." Each category is based on an average of the expenditures by category from survey data. The primary source of data for the Cost Shares child support model is the "1999 Expenditures on Children by Families," published by the Family Economics Research Group (FERG), U.S. Department of Agriculture (USDA). Data used to estimate expenditures on children are from the 1990-92 Consumer Expenditure Survey - Interview portion (CES-I). This survey is administered by the Bureau of Labor and Statistics, U.S. Department of Labor. It is based on a sample of 12,850 husband-wife households and 3,395 single-parent households. This data is then updated and adjusted slightly annually (according to the Consumer Price Index) in the Expenditures on Children by Families from the U.S. Department of Agriculture.

As described earlier, the USDA report provides estimates of family expenditures on children for separate cost categories. The USDA estimates are on a marginal cost basis, except for the housing, transportation, and miscellaneous cost estimates, which are per capita. Per capita estimates are known to yield much higher estimates of child costs than marginal cost estimates and are therefore not an accurate way to determine actual child costs. Thus, to obtain marginal housing costs for children, the housing costs in the Cost Shares tables incorporated housing cost data from the U.S. Department of the Interior instead of using the USDA per capita estimates. The one child cost is the difference between a one-bedroom house and a two-bedroom house, plus utilities factored in for a median income family. The Rogers method also uses independent marginal methods to determine transportation and miscellaneous costs. Ratios are then applied for additional children and different income levels. The entire Rogers method is a direct marginal method of estimating child rearing costs. Thus, it is the very method that PSI stated is the "most appropriate way" to estimate child costs. The net effect of using marginal estimates for all child costs (versus the USDA method of using per capita estimates for housing) is that the actual estimates are lower than USDA estimates and also that the ratio for each individual cost is different (mainly in producing a much lower estimate for the housing cost).

This result is shown on the following table (taken from pages 32-33 of Rogers, R.M., (2005) A Brief Critique of North Carolina's Child Support Guidelines, USDA data from Lino, USDA 2000 report, pg. 19):

| Percent <br> of total <br> child costs | 2004 <br> CES/USDA <br> Low- <br> Median <br> family (\%) | 2004 <br> Rogers <br> Low- <br> Median <br> family (\%) | Difference <br> (CES- <br> Rogers) <br> (\%) | 2001 <br> CES/USDA <br> LowIncome <br> Age 6-8 | 2004 <br> LowIncome <br> family |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | 100 | 100 | 0 | $459^{*}$ | $380^{*}$ |
| Housing | $\mathbf{3 3}$ | $\mathbf{1 8}$ | $\mathbf{- 1 5}$ | $\mathbf{1 9 1}$ | 85 |
| Food | 20 | 24 | +4 | 105 | 113 |
| Transportation | 14 | 16 | +2 | 73 | 75 |
| Clothing | 6 | 7 | +1 | 34 | 33 |
| Health Care | 8 | 10 | +2 | separate | separate |
| Child care | 9 | 13 | +4 | separate | separate |
| Misc. | 10 | 12 | +2 | 56 | 56 |

*= total excludes health care (41 USDA-47 Rogers) \& child care (44USDA-61Rogers) .
The above table shows that using a per capita estimate over-states child costs by $20 \%$. While all of the other costs are about the same, the per capita estimate of housing costs is over $\$ 100$ per month greater than the actual housing costs (191$85=106$ ). Since this cost is a huge part of the total cost of the Economic Table, the total cost itself is over-stated, as discussed earlier, by about $20 \%$ of the total combined obligation for the median family just in terms of this one factor. Thus, the biggest difference between Rogers and USDA is with housing cost estimates.

The published Rogers Cost Share estimates of child rearing costs have been independently corroborated by a legislative research panel appointed by the Legislature of the State of Virginia. In "Technical Report: The Costs of Raising Children," the Joint Legislative Audit and Review Commission (JLARC) - a standing commission with a professional staff - the expenditure levels on children for lowincome households were very close to the Cost Share numbers. However, the JLARC cost estimates were notably lower than the Cost Share estimates for middle to high income households. This difference is thought to be due to the fact that the econometric technique used by JLARC focuses more on marginal child costs than the Department of Agriculture's technique.

The Rogers Cost Shares calculation of child support, as described on their website, uses the following five steps:

1) Determine basic child costs for a single-parent household.

The income level used - of single-parent households from the base tables - is based on the average of the incomes of both parents in question. This average income is used because one of the realities of divorced families is that you cannot run two households on the same income as one. The Cost Shares model recognizes the reality of divorce is that each parent has a separate household. Thus, in the Cost Shares model, both parents will experience a fall in standard of living, so using their average income to gage the child costs of either household will share this proportionately.

## 2) Add other non-basic child expenses when appropriate.

The Cost Shares basic child cost tables do not include child care, education expenses, or extra-ordinary medical expenses, so they are treated as "add-ons." (And are discussed separately in a later section of this analysis).
3) Deduct the tax benefit that the custodial parent receives from total child costs.

Cost Shares treats the tax benefits as a negative cost and child tax benefits are large. Thus the Cost Shares method explicitly addresses child-related tax benefits.
4) Allocate the net child cost between the parents based on each parent's share of combined, after-tax (net) income that is above an explicitly defined self-
support level. The Cost Shares methodology allocates child costs by income available above self-support. This is also done for add-ons. The award cannot reduce either parent's net monthly income below the self-support reserve (SSR).
5) Adjust the amount of the award based upon the actual percentage of residential time the child spends with each parent. When setting the award, the Cost Shares guideline also considers direct support for the child from the non-custodial parent. This is handled through simple cross crediting based on the number of overnights the child is with each parent (an illustration of this method is provided in the section on residential credits at the end of this analysis). .

## Comparison of the Rogers Cost Shares method to the Betson-Rothbarth Income

 Shares methodIt is difficult to make a straight comparison between Cost Share and Income Share models because the Cost Shares model explicitly addresses several factors which are ignored in the Income Share model. The Cost Shares method does not use a simple table and therefore it takes a Cost Shares computer program to generate the Cost Share award amount. In addition, the Betson Income Shares model does not list any actual child costs. Instead, the focus is solely on using indirect proxies to estimate total child costs.

However, using one of the examples provided on the Cost Share website, for a couple with two children and a NCP with no visitation adjustment and an net monthly income of 1,800 and a CP of 1,600, the child support award after tax adjustments is $\$ 242$ per child per month or $\$ 484$ per month for two children. This is based upon an actual cost for raising two children (in this combined income bracket) of $\$ 754$ (not including child care or medical). This equates to $\$ 377$ per child (although the first child in this bracket is about $\$ 400$ and the second is about $\$ 354 .$. In addition, tax benefits to the CP result in a savings to the CP of at least $\$ 100$ per month per child. This results in a net monthly cost of raising two children of $\$ 554$ (754-200=554) and a net monthly cost of raising one child of $\$ 300$ after the CP having received the $\$ 100$ per month tax credit.

Using the current Washington Table for combined monthly net income of $\$ 3,400$, the combined obligation is $\$ 450$ per child for a child under 12 and $\$ 550$ per child for a child over 12. Using the average ( $\$ 500 \times 2$ ), the NCP share of this obligation would be $.55 \times$ $1000=\$ 550$. From the Betson-Rothbarth (one Age Group) Table, the combined obligation for two children would be: $\$ 1,088$ and the NCP share would be $.55 \times 1,088=$ \$598

From these calculations, several things are evident:

1. The costs in the current table overestimate the actual cost of raising a child. 2. In ignoring tax benefits to the CP, the current table over-charges the low income NCP's by about 14 \% (550-484=66/484=14\%). Stated another way, the Cost Shares model results in awards that are about 20 \% less for this income group.
2. The Betson-Rothbarth model results in an award that is about $10 \%$ higher than the current table for this income and child number circumstance, and therefore overcharges the NCP by about 20 to 30\%.

Having studied the Cost Share charts and graphs and having conducted several cost estimates based upon this model, a general rule of thumb emerges. Cost share awards are about $15 \%$ less for low income families (with combined monthly net incomes of $\$ 2,000$ to $\$ 4,000$ ), about $25 \%$ less for high income families (with combined incomes in excess of $\$ 6,000$ ) and about 20 \% less for those families who are in the middle class between these two extremes. These calculations confirm what NCP's have long alleged... that the current Washington Economic Table is too high.. and adopting the Betson-Rothbarth tables would only make the situation even more unfair to NCP's.

## Criticisms of the Rogers Cost Shares Method

The primary criticism of the Rogers Cost Shares Method is that it results in lower child support awards than the Betson Income Shares method (about 20\% to 30\% lower awards depending on the income of the parents). These critics ignore the fact that the reason the Rogers method results in lower awards is that the Betson method results in child cost estimates that are too high, principally due to a failure to address tax credit benefits to custodial parents and a failure to address the differences between intact and divorced family economics. These critics instead try to scare legislators by claiming that the Rogers Cost Share Model would drive more custodial parents into poverty. This criticism may seem reasonable on the surface. But in fact, it is simply not true.

To understand why it is not true, one must understand the actual economics of families living near the poverty level. According to the Federal Office of Child Support Enforcement, of the total child support owed in arrears, " 70 \% (of uncollected child support) is owed by noncustodial parents who show no quarterly earnings (42\%), or have annual earnings of less than \$10,000 (28\%)". (report available at http://www.acf.dhhs.gov/programs/cse/pol/DCL/2004/dcl-04-28a.pdf).

Thus, $70 \%$ of all uncollected child support is derived from ignoring the SSR and involves awards made against NCP's who have little or no income. These NCP's may be in prison or have other physical and mental health problems that prevent them from working. No law, no matter how well intended will be able to draw blood from a rock. This is why it is wise to start the economic table at minimum wage and work up. There is no point in making awards against NCPs who have no income and no ability to produce income. The Rogers method recognizes this by explicitly starting at the Self Support Reserve. Any parents who are not required to make their payments under the Rogers Cost Share Method would not have been able to make their payments under the Betson method either. All Rogers is doing is saving the State the cost of trying to collect an uncollectible debt.

In addition, the low income custodial parents that critics are so concerned about are unlikely to be driven into poverty by the cost differential between the Rogers and Betson methods at low income. Using two minimum wage earners as an example (the worst case scenario), the Rogers method estimates child rearing costs at about \$300 and the Betson methods uses a "combined obligation" of about $\$ 600$. Under Rogers, the NCP would pay $\$ 150$ per month and under Betson, the NCP would pay $\$ 300$ per month. While the Betson estimate is twice as high as Rogers at this income level, the difference is only $\$ 150$ in terms of the actual dollar amount. Looking at the minimum wage custodial parent, their net monthly income is $\$ 1250$ at minimum wage. In addition, that parent still receives federal tax benefits of over \$200 per month and \$150 from the NCP per the Rogers calculation. The total is $\$ 1600$ per month to the CP for this worst case scenario. This amount exceeds not only the federal poverty level, but also $125 \%$ of the federal poverty level. Thus, it is simply not true that the Rogers method, based upon actual child rearing costs will increase the numbers of custodial parent who fall below the poverty level and it is irresponsible of critics to make such a claim that cannot be justified. In fact, setting child support payments at amounts that low income NCP's might actually be able to pay (i.e., $15 \%$ of their net income rather than $25 \%$ of net income), might actually increase child support payments among low income NCPs and therefore result in fewer custodial parents being driven into poverty. This conclusion is supported by several studies of low income wager earners that have repeatedly shown that exceeding $20 \%$ of net income only leads to a much higher default rate. ${ }^{36}$

A more accurate objection to the Cost Share model is that it cannot be presented on a simple table the way the Betson method can. It takes a lot of effort to fill out the Rogers form. This effort is nearly identical to filling out the long version of the federal income tax form, a task most people abhor. Most of these items are intended to identify tax credits. The Rogers Cost Shares model is complicated because it attempts to be fair to both parents at every step of the process. While equity and equal protection are admirable goals (and may be required under State and federal law), the result is a very complicated method. Much of the complexity of the Cost Share method can be traced to calculations intended to balance out all the federal tax credits given to custodial parents. We therefore propose a simplified cost share method which eliminates the complexity of the Rogers cost share method, while still keeping the focus on child costs rather than adult incomes.

### 4.2 Advantages of a Combined Cost Share model

The Cost Shares model just described is accurate in determining actual child rearing costs. But it has the drawback of being a highly complex model which requires the use of a computer program and the likely use of attorneys, accountants and other professionals. While this may be okay for rich people, who can afford all these experts, there is a need for a simple system that can be understood and used by poor people, without the need to pay a bunch of "experts" and yet is still fair to both parents and the child.

[^24]In addition, there would be a "public acceptance" benefit of a system that is transparent in terms of how it determines the economic table. Certainly one of the biggest drawbacks of the Betson-Rothbarth method is its lack of transparency. Being an indirect "proxy" estimate, it is hard to even describe its methodology, much less try to understand it. While the fact that the Betson-Rothbarth calculations and assumptions are hidden from view also makes it difficult for opponents to attack, the very nature of its methodology is contrary to how things are done in science and in a democracy.

The Rogers Cost Share method presents the opposite problem. It is so detail oriented that the public debate can be side-tracked over minor issues like the cost of a pair of shoes. A complexity of the Rogers Cost Share method is that it makes a detailed analysis of every single child cost.

## Benefits of a Combined cost share method

The simplified cost share method compares multiple detailed itemized estimates of child costs to multiple total cost estimates of spending on children to arrive at a consensus estimate. Thus, it is both a "top down" approach, like the Betson-Rothbarth estimate and a "bottom up" approach like the Rogers and USDA estimates.
Use of multiple methods and multiple sources of data, also called triangulation, is considered a "gold standard" of scientific research. Yet, none of the other child cost estimation methods uses convergence of multiple sources of data. Thus, the simplified cost share method is the most scientifically credible method for estimating child costs.

## 6 estimates of child rearing costs

Over a dozen estimates of child rearing costs were considered. Six were deemed most credible: 3 Top down Lump sum, total cost estimates:

- Washington State foster care payment (about \$475 per month, but includes child care).
$\cdot 125 \%$ of the federal poverty guideline marginal difference for one child (15\% or \$360 per month).
- Median child support award for Washington State for one child is $17 \%$ of combined income. (see page 8 of the 2003 Sterling Report).
3 Bottom up detailed cost estimates:
-Self sufficiency standard" by University of Washington.
- Rogers Cost share estimate for low income families.
- USDA estimate of child costs for low income families.


## Top down analysis of total child costs using 3 lump sum estimates

Lump sum estimates see the non-intact family as a complete system of two wage earners in two houses with one child. The unit of analysis is the child cost to total cost ratio. Several widely used "lump sum" estimates of total child rearing costs were considered, including:

1. The Rogers Cost share estimate for low wage earners (about $\$ 300$ to $\$ 360$ net per month depending on the assumptions used).
2. The current Washington SSR estimate (\$300).
3. The federal poverty guideline estimate (\$290).
4. The Washington State foster care payment (about $\$ 475$ per month, but including child care).
5. $125 \%$ of the federal poverty guideline marginal difference for one child ( $15 \%$ or $\$ 360$ per month).
6. Computer program estimates of basic child rearing costs of various counties here in Washington State. These costs were also about $\$ 360$ per month.
7. The actual median child support award amount here in Washington State. As noted on page 8 of the 2003 Sterling Report Executive Summary, this amount for one child is $17 \%$ of combined income.
8. The USDA estimate of child rearing costs (excluding health care and child care) for low income "one-parent families" (gross annual earnings less than $\$ 38,000$ ) (\$459) and adjusting the cost of housing to address the per capita error in the USDA data (\$106).
This amount is about $\$ 354$ per month. (Lino, Mark (2001). Expenditures on Children by Families, 2000 Annual Report, 1528-2000, USDA, p. 25.)
$125 \%$ of the federal poverty guideline for a parent plus a child minus $125 \%$ of the federal guideline for a single adult is a good estimate of basic child rearing costs because it offers an estimate of the child rearing costs as a ratio in comparison the total cost for one child to the total costs of two wage earners plus one child.
Cost of child $=1420-1060=\$ 360$.
Total cost for two households $=1420+1060=2480$.
Cost of Child/ Total Cost = 15\% of combined family income. This $15 \%$ ratio is easy to verify and update on an annual basis.

After comparing these estimates, 125\% of the federal poverty guideline was chosen as a "best estimate" of basic child rearing costs for the State of Washington and is thus recommend as the base index figure from which to calculate the rest of the table.
$125 \%$ of the federal poverty guideline for a parent plus a child minus $125 \%$ of the federal guideline for a single adult is a good estimate of basic child rearing costs for several reasons:
The biggest is that it is very close to an average figure for all of the lump sum estimates of child rearing costs. It has an added benefit of being calculated for a purpose other than determination of child support. Thus it is objective and free of any charges of bias that might be leveled against either the Betson or Rogers figures. Also it is updated annually by the federal government using the Consumer Price Index. Thus if there are any changes over time, it is possible to objectively track them. In addition, this figure matches the minimum wage net monthly minimum for Washington State. In other words, as a practical matter, two divorced minimum wage earners could theoretically raise one child on this amount.

Also, this figure had broad support among members of the former work group as a credible base line index to use for the Self Support Reserve. If the State adopts the $125 \%$ standard as the SSR standard (something that the former workgroup recommended and that I also believe is the best solution), the State SSR marginal increase for one child would also become \$1420-\$1060=\$360.

It seems to be both fair and make sense in terms of consistency to use the same figures throughout the table that have already been agreed upon to be the best figures to use at the beginning of the table.

Finally, and most important, $125 \%$ of the federal poverty guideline offers not merely an absolute estimate of the child rearing costs of one child in today's dollars (\$360). But it also offers an estimate of the child rearing costs as a ratio in comparison to the total costs of two wage earners plus one child ( $\$ 360$ divided by $1060+1420=$ $360 / 2480=$ ) $15 \%$ of combined family income.

2007 HHS Poverty Guidelines (from HHS)

| Persons <br> in Household | Contiguous <br> States and <br> D.C. | 125 <br> Percent <br> of Poverty | $\mathbf{1 2 5 \%}$ <br> Monthly <br> income |
| :---: | ---: | ---: | ---: |
| 1 | $\$ 10,210$ | $\$ 12,720$ | $\mathbf{1 , 0 6 0 .}$ |
| 2 | 13,690 | $\$ 17,040$ | 1,420 |
| 3 | $\mathbf{1 7 , 1 7 0}$ | $\$ 21,360$ | $\mathbf{1 , 7 8 0}$ |
| 4 | 20,650 | $\$ 25,680$ | 2,140 |
| For each <br> additional <br> person (child), add | $3,480=\mathbf{2 9 0} / \mathbf{m o}$ | 4,320 year | $\mathbf{3 6 0}$ per <br> month |

The federal chart (which is the basis of the simplified cost share method) is reproduced above for the sake of easy reference. This Table shows that the base family circumstances for two households with one child would be $\$ 1060+\$ 1,420=\$ 2,480$. As Washington State minimum wage law is also set just above $125 \%$ of the federal poverty level ( $\$ 2500$ monthly net for two wage earners), the simplified cost share method thus can be understood to estimate child rearing costs as a percentage of minimum wage and base increases in child support payments as a ratio of actual combined wages compared to minimum wage. Thus, total child costs can be estimated as a percentage of total combined income simply by using the SSR difference discussed earlier as the basis for minimum child care costs. This is exactly how standard of living has been defined by the federal government and nearly all economists. Braver and O'Connell (1998), in the chapter attached to the 2006 Child Support Work Group Minority Report, used a similar ratio method, which they noted is relatively simple and is a commonly accepted practice among researchers. It is based upon ratios of the poverty threshold as described at the very beginning of this analysis.

The basic method is straightforward. The Self Support Reserve, set at $125 \%$ of the federal poverty guideline, or $\$ 1,060$, is set aside so both parents have what each household needs to survive (theoretically). Beyond this, combined income is available to support the child (similar to the Cost Share method).
In addition, an actual measure of child cost is used instead of the indirect (and inaccurate) measures used in the current table and in the Betson-Rothbarth tables.

This cost is slightly different from the Cost Share cost in that $125 \%$ of the federal poverty guideline is used as a "lump sum" estimate (rather than Rogers detailed cost analysis) and increases of this involve a ratio of actual family income to the base.

## A brief history of the federal poverty guidelines

Because $125 \%$ of the federal poverty guidelines was chosen as the "lump sum" basis for the simplified cost share method, it is worth examining the history of where this set of numbers came from and how it is calculated. The following is a history provided by the US Department of Health and Human Services as described on their website.
To make a statutory reference to the poverty guidelines, use the phrase "the poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2)." The "poverty guidelines" were developed from the "poverty thresholds" which are a more detailed version of the poverty guidelines.

The poverty thresholds were originally developed in 1963-1964 by Mollie Orshansky of the Social Security Administration. Orshansky took the dollar costs of the U.S. D. A.'s economy food plan for families of three or more persons and multiplied the costs by a factor of three. Orshansky used a factor of three because the Agriculture Department's 1955 Household Food Consumption Survey found that for families of three or more persons, the average dollar value of all food used during a week (both at home and away from home) accounted for about one third of their total money (net) income after taxes. In May 1965, the U.S. Office of Economic Opportunity adopted Orshansky's poverty thresholds as a working or quasi-official definition of poverty. In August 1969, the U.S. Bureau of the Budget (predecessor of the Office of Management and Budget) designated the poverty thresholds (with certain revisions) as the federal government's official statistical definition of poverty.

Since 1969, over one dozen federal programs and numerous State programs have adopted the federal poverty guideline as a basis for establishing eligibility for financial aid. In more recent years, $125 \%$ of the federal poverty guideline has become more broadly accepted in recognition of the fact that food costs, as a percentage of total child costs have dropped. Therefore, $125 \%$ of the federal poverty guideline is now the most widely accepted qualifying method used by federal and State governments. However, while food costs as a percentage of total costs have fallen since 1960, as noted earlier, CES/USDA data confirms that total costs, other than child care and transportation cost, have remained nearly unchanged in the past 40 years. In addition, the method is updated annually according to the Consumer Price Index. Therefore, even though the method was developed over 40 years ago, it is still a valid estimate of total cost today.

However, this set of numbers was not chosen just because it is widely used by federal and State governments. Rather it was chosen primarily for two reasons. First, it seems to be the best number for establishing the SSR in that it is slightly below the minimum wage standard here in Washington State. It seems reasonable to hold all divorced parents to the same standard as low income parents are held to. Second, 125\% of the federal poverty guidelines results in child cost estimates that are only slightly higher than the highly detailed Rogers Cost Share estimates. It was the correspondence between the HHS numbers and the Rogers Cost Share numbers that led to the conclusion that the "lump sum" HHS numbers could be substituted for the Rogers Cost Share numbers (if one also ignores the tax benefits the Rogers child cost program attempts to correct). Thus, while this simplified method relies on total costs, it has been checked against individual costs to make sure the total cost estimate is as valid, accurate and reliable as the Rogers individual cost estimates.

## Bottom up analysis of itemized child costs using 3 direct cost estimates

Two of the three existing direct cost estimates, the USDA method and the Rogers Cost Share estimates, have already been discussed. A problem with both of these estimates is that they are national estimates. Ideally, the Washington State Economic Table should be based at least in part on local estimates of child rearing costs. In addition, both national estimates rely heavily on the CEX survey. It would be useful to also consider a method that relied on different sources of data. Thankfully, in the past few years, this highly needed "third source" of local information has emerged. Called the Self Sufficiency Standard (SSS), the following is a summary of the results. A more detailed analysis is provided in Appendix 1.

## What is the Self Sufficiency Standard (SSS)?

-The SSS is a national program focused on determining the local "self sufficiency standard" costs in 36 States*. Highly detailed data for numerous counties in the State of Washington was compiled by the Center for Women's Welfare in the School of Socal Work at the University of Washington with assistance from the Workforce Development Council of Seattle-King County. This multi-year study, funded in part by a grant from Paul Allen, cost well over one million dollars to produce. It is therefore the most credible source available for determining actual child rearing costs here in Washington State.
*Pearce, D. (2006) Self Sufficiency Standard for Washington State, page 37. Note: Even though the report is dated 2006, the PDF indicated that nearly all the information was updated to current costs in the Spring of 2007.

The SSS is a bottom up method which first determines all the individual costs on a local level and then adds them together to determine a total local cost. The amount needed for self sufficiency varies depending on the county, the city within the county, the number of adults living in the household and the number of children living in the household. UW researchers used three different sources of information just to calculate local housing costs. In all they used 11 major sources of information (and about 20 minor sources) to compute 7 categories of family costs. *Pearce, D. (2006) SSS for Washington State, page 4.

SSS estimates for some items may be high. For example, for child care, the $75 \%$ percentile charge of local child care centers was used due to some Fed regulation. For housing, the $40 \%$ percentile was used*. The SSS was calculated for 70 family types and 46 areas in Washington State. A smaller analysis was conducted using the SSS estimates for three areas: Tacoma, Pierce county, unincorporated King County, and Seattle. These were averaged together to arrive at the amounts in the first column on the chart (next slide). Thus the estimate is higher than average. Areas not included were Bellevue/Redmond as this area had excessively high costs and Eastern Washington which had excessively low child costs.
*Pearce, D. (2006) SSS for Washington State, page 39 (except Tacoma = 50\%).

Comparing the Washington State estimate to two national estimates

| Minimum margina monthly child cost for one child | 2007 <br> Washington State SSS for median cost areas | 2001 <br> CES/USDA <br> Low Income Age 6 to 8 | 2004 Rogers Low Income family | Best Estimate of Child Cost Per item |
| :---: | :---: | :---: | :---: | :---: |
| Housing | 165 (rent) | 191 PC + own | 85 (ignored) | 170 |
| Food | $\begin{aligned} & 170(2003 \\ & \text { CEX?) } \end{aligned}$ | 105 (ignored) | 113 (ignored) | 180 |
| Transportation | 5 (ignored) | 73 | 75 | 70 |
| Misc (inc clothing) | 95 | 90 | 89 | 90 |
| Total (ignoring tax credit) | 435 | 459 | 380 | 510 |
| Minus tax credits | 150 | 150 | 150 | 150 |
| Net Child Cost | 285 | 309 | 230 | 360 |
| COSTS | NOT | IN | ECONOMIC | TABLE: |
| Child Care | $420 ?$ | 44? | 61? | $400 ?$ |
| Health Care | $187 ?$ | 41? | 47? | $100 ?$ |
| Total Child Cost | 892? | 394? | $338 ?$ | $460 ?$ to $860 ?$ |

Convergence of Multiple Sources and Multiple Methods
The Convergence of three "bottom up" sources of information with three "top down" sources of information on child rearing costs, all centered on $\$ 360$ per month, leads to a high level of confidence that $\$ 360$ (or $15 \%$ of combined net monthly income for two minimum wage earners) is a reasonable estimate of monthly child rearing costs for Washington State.

### 4.3 Benefits of a flat rate table over a regressive table

The prior analysis was focused primarily on minimum wage earners. Is it reasonable to extent the $15 \%$ ratio to higher wage earners?

As noted earlier, many believe that this percentage declines slightly as income increases. This decrease in percentage is reflected in the current Economic Table, which starts at $24 \%$ of combined income and drops down to $15 \%$. It also is mirrored in the Betson-Rothbarth Table, which uses a rate of $25 \%$ of combined income for low income parents and lowers to a rate of $16 \%$ for high income parents (the full BetsonRothbarth table, not shown begins with low income parents paying $26.8 \%$ and ends with high income parents paying only $13.7 \%$... Thus the Betson-Rothbarth method places twice the burden on low income parents than it places on high income parents).

However, there are good reasons to conclude that child costs do not decline as a percent of income as income rises. Put another way, there are good reasons to conclude that child costs are over-estimated at the low income end of the table and possibly under-estimated at the high income end of the table.

As noted earlier, the primary source for data on which to estimate child costs is the Consumer Expenditure Survey (CEX). For the lowest income groups, this survey consistently reports that total household consumption exceeds total household income by more than $200 \%$. The problem of expenses exceeding income is quite familiar to poor parents. However, it is not possible for expenses to exceed net combined income by more than 200\%. Therefore the CEX either over-reports expenses and/or underreports income. Either way, CEX dramatically over-states the ratio of child expense to income for low income parents and thus results in child cost estimates that are certain to be way too high for low income parents.

In addition, the CEX data shows a ratio of total expenses to total net income of $75 \%$ for higher income families (i.e., families with a net annual income of $\$ 60,000$ or more). While some of this is put into savings, it is known that the savings rate for this income group cannot possibly be $25 \%$. Thus, the CEX data either under-reports expenses and/or over-reports net income for high income parents. Either way, CEX data slightly under-states the ratio for high income parents. This results in child cost estimates that are slightly too low for high income parents.

The above information and the following table comes from Appendix 1, page 4 of the Arizona PSI report and Table I-3 of the same report which in turn is based on the Consumer Expenditure Survey (CEX), 1996-1997, Report 935 from the Bureau of Labor Statistics.

The CEX survey is one of the few surveys that combine information on both income and expenses in families. However, it is based primarily on interviews and therefore suffers from inaccuracies in both recall and reporting.

CES Family consumption as a \% of net income

| Net Annual <br> Income Range | Consumption as a <br> $\%$ of net income | Error in child cost <br> estimate |
| :---: | :---: | :---: |
| Less than 15,000 | $265 \%$ | $165 \%$ |
| Less than 25,000 <br> $(2 x m i n i m u m ~ w a g e) ~$ | $150 \%$ | $50 \%$ |
| 25 to 30 K | $118 \%$ | $18 \%$ |
| 30 to 35 K | $106 \%$ | $6 \%$ |
| 35 to 40 K | $100 \%$ | $0 \%$ |
| 40 to 45 K | $94 \%$ | $-6 \%$ |
| 45 to 50 K | $90 \%$ | $-10 \%$ |
| 50 to 60 K | $86 \%$ | $-14+5 \%=-9 \%$ |
| 60 to 80 K | $75 \%$ | $-25+10 \%=-14 \%$ |
| More than $\$ 80,000$ | $70 \%$ | $-30+10 \%=-20 \%$ |

- assumes no savings below 50 K and a savings $5 \%$ to 60 K and $10 \%$ above

The above chart confirms that for all incomes below $\$ 35,000$ the CEX is known to yield inaccurate results that are known to over-estimate the cost of child rearing, especially for the two lowest income (minimum wage) groups. Also for all incomes above $\$ 40,000$ the CEX yields inaccurate results that slightly under-estimate the cost of child rearing. If the total obligations of low income parents are greatly reduced based upon this chart and higher income parents total obligations are raised slightly also per this chart, the result would be a flat rate chart such that the cost of children as a percentage of total expenditures would remain unchanged for all income levels.

A flat rate table (whether 12\%,15\%, or $18 \%$ for one child) corrects for the known "low income" self reporting error in the CEX data base by replacing the least reliable section of the CEX with other more reliable direct cost estimates for low income wage earners.

In the 1990 Betson study, commissioned by HHS, Betson concluded that "the cost of children expressed as a percentage of total expenditures is almost constant across all levels of total expenditures.

The courts here in Washington State appear to have also reached a similar conclusion. On page 1 of the Sterling 2003 Executive Summary, the authors state that "While order amounts vary with income, the proportion of income ordered in child support is similar across all income levels".". This amount currently is $17.9 \%$ in terms of actual orders. 87\% of all deviations are downward deviations. They therefore represent judges refusing to drive poor NCP's into bankruptcy by charging them the $25 \%$ amounts of the current table. Adopting a flat rate table would therefore get rid of most of the deviations. By contrast, the BR table would only increase deviations.

[^25]But there are also other good reasons to question the wisdom of using a regressive table. One reason is a practical reason. When parents are charged more than they can possibly pay, many will simply give up and stop paying altogether. A report by the Division of Child Support's Management and Audit Program Statistics Unit. ${ }^{38}$
Concluded that if the obligor's support obligation exceeded $20 \%$ of the obligor's gross income, especially obligors in the lower economic echelons, the less likely the obligor would be able to pay even the current support obligation, which in turn results in increasingly large accruals of back-support. ${ }^{39}$ Thus, it makes no sense to charge low income NCP's $25 \%$ of their income when these are the people who can least afford to pay this percentage and when studies have shown that charging low income parents more than $20 \%$ of their income merely leads to an extremely high default rate.

There is also the issue of "perception of fairness". Low income parents should not be forced to pay a higher percent of their income in child support than other income groups. It is unjust for a committee comprised of middle and high income individuals to decide that middle and high incomes should have a low child support rate, but low income parents should have a much higher rate.

It therefore makes no economic sense and no political sense for this workgroup to decide that low income parents should be forced to pay $25 \%$ of their income in child support while middle and high income parents are only required to pay 15 to $17 \%$. Even if such a system could be proven to be fair economically, it still could not be justified from a practical standpoint or a political standpoint. For these reasons many economists as well as seven States have adopted a flat rate model.

As the State of New York, which uses a flat rate of $17 \%$ for one child and $25 \%$ for two children, has noted, a flat rate leads to simpler calculations and a greater perception of fairness among the public, therefore leading to an increased rate of compliance.

It is likely that low income parents use more federal services, percentage wise than high income parents. Yet federal income tax rates recognize that low income parents are less able to afford to pay taxes. Therefore they are charged a lower tax rate, in order to impose an equal "burden" upon all tax payers. Child support should be viewed in a similar manner. It is therefore proposed that a flat rate of $15 \%$ of net combined monthly income be used for all parents. This equals $\$ 360$ per month for the first child for two minimum wage earners as noted at the beginning of the table (calculations for more than one child will be discussed in the next section).

[^26]The following are three examples of the simplified cost share method:
Up to $\$ 2480$ combined net per month: SSR dictates zero combined obligation and zero child support. (The actual number would be $2 \times \$ 1060+\$ 360=\$ 2480$.

After 2,480 combined net income per month, combined obligation is set at $15 \%$ of combined net $(\$ 360 / \$ 2480=15 \%)$ and each parents share is set at a ratio of this obligation. For the median family (discussed in greater detail below), the combined income would be $\$ 4000$ and the combined obligation would be $15 \% \times 4000=600$.

Over \$7,000 combined monthly net income (equivalent to a combined pre-tax annual income of over $\$ 100,000$ ), combined obligation is capped at $15 \%$ of $\$ 7,000$ or $\$ 1,050$ per month. However, the CP would also receive tax benefits of at least $\$ 200$ per month and more typically $\$ 277$ per month as well as health care and child care benefits. Thus, the actual amount available to the child would be a maximum of $\$ 1,500$ per month. This is over 3 times greater than the actual cost needed to meet the basic needs of the child. Assuming the NCP has income of $\$ 6,000$ a month and the CP has income imputed at minimum wage to be $\$ 1,250$ per month, the highest child support award would be capped at about $\$ 900$ a month or about $15 \%$ of the NCP net income. (note that the current Table has a maximum "presumptive" income of $\$ 5000$ combined income of $\$ 825$ combined average obligation for one child and an advisory limit on $\$ 7000$ of $\$ 1100$ ). The proposed cap is discussed in greater detail later in this section.

## Comparison of the Combined Cost Shares Method to the current Table for Median Ratio (60-40) Wage Earners.

The median net monthly incomes of NCP NON-IV-D parents to CP parents is about $\$ 2,600$ to $\$ 1,800$ for a total monthly income of $\$ 4,400$ (or $10 \%$ less than twice a combined SSR of 2400). This is about a 60 to 40 income ratio. Under the simplified Cost Shares method, the combined obligation would be $10 \%$ less than twice the base child cost amount ( $15 \% \times 4400=660$ ). The NCP's share would equal $\$ 660 \times 60 \%=\mathrm{a}$ monthly transfer payment of $\$ 396$. This compares to a total obligation of $\$ 743$ under the current Table and a transfer payment of $\$ 460$ and thus represents a reduction of about 14\%. In terms of percent of income, the proposed table uses a flat rate of $15 \%$ and the current table uses a rate of about $17 \%$ for the median family.

This $14 \%$ difference between $15 \%$ and $17 \%$ is slightly less than the $20 \%$ reduction in NCP payments that is typically achieved in the original Cost Share calculations. Thus the result of this "simplified cost share" method yields greater payment amounts that the original cost share method. The difference is due primarily to the fact that the simplified method ignores tax benefits to the majority parent, while the original cost share method does not.

However, the benefit is that the simplified method does not require all the complex tax calculations of the original Cost Share methodology. Nor does the calculation of combined net obligation require the use of a computer program. Instead, the obligation of each parent can be easily determined from a Table that is much easier to read than the current Washington State Economic Table. So that readers can understand how the results of this method are calculated for low incomes, see the following chart. However, the actual table for all incomes is the simple table shown after that.

The proposed Economic Table would thus begin with the following:

| Combined monthly net income | $\begin{array}{\|c\|} \hline \text { Obligation } \\ \text { as } \\ \% \text { of } \\ \text { combined } \\ \text { net } \\ \text { income } \end{array}$ | Combined Obligation for child | NCP <br> And CP <br> income (assuming both are the same) | NCP Obligation $=$ Amount over SSR of 1060 =CS transfer | NCP Income after child support payment $>$ SSR | $\begin{gathered} \text { Income of } \\ \text { CP + CS } \\ \text { transfer from } \\ \text { NCP } \\ (1420=125 \% \\ \text { FPG for 2 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2500 | 15\% | 375 | 1250 | 190 | 1060 | 1440 |
| 2600 | 15\% | 390 | 1300 | 200 | 1100 | 1500 |
| 2800 | 15\% | 420 | 1400 | 210 | 1190 | 1610 |
| 3000 | 15\% | 450 | 1450 | 225 | 1225 | 1675 |
| 3200 | 15\% | 480 | 1500 | 240 | 1260 | 1740 |
| 3400 | 15\% | 510 | 1550 | 255 | 1295 | 1805 |

The reason the above chart shows the incomes of the poor parents to be about the same is that the disparity in income between fathers and mothers is very small at low combined incomes (both parents are typically at or near minimum wage).

Table 6.2: The proposed Economic Table for one child would therefore be:

| Combined <br> monthly <br> net <br> income | Obligation <br> as <br> $\%$ of <br> combined <br> net income | Combined <br> Obligation <br> for the <br> first child | Combined <br> monthly <br> net <br> income | Obligation <br> as <br> $\%$ of <br> combined <br> net income | Combined <br> Obligation <br> for the first <br> child |
| ---: | :---: | :---: | :---: | :---: | :---: |
| 2500 | $\mathbf{1 5 \%}$ | 375 | 5400 | $15 \%$ | 810 |
| 2600 | $15 \%$ | 390 | 5600 | $15 \%$ | 840 |
| 2800 | $15 \%$ | 420 | 5800 | $15 \%$ | 870 |
| 3000 | $15 \%$ | 450 | 6000 | $15 \%$ | 900 |
| 3200 | $15 \%$ | 480 | 6200 | $15 \%$ | 930 |
| 3400 | $15 \%$ | 510 | 6400 | $15 \%$ | 960 |
| 3600 | $15 \%$ | 540 | 6600 | $15 \%$ | 990 |
| 3800 | $15 \%$ | 570 | 6800 | $15 \%$ | 1020 |
| 4000 | $15 \%$ | 600 | 7000 | $15 \%$ | 1050 |

This Table raises the maximum combined income from 5,000 to 7,000, but lowers the percentage charged at upper incomes by about 20\%, thus addressing the 20\% overcharge confirmed by the Cost Share calculations for high incomes. Thus, the combined obligation in the proposed Table at a combined monthly net income of $\$ 7,000$ is $\$ 1050$ which is about $20 \%$ less than the combined obligation of $\$ 1218$ listed in the current Table. The proposed Table also sets a cap at 7,000 of 1200 combined obligation recognizing that there is a ceiling of $\$ 1000$ on what it costs to raise a child just as there is a floor of $\$ 360$.

### 4.4 A final option is preservation of the Status Quo

When the current Washington State Economic Table was adopted more than 20 years ago, it was based upon inaccurate information and assumptions that have since been thoroughly discredited. It was therefore biased against NCP's and likely destroyed the lives of many NCP's leading to the bitterness that was heard at public meetings of the Child Support Work Group during the past few years. The State of Washington owes these NCP's an apology (if not a huge lump sum refund). For example, the Cost Shares analysis of actual costs confirms that the Washington State Economic Table is currently overcharging NCP's by 20 \% or more. This "over-charging" will not go down over time as it is not affected by inflation. Instead, as inflation increases income, child support payments also increases the child support level because that level is based upon the rising income and therefore the obligation rises at the same rate as the income. In addition, inflation affects costs of NCP's to the same extent as CP's.

In an ideal world, this over-charge would be corrected by reducing the table obligation and child support payments by about $20 \%$. However, a basic principal of child development is maintaining "stability" in the child's life. This includes maintaining the child's social relationships with both parents. And it also includes maintaining the child's economic stability to the greatest extent possible (while also recognizing the economic reality that divorce always leads to a lower standard of living due to the cost of two households being greater than the cost of one). The child, the CP and the NCP have by now grown used to the fact that the NCP is being overcharged by $20 \%$.

In addition, maintaining the status quo may be more politically acceptable to State legislators who may be concerned more about being re-elected than about being fair to NCPs. There would be less political fall out, less press coverage and less backlash by maintaining the status quo. Essentially, this is what the 2007 legislative session did in rejecting the recommendations of the slight majority of the 2005 Child Support Work group and choosing instead to maintain the status quo of the current schedule while the issue was re-examined by the 2007 Child Support Work Group. Thus, there appears to be political support for maintaining the status quo of the current Economic Table.

Finally, NCP's may accept preservation of the status quo as being a better alternative than adopting the Betson-Rothbarth (BR) methodology as the BR method would worsen the bias against NCP's by raising child support payments $20 \%$ or more Thus there are many very good reasons for staying with the current schedule despite it being despised by NCP's and clearly biased against NCP's. If the legislature lacks the political will to drop rates down closer to actual child rearing costs, then leaving things alone and maintaining the status quo may be the only politically acceptable alternative to the Betson-Rothbarth disaster.

## Another option is slightly modifying the Status Quo

The most important modifications would be to:

1. Consolidate the current table into one age group by averaging the columns (2/3 $x$ first+1/3 x second).
2. Start the Table at $\$ 2400$ (assuming two minimum wage earners) to address the SSR problem.
3. Cap the Table at $\$ 7,000$ combined monthly net income as the maximum cost needed to raise a child.

Addressing the worst injustice of the current table by using a flat rate of $17 \%$ for the lower income groups. Thus, a "status quo" compromise would correct for the regressive (and excessive) obligation current placed on low income Non-majority parents while leaving middle and high income rates unchanged. This would essentially duplicate the NY model.

This "modified status quo" option comes as close as possible to the current table, while still retaining the principal of a nearly flat rate and also addressing the major problems in the current table at the low income end of the current table. If the work group elects to follow a "status quo" path (to preserve stability for current Orders and children affected by current orders), then the following table may be a useful compromise between being fair to NCP's and having a stable table for CP's.

## Comparison of the Modified Status Quo Option to the New York Model

The following information was derived from the 2000 New York Child Support Guideline Report. New York is similar to Washington in several respects. Most notably, the median income of NCP and CP's are nearly identical. New York does have a slightly higher Self Support Reserve (135\% of the federal poverty guideline). However, New York has a slightly lower minimum wage (\$7.15 per hour versus Washington's \$7.95 per hour).

New York, like Wisconsin and several other States, has also adopted a flat rate system of child support awards and total child obligations of $17 \%$ for one child and $25 \%$ for two children. (note that when a flat rate system is used, the combined Income Share and Percent of Obligor Income methods yield equal results. In other words, it does not matter whether one uses $17 \%$ of the obligor income or combine the incomes and take $17 \%$ of the ratio between incomes).

New York did an extensive review of their guidelines in 2000 and elected to make no changes in their child support system. The status quo model proposed above is nearly identical to the New York model. In fact, if the SSR were raised to match the New York SSR, the end result would be nearly identical. The only difference would be a proposed flat rate of $16 \%$ instead of a New York flat rate of $17 \%$ for the first child. Of interest, the New York review compared their 17\% flat rate system to the Betson-Rothbarth and Engel calculations for 32 specific circumstances and concluded that the raises proposed by Betson-Rothbarth would not be worth sacrificing the simplicity of their current system.

Thus, a primary reason listed in the review for retaining the New York system was a recognition of the benefit of simplicity in terms of public acceptance. The New York system was simple to understand and therefore aided in "public perception of fairness and compliance". For this reason, the New York Review committee specifically rejected the Betson-Rothbarth Table as not serving the best interests of their State.

### 4.5 Comparison of the four remaining options for One Child

This analysis has thus far considered seven options. However, the Betson- Engel method and the USDA method are so clearly inaccurate that they will not be considered further. In addition, the Rogers Cost Share method is so complex that it cannot be presented in a simple table. Therefore, it too will not be considered further.

This leaves four options, the simplified cost share method, the slightly modified status quo option, the status quo option and the Betson-Rothbarth option. The following table compares these four options.

This table shows there is not a substantial difference between the current table and the proposed Simplified Cost Share table for middle to high income wage earners. However, the group of parents in greatest need of relief (low income NCP's) would get it under the proposed table. Obviously they would not if the current table was retained or the Betson-Rothbarth estimate was used.

This table also shows that most income groups would face dramatic increases in child support payments if the Betson-Rothbarth method is used. For example, the median wage earner (at $\$ 4000 \mathrm{CMNI}$ ) would see the total obligation rise from 681 to 873 . This would represent an absolute increase of $\$ 192$ per month and a percentage increase of $\mathbf{2 8 \%}$. Compared to the actual cost of $\$ 600$ per month, the Betson Rothbarth table would overcharge NCP's by $\$ 273$ per month or $45 \%$.
\% Comparison of four options for One Child:
(\% of Combined Monthly Net Income)

| Combined <br> Monthly Net <br> Income | Simplified <br> Cost Share <br> Option | Status Quo with <br> Flat Rate <br> Adjustment | Current Table <br> Status Quo <br> Option | Betson-Rothbarth <br> Option |
| :--- | :--- | :--- | :--- | :--- |
| 2500 | 15 | 17 | $24 ? ?$ | $25 ? ?$ |
| 3000 | 15 | 17 | $21 ? ?$ | $25 ? ?$ |
| 4000 | 15 | 17 | 17 | $22 ? ?$ |
| 5000 | 15 | 16 | 17 | 20 |
| 6000 | 15 | 16 | 16 | 16 |
| 7000 |  |  | 16 |  |

### 4.6 What percentage is appropriate for additional children from the same relationship?

Children from the same relationship are addressed by the Economic Table. As with the Cost Share method, there is a lesser addition to the child support obligation for each additional child. Given that the first child represents an obligation of $15 \%$ and that later children are a lower percent, the question remains as to what percent is appropriate for additional children?

Using the HHS SSR table, the second child would be 1780 (for a family of one adult and two children) plus 1060 for a family of one adult and no children (both families at $125 \%$ of the federal poverty level) for a total "lump sum cost need" of $1780+1060=$ $\$ 2840$. Two children would be $1780-1060=720=360 \times 2=720 / 2840=\mathbf{2 5 \%}$. Thus, if the first child is $15 \%$ of combined net income, the second child is $10 \%$ of combined net income. But the second child is still \$360.

On page 8 of the 2003 Sterling Report Executive Summary, the median award for two children here in Washington State is 23.4 percent. This number stays constant almost regardless of the income of the parents. Thus, Washington Courts appear to ignore the Economic Table and instead using the flat rate approach used in several other States. Thus, $\mathbf{2 5 \%}$ of combined net is a maximum estimate for $\mathbf{2}$ kids.

Bassi and Barnow* (1993), using the same CES/USDA data described earlier that tends to over-state child rearing costs, concluded that in intact two -parent households, child costs for two children was 27 percent of all expenditures. However, this estimate is known to be at least $10 \%$ too high for all the reasons stated earlier. Thus, this data also supports the conclusion that two children cost about $25 \%$. ${ }^{40}$

Studies of families in New York also reveal that the average award for two children based upon actual expenses were close to the Economic Table in New York*. (i.e., also yielding a result of about 25\%). Thus, four different estimates of lump sum costs all converge on an estimated cost for two children of 23.4 to $25 \%$.

* See Child Support Review for the State of New York, available online.

Using this figure here in Washington State as a flat rate placed in the economic table would greatly reduce the number of deviations as it would bring the table into line with the actual costs and the actual awards here in Washington State. Thus, if one assumes that cost of the first child is $15 \%$, the cost on the second child would be about $10 \%$. Even if costs on both children were the same, the costs on either one would not exceed $12.5 \%$ (further confirmation that the BR method is wrong). Thus, for the sake of simplicity, clarity and uniformity, $25 \%$ for two children was chosen.

There was far less information available for the third and fourth child (which is a very small percent of total orders). Thus, the average award in Washington State* for three and four children was chosen to reduce the number of deviations.
This amount was $30 \%$ for 3 children and $35 \%$ for 4 children. Thus, the third child was $5 \%$ and the fourth child was also 5\%. *See Sterling 2003 Report, page 10.

[^27]4.7 The proposed Economic Table would therefore be:

| Combined <br> monthly <br> net <br> income | Obligation <br> as <br> \% of <br> combined <br> net | Combined <br> Obligation <br> for the <br> first child | Obligation <br> as <br> \% of <br> combined <br> net | Combined <br> Obligation <br> for the <br> first and <br> second <br> child | Obligation <br> as <br> $\%$ of <br> incombined | Combined <br> net <br> income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 5 0 0}$ | $15 \%$ | 375 | $18 \%$ | 460 | $18 \%$ | for the <br> first three <br> children |
| 2600 | ${fe1351ac6-7dc2-46a0-8b5f-202ad39e36f1} 15 \%$ | 480 | $25 \%$ | 800 | $30 \%$ | 960 |
| 3400 | $15 \%$ | 510 | $25 \%$ | 850 | $30 \%$ | 1020 |
| 3600 | $15 \%$ | 540 | $25 \%$ | 900 | $30 \%$ | 1080 |
| 3800 | ${f82188b30-3875-489b-a302-8d52424e1cf2} 15 \%$ | 630 | $25 \%$ | 1050 | $30 \%$ | 1260 |
| 4400 | $15 \%$ | 660 | $25 \%$ | 1100 | $30 \%$ | 1320 |
| 4600 | $15 \%$ | 690 | $25 \%$ | 1150 | $30 \%$ | 1380 |
| 4800 | ${face45a84-0f6a-4662-bb32-42cb96414c4e} 15 \%$ | 780 | $25 \%$ | 1300 | $30 \%$ | 1560 |
| 5400 | $15 \%$ | 810 | $25 \%$ | 1350 | $30 \%$ | 1620 |
| 5600 | $15 \%$ | 840 | $25 \%$ | 1400 | $30 \%$ | 1680 |
| 5800 | ${f8bd3b51c-cc93-429b-a1fb-613ea22ac036} 15 \%$ | 930 | $25 \%$ | 1550 | $30 \%$ | 1860 |
| 6400 | $15 \%$ | 960 | $25 \%$ | 1600 | $30 \%$ | 1920 |
| 6600 | $15 \%$ | 990 | $25 \%$ | 1650 | $30 \%$ | 1980 |
| 6800 | $` 15 \%$ | 1020 | $25 \%$ | 1700 | $30 \%$ | 2040 |
| 7000 | $15 \%$ | 1050 | $25 \%$ | 1750 | $30 \%$ | 2100 |

Comparison of Simplified Cost Share method with current Economic Table Using median NON-IV-D parents, with a combined income of $\$ 4400$ with two children, the proposed Table results in a total obligation of $\$ 1100$ or $25 \%$ of combined income. The current Table results in a total obligation for two children under 12 of $516+516=$ 1032 and for two children both over 12 of $637+637=1274$. Thus the proposed Table would result in a $5 \%$ increase for two young children, but a reduction of about $10 \%$ for two older children. Using an average of the two existing age columns ( $576+576=$ 1152) results in less than a $5 \%$ change between the two methods for this median family circumstance. Adding a third child to the above example, the proposed Table would result in a total obligation of 1320 which is $30 \%$ of combined monthly net income. The current Table for the same income results in a total obligation for three children under 12 of $431+431+431=1293$. For three children all over 12, the total obligation using the current Table is $532+532+532=1596$. Once again, the current table results in a no change for two young children while there is a $10 \%$ difference for two older children.

Comparison of the Simplified Cost Share Method with the New York Flat Rate method and current actual 2 and 3 child awards in Washington State
New York uses 17\% for the first child, and 25\% for two children. Thus, for two children, the proposed table is identical to the existing New York Table. This confirms that the flat rate model proposed in this analysis has worked very well for a State that is very similar to the State of Washington. Most important is the actual rate of awards for two and three children here in Washington State. The chart on page 10 of the Sterling 2003 report confirms that actual awards for two children average 25\% of net income and three children average $30 \%$. By bringing the table into alignment with actual awards based upon actual child costs here in Washington State, there would be a reduction in deviations and therefore a much greater consistency in awards and much lower litigation costs for families going through divorce as well as much lower usage of the courts as more families would settle "in the shadow of the law" due to a greater perception of fairness.

## Comparison of the Simplified Cost Share method to the Rogers Cost Share method for estimating costs of multiple children

As noted earlier, the Rogers Cost Share method for 2 children with combined parent income of $\$ 3400$ results in a total child cost (and therefore total combined obligation of $\$ 754$. By comparison, the Simplified Cost Share method results in a combined obligation of $\$ 850$ for a combined income of $\$ 3400$. Thus, the simplified cost share method results in a total obligation that is about $\$ 100$ higher than the Rogers Cost Share method. The actual child support award, depending on income would be about $10 \%$ or more greater than the Rogers Cost Share method.

## Comparison of the Simplified Cost Share method to the USDA per capita method for estimating costs of multiple children

As noted earlier, the USDA per capita estimates of child expenditures are least accurate for one child. The following chart explains why the greatest differences between marginal methods and all other methods occur for one child and why these differences lessen significantly for more children. . It is because all other methods, which are ultimately based on the USDA per capita data, have a built-in over-estimation error of about $18 \%$ for one child and this error is greatly reduced for two or more children to about $7 \%, 5 \%$ and $1 \%$.

| Percent cost | Simplified Cost Share method | USDA per capita method cost of child | Difference between two methods |
| :---: | :---: | :---: | :---: |
| One child | 15\% | 1/3 = 33\% | 33-15= 18\% |
| Second childTwo children | $\frac{10 \%}{25 \%}$ | $\begin{aligned} & 2 / 4=50 \%- \\ & 33 \%=17 \% \end{aligned}$ | 17-10= $7 \%$ |
| Third childThree children | $\frac{5 \%}{30 \%}$ | $\begin{aligned} & 3 / 5=60 \%- \\ & 50 \%=10 \% \end{aligned}$ | $10-5=5 \%$ |
| Fourth childFour children | $\frac{5 \%}{35 \%}$ | $\begin{aligned} & \hline 4 / 6=66 \%- \\ & 60 \%=6 \% \end{aligned}$ | $6-5=1 \%$ |

## Summary of differences between the proposed table and the current table

The proposed table addresses the two biggest inequities in the current table. These are the huge over-charges for the low income group and significant over-charges for parents with one child (as shown in the table above). These two groups would see a reduction in child support obligations. However, other groups would see virtually no change. These would include high income parents with one child (who are already at $15 \%$ ) and parents with more than one child (who are already at $25 \%$ for two children, $30 \%$ for three children and $35 \%$ for four children).

The State would also see benefits. The two primary reasons for deviations from the schedule are low income parents being put below the SSR. All of these deviations would be eliminated by the proposed table. The other main reason for deviations is families with two or more children. Most of these would also be eliminated since the proposed table was set at the average value for these awards. Thus, the State would save both in terms of lower court costs and in terms of not wasting money trying to collect child support from low income parents who lack the ability to pay.

## SECTION FIVE: OTHER ISSUES RELATED TO THE ECONOMIC TABLE

5.1: Whether the economic table should distinguish between children under twelve years of age and over twelve years of age.
Discussion: Dr. Betson has concluded that there is no significant age differences in costs to justify two columns. Independent reviews of child costs in several States also concluded that age is not a significant factor in child costs. The PSI 2005 Ohio Report presents a detailed analysis of this issue. It is not repeated here because there appears to be consensus on this issue. Finally, it would greatly simplify the table to use one column instead of two. For all these reasons, the Economic Table should be amended to eliminate the distinction between children by age.
(RECOMMENDATION: ONE COLUMN)

## 5.2: Whether gross or net income should be used for purposes of calculating the child support obligation.

Discussion: Washington State currently uses net (after tax) income. Since pre-tax income includes income that must go to the government and is not available to parents, net income is a more accurate estimate of a parent's after tax dollars.
(RECOMMENDATION NET INCOME)
5.3 Whether child care costs and ordinary medical costs should be included in the economic table, or treated separately. Currently, child care costs are treated separately and ordinary medical costs are added to the table as $5 \%$ of total.

A basic principle used throughout this analysis is that the State should only intervene in divorce finances to the minimum extent necessary to provide for the "basic needs of the child in accordance with the combined incomes of the parents". No requirement should be made of divorced parents that is not also made of parents in intact families. Washington's constitution provides: "No law shall be passed granting to any citizen, class of citizens, or corporation other than municipal, privileges or immunities which upon the same terms shall not equally belong to all citizens, or corporations." CONST. art. I, § 12.

Divorced parents therefore deserve the same rights under the law as married parents. Once the basic needs of the child have been meet in accordance with the combined income of the parents, the parent (whether married or divorced) has fulfilled their obligation to the child, to the other parent and to the State. This principal also includes that if the parents in intact families are not required to pay for health insurance (and indeed most parents in intact families are unable to pay for health insurance for their children), then it is insane to expect divorced parents (who are likely to be far worse off financially and have far greater expenses due to having to pay for two households instead of one) to also pay for health insurance.

The cost of child care should be by agreement between the parents and both parents should have a "right of first refusal" to care for the child when the other parent is working or otherwise unavailable to care for the child

The same "equity principle" is true of requiring divorced parents to pay for child care costs. Any divorced parents, but especially unemployed parents should be given the same "right of first refusal" and option to care for their child while the other parent is at work as any married parent would have.

During the public hearing testimony, one of the non-majority fathers asked a very good question: Why should someone pay for child support and child care when he/she is willing and able and fully available to care for a child??? The rational answer is that he should not. The child would be far better off developmentally in the care of a loving and devoted parent, than in the care of third party caregivers. Only parents who are unwilling to care for their children while the other parent is working should be required to pay for child care. Again the presumption should be that both parents will do what is best for their children and all other options should be the "deviation".

Thus, there should be an opportunity for either parent to care for the child if they are available (l.e., each parent should have a "right of first refusal" to care for the child while the other parent is at work or is otherwise unavailable to care for the child) instead of being required to pay for child care. It is far to common to here about divorced parents who were fully available to care for the child, but who not only were not allowed to care for the child by their vindictive spouse, but adding insult to injury, they were required to pay for a third party caregiver to care for the child when they could have directly provided that care.

This issue is particularly important to low income parents who may not have the income to pay for child care. As the 2006 CES/USDA data confirms, child care costs per child are 0.24 percent of combined obligation for households with annual net incomes of less that $\$ 15,000$ (i.e., just above the minimum wage for one person, but well below the minimum wage for two earners).

In addition, half of the households reported zero child care costs. Thus, child care should not be required of low income divorced parents because it is not a typical practice of low income married parents.

Public Comment: When you're talking daycare, and "It's my friend that's taking care of them," or "my mother-in-law and we don't really get receipts, and we don't really issue 1099s, but we want somebody else to pay for it," that breeds rancor.

If a child care obligation is involved and written into the child support order, those costs must be actual substantiated costs agreed to by both parents. For example, if the parents have a $\$ 500.00$ child care cost written into the child support order and divided between parents based upon income, but if one or both parents then do not send the child to daycare during their residential time (thus incurring no actual cost), then the other parent should not have to pay their percentage of that cost. Alternately, if there is a child care agreement written into the child support order, and one of the parents refuses to pay their share of that actually incurred child care cost, and the other parent therefore is required to pay the entire bill, in order to retain the agreed child care service, the parent who paid the entire child care bill should be entitled to a credit (either added to the child support payment or subtracted from the child support payment depending on who actually paid the bill).

Finally, it should be clear that child care costs cannot be paid for the time either parent or any other family member (or friend of the family) spends caring for the child. Instead, it is an honor and privilege for the parents and grandparents and other relatives to spend time caring for the child.

Child care expenses should only be paid for when no family option exists and the child must be left in the care of a professional third party caregiver and both parents have agreed on the arrangement in advance. If parents cannot agree, then they can each make their own arrangements and payments during their own residential time with the child and pay for the cost associated with that time themselves.

When parents do have a child care agreement, both parents must honor that agreement and treat the other parent fairly in their joint financial dealings. It is entirely unreasonable for either parent to fail to meet their court-ordered financial obligation to the other parent, and still expect the other parent to meet their court-ordered financial obligation to them. Hopefully providing clearer, more explicit rules will encourage greater cooperation among parents and reduce the temptation for either parent to unfairly burden the other parent with bills that both parents are responsible for paying.

### 5.4 How extraordinary medical expenses should be addressed, either through the basic child support obligation or independently.

Neither Income Share or Cost share models include any medical or child care costs in its calculations. Instead, these expenses (including the cost of health insurance) are treated as add-ons. In the cost share model, they are credited to the person making the payment, assuming that the medical costs were jointly agreed to. Ordinary medical costs are believed to be about 5\% of the total obligation or about $\$ 20$ per month in other estimates. Health insurance is estimated at $\$ 100$ per month. Child care costs vary widely.

In the Income Share model, they are pro-rated between parents based upon percent of total income. (Note that in reality, one or the other parent may refuse to pay their fair share of child care or medical cost bills... in such case, the more responsible parent is required to foot the entire bill... A solution for correcting this problem is offered in the final section of this analysis).

The prior work group concluded that medical and child care expenses should be treated separately from the Economic Table. However, a primary concern with child care and medical expenses is that, while they are treated separately from the Economic Table, they should not be made mandatory, unless the couple mutually agree that they should be made mandatory. This is because when the couple was married, medical and child care expenses required the agreement of both parties. The same should be true after divorce. In other words, there should be no financial incentive to encourage couples to get divorced. Furthermore, divorced parents should not be required to do anything that married couples are not also required to do. Neither parent should have the ability to force the other parent to spend money on items upon which they cannot agree. Both child care and medical care are major decisions. Barring limiting factors, all major decisions should be decided jointly.

### 5.5 A proposed cap: Whether the economic table for calculating child support should include combined income greater than five thousand dollars.

The "basic needs" cost of raising a child in terms of food, clothing and shelter does not increase indefinitely. In fact, the costs eventually reaches a maximum level once the child has all the toys they could ever use. Just as there is a floor, or minimum cost necessary to meet a child's basic needs, there is also a maximum cost beyond which the State has no further interest in insuring the child's needs have been met.

This basic principal has been called the Three Pony Rule," which states that "no child needs to be provided with more than three ponies." The idea behind this rule is that a child can only ride on one pony at a time. Updating this rule to the current century, the maximum amount that can be even remotely related to meeting the basic needs of the child is about three times the minimum amount. Thus, if the minimum total cost is $\$ 360$ exclusive of child care and health care, then the maximum amount would be 3 x $\$ 360=\$ \$ 1080$.

This number is also the proposed Self Support Reserve for one person based upon the SSR set at $125 \%$ of the federal poverty guideline. It should be obvious that if $\$ 1080$ per month is adequate to support an adult, it should also be adequate to support a child.

Assuming the Economic Table uses a flat rate of $15 \%$ and a maximum cap is set at $\$ 7,000$ combined monthly net income, the maximum Table amount would be $\$ 1050$. However, if the Economic Table used the current rate for $\$ 7,000$, Even using the current Economic Table, but averaging the two age columns, the maximum Table amount would be $\$ 1080$.

As child care and health care could be added to these amounts, the total maximum could rise as high as $\$ 2,000$ per month for full medical coverage and an excellent day care facility. It is hard to image a child's needs exceeding this amount under any conceivable circumstances. But as the Table Amount is merely a rebuttable assumption, any wealthy parent would be free to present evidence to a judge if they feel for any reason that their child needs more than $\$ 2,000$ per month.

The fact that CPs can completely live off child support without having to work themselves to support the same children is prima facie evidence that child support is too high for high wage earners.

For additional reasons why indefinitely extending child support is not in the best interest of the child, see Frasca, R. (2002) Economic Issues and Arguments in High Income Child Support Cases, Journal of Forensic Economics 15 (1) 31-44.

Other states have, by policy, carefully decided that the state's legitimate interest is in assuring a basic standard of living for children, and not going beyond that. Thus, these States cap income considered and cap child support. For example, Nevada has an $\$ 800$ cap, inclusive of health insurance and childcare, per child. (See Nevada Presumptive Maximum Amount Table below). This provides a balance between the state's legitimate interest in protecting children, and parents' legitimate interest in raising children without State interference.

The following Tables compares the existing Nevada Cap to the proposed Washington State Cap.

## NEVADA PRESUMPTIVE MAXIMUM AMOUNT ECONOMIC TABLE

INCOME RANGE
If the Parent's Gross
Monthly Income Is at Least

| $\$ 0$ |  |
| ---: | ---: |
| 4,168 | - |
| 6,251 | - |
| 8,334 | - |
| 10,418 | - |
| 12,501 | - |

The Presumptive Maximum Amount
Parent May Be Required to Pay per Month per Child Pursuant to Paragraph (b) of Subsection 1 Is
Less Than \$4,168 \$500 6,251 8,334
10,418
12,501
14,583

550
600
650
700
750

If a parent's gross monthly income is equal to or greater than $\$ 14,583$, the presumptive maximum amount the parent may be required to pay pursuant to paragraph (b) of subsection 1 is $\$ 800$.

## Comparison of Nevada Economic Table to Washington Table

(converting NCP gross to net and adding CP minimum net monthly wage (\$1250) for the first row and CP median net monthly wage (\$1800) for the subsequent rows)

| Nevada <br> NCP <br> Monthly <br> Gross | Nevada <br> NCP <br> Monthly <br> Net $(1)$ | Plus CP <br> monthly net | Combined <br> monthly net | Current <br> Nevada <br> Table | Current <br> Washington <br> Table <br> NCP OBL* |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 4000 | 3600 | 1250 | 4850 | 500 | 713 |
| $\$ 6000$ | 5400 | 1800 | 7200 | 550 | 1000 |
| $\$ 8000$ | 7200 | 1800 | 9000 | 600 | 1200 (CAP?) |
| $\$ 10,000$ | 9000 | 1800 | 9800 | 650 | $? ?(1428)$ |
| $\$ 12,000$ | 10,800 | 1800 | 11,600 | 700 | $? ?(1535)$ |
| $\$ 14,000$ | 12,600 | 1800 | 14,400 | 750 | $? ?(?)$ |
| $>\$ 14,583$ | $13,000+$ | 1800 | $14,800+$ | 800 max | ??(?) |

(1) A flat rate of $10 \%$ was used to change gross into net. While it is generally assumed that higher tax rates apply to higher incomes, according to the Congressional Budget Office (CBO), the effective average federal income tax rate, under the 2000 tax law, for families with children with a mean income of $\$ 83,100$ is $7.1 \%$. See Table G-2a.
Effective Tax Rate for Households with children. Thus tax rates for nearly all families are fairly close to $10 \%$.
*Washington child support NCP Obligation estimated by deducting 20\% custodial obligation from the total obligation
?? = Incomes beyond Washington Tables. (from Betson-Rothbarth Tables) ??? Note: Betson Rothbarth Table ends at \$12,000.

## DISCUSSION

The current Washington presumptive limit is nearly identical to the Nevada presumptive limit ( $\$ 800$ ). However, the Nevada maximum payment applies to monthly gross of $\$ 14,583$ which is equal to an annual gross of $\$ 175,000$. The current Washington presumptive limit is reached at half that amount.

This compares with a maximum monthly net income cap of $\$ 7000$ proposed for the Washington Table which equates to a combined annual net income of \$84,000 and an annual gross combined income of about \$100,000.

More important than who is affected, the maximum cap proposed about (\$1000) is $20 \%$ greater than the Nevada maximum and does not include either child care or medical care. If the Betson-Rothbarth maximum is used, the Washington high income parent could end up paying over $100 \%$ more than the same high income parent in Nevada. Given that the Washington Economic table is already 20\% too high, there is no justification for doubling the maximum presumptive limit here in Washington State.

This analysis has chosen a "compromise solution" to this problem. A maximum cap was placed at about $\$ 1,000$ for one child for families earning more than $\$ 100,000$ gross. This equates to a child expense that is about three times the basic child need of $\$ 360$ and about double the median parent obligation here in Washington and about double the maximum allowable child support payment permitted in Nevada.

Thus, the Betson-Rothbarth proposal for high income parents is as unjustified as the Betson-Rothbarth proposed total obligation for the other income groups. The maximum limit we have proposed should apply to no more than $20 \%$ of all parents and their children.

This does not mean that the lower time parent will only spend $\$ 1,000$ per month on their child. It merely means this would be the maximum transferred to the other parent. It is highly likely that the lower time parent would provide additional funds for the child. But the funds would be provided in a cooperative fashion involving joint decision making just as funds are allotted to the child during marriage in this same manner.

As with all the other policies recommended in this analysis, the intention is to reduce or eliminate the current economic incentives for divorce. The government's interest in family expenditures on children, whether that family exists before or after the dissolution of marriage, or even in the absence of marriage, is limited to insuring that the children's basic needs are met. Not extravagances, not luxuries, but needs. Once that occurs, government intrusion must cease. Thus, the purpose of child support should be limited to supporting children, not as a source of hidden alimony from one parent to the other.

## SECTION SIX: ISSUES AFFECTING LOW INCOME PARENTS

(Issues related to a minimum obligation for a minimum wage NCP)
6.1 Whether the economic table should start at $125 \%$ of the federal poverty guidelines and move upward in 100 dollar increments.
6.2 Whether the self support reserve should be tied to the federal poverty level. 6.3 How to treat imputation of income for purposes of calculating the child support obligation, including whether minimum wage should be imputed in the absence of adequate information regarding income.

The answer to these three questions will be considered together. Despite the directive from the legislature that two low income parents be on this committee, there is not one low income parent on this committee. This lack of participation has been blamed on the claim that poor people do not have the time to participate. However, it may also be due to a view of many, if not most, poor people that the government is more concerned about addressing the interests of the rich than the concerns of the poor. The current child support guidelines, which assess low income parents at a rate of $26 \%$ while only assessing high income parents at a rate of $15 \%$ certainly adds fuel to this fire. With such unfair regulations, it is no wonder that government intervention in the lives of poor people simply creates conflict, bitterness and resentment and therefore harms children of poor parents much more than it helps. Such unfair regulations are directly related to horror stories of poor dads being put into "debtors prison" due to their inability to make their child support payments. This is not a productive use of the State's limited tax dollars in that it does nothing to make these poor dads more employable and therefore does nothing to solve the "Poverty Problem". There is a saying that "you cannot get blood from a rock." However, this is exactly what the State is trying to do when it imposes huge child support obligations upon those with the least ability to pay.

### 6.1 Minimum Wage Analysis:

The most common wage among poor people is very close to minimum wage. Minimum wage in Washington State is $\$ 7.93$ per hour with overtime for more than 40 hours per week and adjusted annually for inflation by a calculation using the consumer price index for urban wage earners and clerical workers for the prior year. By comparison, federal minimum wage is $\$ 5.85$. Thus, Washington State minimum wage is about $30 \%$ higher than the federal minimum wage. Assuming that minimum wage is set just above the "poverty line" in Washington State, it would be reasonable to use 125\% of the federal poverty guideline as the Washington State poverty level. (i.e., there is a rough, but relatively consistent correspondence between federal and State poverty calculations such that State calculations appear to be 25-30\% above federal calculations).
\$8 per hour (a proxy for Washington minimum wage) x 40 hours per week equals $\$ 320$ per week $x 52$ weeks equals $\$ 16,640$ annual gross income. Assuming a $10 \%$ 'low income" federal tax bracket, annual net income would be \$15,000 and monthly net income at Washington State minimum wage would be about $\$ 1,250$. The combined monthly net income (CMNI) for two minimum wages earners is $\$ 2500$.

### 6.2 The Washington State Need Standard Self Support Reserve (SSR):

RCW 74.04.770 states: The department shall establish consolidated standards of need each fiscal year... based on studies of actual living costs and generally recognized inflation indices and shall include reasonable allowances for shelter, fuel, food, transportation, clothing, household maintenance and operations, personal maintenance, and necessary incidentals.

The legislature, as part of the child support schedule, tied the self-support reserve to the need standard in RCW 26.19.065(2). Self-support reserves are incorporated into child support guidelines in order to protect an amount of the obligor's income, recognizing that payment of child support should not impoverish a noncustodial parent to the level that he or she can no longer meet their own basic needs.
WAC 388-478-0015 (Need standards) states: The need standards for assistance units with obligation to pay shelter costs:

| Assistance | Marginal cost for |  |
| :---: | :---: | :---: |
| Unit Size | Need Standard added person |  |
| $\mathbf{1}$ | $\$ 1,016$ |  |
| 2 | 1,285 | 269 |
| 3 | 1,587 | 302 |
| 4 | 1,873 | 286 |

This table shows that a minimum (marginal additional) cost per child to be about 270 to 300 per month. This is somewhat less than the State pays on average for care of foster kids. The Median payment for foster care is currently $\$ 475$ per month in 2007. (This higher figure includes child care and ordinary medical expenses, but excludes extra-ordinary medical expenses).

The federal government also produces an annual estimate of the minimum income needed to support oneself. Because this table includes different figures for different family sizes, this table has become known as the poverty guidelines.
1.3 2007 HHS Poverty Guidelines (from HHS).

| Persons <br> in Household | 48 Contiguous <br> States annual | $\mathbf{1 0 0} \%$ of <br> monthly <br> income | 125 <br> Percent <br> of Poverty | 125\% <br> of monthly <br> income |
| :---: | ---: | ---: | ---: | ---: |
| 1 | $\$ 10,210$ | 850 | $\$ 12,720$ | $\mathbf{1 , 0 6 0 .}$ |
| 2 | 13,690 | 1140 | $\$ 17,040$ | 1,420 |
| 3 | 17,170 | 1430 | $\$ 21,360$ | $\mathbf{1 , 7 8 0}$ |
| 4 | 20,650 | 1720 | $\$ 25,680$ | 2,140 |
| For additional <br> (child), add | $3,480 /$ year | $290 /$ month | 4,320 year | $\mathbf{3 6 0}$ per <br> month |

Notes on the above table: Income is interpreted to be cost-based (or net) income. Members of family are not defined but typically include one adult with the remainder children. Also, this cost includes child care, medical care, and food with the exception that much of these costs may be offset by State and federal programs, but such programs are typically only available for the custodial parent.

The above tables show that the Current Self Support Reserve (SSR) in Washington State is 1,016 net per month and that $125 \%$ of the federal poverty guideline is 1,060 net per month. Thus, minimum wage in Washington State (net of \$1250) is above the SSR and above the $125 \%$ proposed threshold. Thus, a full time minimum wage earner in Washington State would be required to pay child support, but only by an amount that would keep their resultant income above the SSR. This would be true regardless of the method used to calculate the combined obligation for the rest of the economic table. Thus, child support obligation at the beginning of the table are determined by the SSR.

From the federal chart, several things become apparent. First, minimum monthly (net) wage in Washington State $(1,250)$ is above $125 \%$ of the federal poverty guideline for one person, but below the $125 \%$ monthly net standard for two people. Thus, Washington minimum wage is not adequate to keep a single parent with a child out of poverty. However, it would be adequate if the child support payment from the other parent was $1,420-1,250=\mathbf{1 7 0}$ per month. Thus Washington State minimum wage is adequate to support the family when looked at as a system of two minimum wage earners with one child. The combined family need is $1060+1420=2480$ and the combined family net monthly income at minimum wage is $\$ 1250+\$ 1250=\$ 2500$. Second, the addition for each member of a family (such as a child), as a "marginal cost" over and above the cost of a single person, is $\$ 360$ per month at $125 \%$ over the federal poverty guideline. Thus, the minimum standard in terms of cost to meet the "basic needs of a child" is \$360 per month.

In an intact 3 person family (with two minimum wage earners and one child), the family could get by on a combined minimum wage of $1250+1250=2500$. In fact, they would have (2500-1,780=) \$720 to spare. After separation, and split between two minimum wage earners, there would be one one-person household at 1,060 and a second twoperson household at 1,420 . The combined expense would be 2,480 . Each parent would have about $\$ 10$ to spare per month. Alternately, looking only at the marginal additional cost of the child (360), each parent would be obligated for half of $\$ 360$ or 180 per month. The ratio of total child cost obligation to total income by the federal table is 360/2480 = $15 \%$ (actually $14.5 \%$ ). Assuming each parent lives at the Washington State SSR based on 125\% of the federal poverty guideline (1060), and that the child lived equally in both households, the two parents might just be able to get by (1060 + $180=1240$ ). This assumes that the parents have opposing work schedules or that the child remains with the grandparents while the parents work.

## How do Washington State Guidelines (via the Economic Table) currently treat a low income (minimum wage) couple with one child after they divorce?

The combined net monthly income of two divorced parents both making minimum wage (or imputed at minimum wage) is $=2 \times 1250=2500$. According to the current Economic Table (see Below), the combined obligation for one child at this combined income is 650 for a child over 12. Dividing this based upon \% of income (ie 50-50), each parent should contribute about 325 per month. This represents $\mathbf{2 6} \%$ of each low income parent's income $(325 / 1250=26 \%)$. Such a high obligation would place the minimum wage dad $\$ 135$ below the SSR: $(\$ 1250-325=925=1060-135$. (Note that all calculations in this analysis assume the work group and legislature will adopt the recommendation that the current SSR be replaced by $125 \%$ of the federal poverty guideline).

Thus the maximum a minimum wage dad can pay in child support and still stay above the SSR is $\$ 190$ per month (1250-1060=190), which converts to a combined obligation of $\$ 380$ per month. This total obligation is thankfully similar to the expected cost of a child living at minimum wage or $125 \%$ of the federal poverty level (\$360). The following table shows that the current economic table does not take into account the SSR needs of the non-majority parent. The current table thus yields "absurd" results for income amounts below the minimum wage in that the non-majority parent cannot possibly afford the payments without being placed below the SSR:

Current Economic Table at or below combined full time minimum wage (\$2500):

| Combined <br> monthly <br> net <br> income | Combined <br> Obligation <br> for child <br> over 12 | NCP <br> income <br> (assuming <br> both are <br> the same) | NCP <br> presumed <br> child <br> support <br> obligation | Obligation <br> as <br> \% of NCP <br> net <br> income | Income <br> after <br> child <br> support <br> payment | Maximum <br> NCP <br> child <br> support <br> obligation <br> Per SSR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1000 | 272 | 500 | 136 | $27 \%$ | 364 | 0 |
| 1200 | 326 | 600 | 163 | $27 \%$ | 437 | 0 |
| 1400 | 379 | 700 | 190 | $27 \%$ | 510 | 0 |
| 1600 | 428 | 800 | 214 | $27 \%$ | 586 | 0 |
| 1800 | 478 | 900 | 239 | $27 \%$ | 661 | 0 |
| 2000 | 527 | 1000 | 263 | $26 \%$ | 737 | 0 |
| 2200 | 577 | 1100 | 288 | $26 \%$ | 812 | 40 |
| 2400 | 627 | 1200 | 313 | $26 \%$ | 887 | 140 |
| 2500 | 650 | 1250 | 325 | $26 \%$ | 925 | 190 |

The preceding table confirms that a presumptive transfer payment greater than $\$ 180$ for a minimum wage earner is asking the NCP to do the impossible. There is no way that a minimum wage NCP can make a payment of $\$ 325$ per month as required by the current table. Thus this entire section of the Washington Economic Table must be amended to reflect the reality of low income parents trying to keep their head above water after divorce.

### 6.3 Whether the amount of the presumptive minimum order should be adjusted (from \$25/month per child).

Pursuant to RCW 26.19.065(2), there is a presumption that the noncustodial parent pay $\$ 25$ per month per child in instances where the combined monthly net income of the parents is below $\$ 600$, or if the noncustodial parent's current support obligation reduces his or her net income below the one-person need standard. However, It is difficult to understand how a parent with no income can be expected to pay $\$ 25$ per month to the other parent. Therefore the regulations should be amended so that the minimum order is set at \$0. However, since we propose that all parents income be imputed at minimum wage, this establishes a minimum combined income of at least $\$ 2400$ per month and a minimum combined obligation of \$360 (at the amended 15\% rate). Thus, absent information to the contrary, the minimum obligation of each parent (and thus the actual minimum order) would be $\$ 180$ per month.
(RECOMMENDATION: NO MINIMUM PAYMENT FOR ZERO INCOME, BUT A MINIMUM ORDER OF \$180 BASED UPON TWO MINIMUM WAGE INCOMES).

## CONCLUSION:

The self support reserve for one person in Washington State should be set at $125 \%$ of the current federal poverty guideline for one person. The economic table should start at $125 \%$ of the federal poverty guidelines PLUS the marginal cost for one child as indicated by the federal table (\$360), (or SSR for a combination of two minimum wage earning parents in two households with one child $=\$ 2500$ ) and move upward in $\$ 100$ increments. Income should be imputed at minimum wage for both parents, absent other information confirming a higher income during the three years preceding divorce or separation or termination of co-habitation. Thus imputing full time minimum wage income to both parents will nearly always result in a combined income of at least $\$ 2500$ and a presumptive transfer payment to the CP from the NCP of about $\$ 180$ thus keeping the CP and the child above $125 \%$ of the federal poverty level.

The proposed Economic Table would therefore begin with the following:

| Combined monthly net income | $\begin{aligned} & \text { Obligation } \\ & \text { as } \\ & \% \text { of } \\ & \text { combined } \\ & \text { net income } \end{aligned}$ | Combined Obligation for child | NCP And CP income (assuming both are the same) | $\begin{gathered} \text { NCP } \\ \text { Obligation }= \\ \text { Amount } \\ \text { over SSR of } \\ 1020 \\ \text { = CS } \\ \text { transfer } \\ \hline \end{gathered}$ | NCP Income after child support payment = or >SSR | $\begin{gathered} \text { Income of } \\ \text { CP + CS } \\ \text { transfer } \\ \text { from NCP } \\ (1374=125 \\ \% \text { FPG for } \\ 2 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2500 | 15\% | 375 | 1250 | 190 | 1060 | 1440 |
| 2600 | 15\% | 390 | 1300 | 200 | 1100 | 1500 |

Child care costs and medical costs for low income families should be set at ZERO recognizing that low income parents can not afford either of these costs during marriage and thus should not be required to pay for child care or medical costs after divorce.

This brings up the issue of who should pay to care for children when both low income parents are working minimum wage jobs. If the parents themselves do not have the ability to pay and if the State wants these parents to work full time (and is requiring both divorced parents to work full time by imputing minimum wage), then the State is going to have to find a way to provide such parents with free or very low cost child care, including assisting schools with before and after school programs. Given that the State also wants these kids to pass the WASL, State supported preschools, and before and after school educational programs could serve both purposes.

### 6.4 Another important question is how to treat over time income or income from a second job for purposes of calculating the child support obligation.

The answer lies in how the State treats intact families and what the State expects from parents in intact families. The State does not require "intact" parents to work over-time or work two jobs. We would all agree that no parent should "expect" the other parent to work over time or working two jobs. No child in an intact family has or should have an expectation from either parent that they will work more than 40 hours per week. It is reasonable to expect both divorced parents to get a full time minimum wage job to support their child. Given the availability of minimum wage jobs, it would be difficult for parents to claim they cannot find a minimum wage job.

However, it is unreasonable to expect divorced parents to work overtime. Nor would such an expectation help children. Developmentally, children need to spend time with their parents as much as they need money from their parents. Therefore anything over 40 hours per week should be allowed to remain with the parent who put in the effort as a reward for putting in that effort. To do otherwise creates a dis-incentive to work hard and try to improve their lot in life.

This dis-incentive affects both CP and NCP. If the CP tries to get ahead by working overtime at a first or second job, then she raises her income and now has higher than $50 \%$ share of the combined income. Thus she is required to pay more of the child costs.

The same would be true if the NCP worked more. Working two jobs is one of the few ways poor people have of supplementing their incomes. If all hope is taken away from them, it would only lead to an increase in suicide of the CP or NCP. Neither of these would help the low income child.

Currently under RCW 26.19.071(3)(e) and (g), income from overtime and second jobs is to be included in gross income for the determination of the support obligation. However, parents who have taken second jobs or seek overtime typically do so to make ends meet for multiple families or extraordinary expenses. Therefore this law should be amended to eliminate the consideration of any income in excess of full time from child support calculations.

It is worth asking how the current economic table can be so far above what the low income NCP can possibly pay. One likely reason is that the current Economic Table is based on estimated child expenses of an INTACT FAMILY. However, as the following calculations show (and as common sense would also tell us), the two households required after a couple separates will be dramatically more expensive than having all three family members living in the same household. Therefore, each of the households will have a much lower standard of living that an intact family.

As noted by the Federal table above, an intact family of three with two minimum wage earners has about $\$ 700$ to spare. (Total income of $\$ 2500$ per month and expense of $\$ 1,780$ using $125 \%$ of the federal poverty guideline). However, a one-person household costs $\$ 1060$ and a two-person household of 1420 results in combined expense of $\$ 2,480$. Thus, there is a $\$ 700$ per month difference in efficiency $(\$ 2,480-\$ 1,780=$ $\$ 700$ ) between an intact low income family and a divorced low income family which has two households. Put another way, it costs about $40 \%$ more ( $\$ 700 / \$ 1,780=39.3 \%$ ) to have two low income households sharing one child than it does to pay for one low income household with two adults and one child.

Ignoring the reality of low income divorced parents led to an economic table that required NCP's to make payments they could not possible make. It is therefore NOT appropriate to use the child spending of intact families as a basis to set obligations for parents after divorce. This subject will be explored further in the next section.

## SECTION SEVEN: ISSUES NOT RELATED TO THE ECONOMIC TABLE

7.1 How the support schedule and guidelines shall treat children from other relationships, including whether the whole family formula should be applied presumptively
Children from other relationships are currently handled as a deviation:
The Policy Studies, Inc. report entitled, "Washington State Child Support Schedule: Selected Issues Affecting Predictability and Adequacy", January 20, 2005, found that $29 \%$ of all deviations in Washington are based on other children for whom the noncustodial parent has a support obligation. ${ }^{41}$ This deviation is currently allowed under RCW 26.19.075 (1)(e) as follows:
e) Children from other relationships. The court may deviate from the standard calculation when either or both of the parents before the court have children from other relationships to whom the parent owes a duty of support.
(i) The child support schedule shall be applied to the mother, father, and children of the family before the court to determine the presumptive amount of support.
(ii) Children from other relationships shall not be counted in the number of children for purposes of determining the basic support obligation and the standard calculation.
(iii) When considering a deviation from the standard calculation for children from other relationships, the court may consider only other children to whom the parent owes a duty of support. The court may consider court-ordered payments of child support for children from other relationships only to the extent that the support is actually paid.
(iv) When the court has determined that either or both parents have children from other relationships, deviations under this section shall be based on consideration of the total circumstances of both households. All child support obligations paid, received, and owed for all children shall be disclosed and considered.

Under 45 CFR $\S 302.56(\mathrm{~h})$, child support guideline reviews are to be conducted, in part, to guarantee that the number of deviations from the guidelines are limited. Since this particular deviation is being applied with regularity, the workgroup agreed that the calculation used to grant the consideration for additional dependents of the obligor should be reduced to an "above-the-line" formula. If the consideration were given per a formula, and written into the calculations to determine the final amount of the transfer payment the obligor is to pay the obligee, it no longer would be considered a deviation. This simple change would result in a drop in deviations of $29 \%$.

The (prior) workgroup tasked a subcommittee to study other methods that other states or Washington State has used to address additional dependents of the noncustodial parent, including the Blended Family Formula, the Whole Family Formula, and some other methods. The workgroup voted to propose the Whole Family Formula as the preferred method of calculations. Their reasons included that many in the administrative and the judiciary are already familiar with the Whole Family Formula. Additionally, some of the other methods were more complicated and appeared to produce results that were not as favorable to the multi-child noncustodial parent (who is often near either the SSR of the \% of total income cap).

[^28]In order to address the issue that the formula might favor the noncustodial parent, the workgroup also agreed that there should continue to be discretion on the part of the trier-of-fact to deviate when the application of the formula is unjust. There was much discussion on what the bases for granting the deviation would be, but in the end, a majority of the workgroup members agreed to a recommendation. The trier-of-fact may deviate when the application of the formula would result in insufficient funds to meet the basic needs of the children in the custodial parent's household, or, when considering the total circumstances of both households, application of the formula would be unjust.

The (prior) workgroup also had an animated discussion on which of the obligors children to include in the calculation. After much debate, it was decided by a consensus that the formula should take into account children for whom a support order exists. We decided against requiring proof of payment for those ordered obligations, again after much debate, because if, for instance, the Division of Child Support is successful in collecting support, it collects and distributes for all of the obligors cases in the child support system. Acknowledging this, we believed it was forward thinking to give the consideration up front for these children, rather than have the noncustodial parent have to try to address the multiple obligations and any inequities thereby created after the fact.

The (prior) workgroup also agreed that biological, adopted or children of the noncustodial parent's current marriage who reside with the noncustodial parent a majority of the time should be considered in the formula. ${ }^{42}$ This formula is not to include stepchildren. If the children are living in that parent's household, the parent is supporting them and that support should be acknowledged. The workgroup had much discussion about how to include the noncustodial parent's children if his children were born out of a relationship between the husband and his wife. The workgroup also agreed that step-children resulting from marriage are not to be considered in the calculation.

The workgroup could not agree on how to address children with a presumptive father, as defined in the Uniform Parentage Act under RCW 26.26.116, but did agree that they wanted children of the noncustodial parent and his/her current spouse considered. Because married parents do not routinely seek genetic tests on their children, simply defining children born from a marriage as either biological or adoptive children was not inclusive enough, but many in the group were strongly opposed to using any term based on the presumptive responsibility that husbands are financially responsible for supporting their children. Finally, the workgroup also agreed that children for whom the noncustodial parent can prove that he or she is actually providing support should also be considered.

The workgroup voted to exclude stepchildren of the noncustodial parent in the calculation, partially because the burden of support for those children should fall upon their natural parent first and foremost.

[^29]The Honorable Chris Wickham also provided the workgroup with feedback from the Superior Court Judges' Association with regard to some of their concerns about adopting the Whole Family Formula approach. Some of the concerns expressed by the judiciary were that the Whole Family Formula not be the basis for a modification for later-born children. The judges' concern was mainly centered on subsequent families. They also considered that a noncustodial parent voluntary undertakes to have children in a second family, and that the children in the original family should be able to count on the original support amount, regardless of later born children.

The group then discussed the concerns of the judiciary, including concern that to take such a position could be viewed as treatment of later born children as second class citizens, who by just a fault of birth order would then not be entitled to share in the resources of the noncustodial parent to the same extent as earlier born children. Following the discussion, an amendment was suggested as a compromise of the positions to which the majority of the workgroup supported. The amendment offered was to change RCW 26.09.170 to reflect that the birth of another child for whom the obligor has a duty of support not be the sole basis for a modification under the substantial change of circumstance criteria.

The final recommendation of the workgroup to address additional children is as follows: Include the Whole Family Formula into the worksheet calculation so that it is applied presumptively (above-the-line).
A. Give courts discretion to deviate only under either or both of the following conditions:
1.There are insufficient funds in the obligee's household to meet basic needs as defined by placing the obligee's household below 125\% of the federal poverty level .
2. The consideration of the total circumstances of both households results in an inappropriate or inequitable application if the Whole Family Formula is applied.
B. Include in the calculation the following children of the noncustodial parent not before the court:
1.Children for whom a child support order exists. The noncustodial parent need not prove actual payment of support to include these children in the calculation.
2.Biological, adoptive, or children of the noncustodial parent's current marriage residing with the noncustodial parent a majority of the time.
3.Children for whom the noncustodial parent can prove that he or she is currently paying support.
4.Step-children are not to be included in the calculation.
C. Amend RCW 26.09.170 to reflect that the birth of another child or the addition of another child for whom the noncustodial parent has a duty to support by itself is not the basis of a substantial change of circumstance.
DISCUSSION: It is recommend that one sentence be added to the proposal adopted by the former work group. It is important to clearly and precisely define what is meant by phrase "insufficient funds to meet the households basic needs" as $125 \%$ of the federal poverty guideline. Otherwise the phrase can be inappropriately mis-interpreted to mean almost anything.
7.2 Whether the non-custodial parent's current child support obligation should be limited to $45 \%$ of net income.
Neither parent's total child support obligation is allowed to exceed forty-five percent of that parent's net income except for good cause shown. RCW 26.19.065(1). The prior workgroup was never able to discuss or formulate a recommendation on whether this limit continues to be appropriate -up or down. However, during discussions of the prior work group, there were many references to a report done by the Division of Child Support's Management and Audit Program Statistics Unit. ${ }^{43}$ The report found that if the obligor's support obligation exceeded $20 \%$ of the obligor's gross income, especially obligors in the lower economic echelons, the less likely the obligor would be able to pay even the current support obligation, which in turn results in increasingly large accruals of back-support. ${ }^{44}$

It is therefore recommended that the $45 \%$ limit be expressly tied to cases where the NCP is responsible for four or more children In addition:

* In cases involving one child, the non-custodial parent's current child support obligation should be limited to $25 \%$ of net income.
* In cases involving two children, the non-custodial parent's current child support obligation should be limited to $35 \%$ of net income.
* In cases involving three children, the non-custodial parent's current child support obligation should be limited to $40 \%$ of net income.


### 7.3 Imputation of Income

RCW 26.19.071(6). When parents fail to produce any proof of income for the determination of a child support obligation, there needs to be a means for the court to use a standard for imputing income. Currently, the only standard in statute is to impute federal median net income, which is based on the median income of year-round fulltime workers as derived from the United States bureau of census. Unfortunately, this method, assuming that every person who comes before the court of capable of making a "median income", will by definition overstate a person's potential income capacity at least half the time. Research has repeatedly shown that lower income earners are more likely to suffer divorce than high income earners. It is therefore crazy to impute "median income" to someone facing a divorce. Instead, there are good reasons to not impute income beyond minimum wage to parents. Even if a person is qualified and experienced and willing and able to work, higher paying jobs can be very hard to come by. Overtime is transitory, and cannot be relied upon. Second jobs may be necessary for the NCP to maintain a basic standard of living, and to provide a place for the children to be when in his care. Income calculations must therefore stop at the 40 hour work week schedule. Restrictions should be placed on imputing income including that imputed income can only be based upon the prior three years of normal (40 hours per week) income and/or minimum wage. This would put an end to the horror stories of unemployed dads being charged based upon their age and gender or their level of training (even if they had NEVER been able to earn the income imputed to them).

[^30]The (past) workgroup recognized that federal median net income can be too high an estimate of income. Typically minimum income is imputed instead. However, this practice is not uniform throughout the state. There is also lack of uniformity on how to address income in the child support worksheets when a parent receives public assistance. It is unclear whether income may be imputed to the recipient, as under the federal tax instructions and state law, public assistance grant money is not to be considered income. ${ }^{45}$ The question becomes whether it is appropriate to impute wages to the recipient of public assistance for what they are or could be earning if they were not receiving a TANF grant. It should be noted that under TANF, as opposed to the prior public assistance program AFDC, parents are required to engage in job activities in order to be eligible for public assistance unless they meet one of the exceptions to that requirement.

While the workgroup was unable to reach a final vote on recommendations, there was preliminary agreement to amend RCW 26.19.071(6) to consider the following:
A. Use actual earnings first, if available.
B. Use reliable, historical data where available, such as Employment Security data.
C.
D. If there is a recent history of minimum wage (or approximating minimum

If there is incomplete, sporadic information, impute using that data. wage), impute at minimum wage for the state in which that parent resides.
E. (The majority appeared in agreement with this.)In the absence of reliable information, use federal median net updated to the current numbers. (This clause should be deleted for the reasons listed below).
F. If there is a recent history of coming off of public assistance, GAU, SSI, or disability, or a recent release from incarceration; in the absence of reliable wage information to the contrary, impute minimum wage at the wage for the state in which that parent resides.

## DISCUSSION

This section of the law must be changed. As noted in the first section on poor parents, imputation of income to anything more than minimum wage is a prescription for disaster. In today's rapidly changing job market, it should never be assumed that any person, no matter how well trained or experienced can get a high paying job. Instead, it should be assumed that parents are trying as hard as they can to make as much money as they can.
Therefore federal median net income should NEVER be imputed to any parent.
Instead, income should always be based upon the average of the three years preceding separation and excluding any income beyond full time. In the absence of tax returns, or in the event a parent is unemployed, it is reasonable to assume that parent can get a full time minimum wage job. Therefore it is reasonable to impute minimum income to parents who have the ability to work. This excludes parents who are in prison as they are obviously unable to work while in prison (unless of course the prison is willing and able to employ them or accommodate them to work for others while in prison).

[^31]
## SECTION EIGHT: RESIDENTIAL CREDITS AND THE TWO EARNER TWO CAREGIVER FAMILY MODEL

Issue: Residential Credits: Whether the residential schedule (shared parenting) should affect the amount of child support obligation.
RCW 26.19.075(1)(d) currently grants judges discretion to deviate from the standard calculation when the child spends a significant amount of time with the obligated parent. It sets forth standards for the deviation. However, there is no statutory guidance on how to address the support calculation when children spend an equal amount of residential time in both parents' households. Since it is a deviation, there is no guarantee that it will be considered or granted in all cases when children spend a significant amount of time with both parents.

Since this is the most important question for children of divorce, it is disappointing that the prior workgroup was never able to engage in a formal discussion of the considerations of residential credits. Therefore, the following comments are intended to address concerns about the shortcomings of the traditional child support system and why significant changes are need in the area of residential credits to develop a child support system that is truly "in the best interest of the child".

It was highly significant that public comment was nearly entirely against the current system of child support. Citizen after citizen complained that the current system is "unfair to the non-majority parent because it fails to give the non-majority parent any credit for costs they spend directly on the child while the child is in their care." Citizen after citizen testified about flaws in the system that harmed their families and their children.

Finally, it was significant that the two parents on the committee (a higher time parent and a lower time parent) reached agreement on a minority report that did address the concerns of citizens who made comments at the public meetings. However, the prior committee ignored the opinions of the two parents who were on the committee. Thus these two parents, on their own, wrote the "Minority Report", which was highly informative and which members of the 2007 Child Support Work Group are encouraged to read.

Before offering a proposal to deal with the issue of residential credits, we will review some of the problems with the traditional system, all of which argue for a change in the treatment of residential credits:

### 8.1 The current (traditional) system of child support does not match the reality of modern "two earner/two caregiver" family structure.

The current system of child support is based upon several assumptions about family structure that may have been true in the past, but are not true in the present. These assumptions include, but are not limited to:

- The family is supported by a single or primary wage earner, typically the father.
- The child is raised by a single or primary caregiver, typically the mother.
- At divorce, the mother is incapable of getting a job and earning wages.
- At divorce, the father is incapable of caring for the children.

The traditional solution was, after divorce, to give the mother the job of caring for the children and transfer wages from the father to the mother in order to provide for the "basic needs of the child". The mother was called the "custodial parent" (or CP) and the father was called the non-custodial parent (or NCP). It is highly symbolic that this committee still clings to such outdated terminology even though the Washington State Parenting Act, recognizing that children are not property to be owned and that the child still has two equal parents after divorce. Thus, the legislature, in 1988, abandoned not just the term custody, but the concept of custody as being a harsh, judgmental, demeaning, derogatory and frankly offensive distinction between parents. While there may have been a time in the past when a family could be supported by a single wage earner, that has not been the reality of most Washington families for at least the past 20 years. Instead, the dramatic rise in nearly all family expenses, particularly a rise in the costs of housing and energy, have forced nearly all families to adopt a "twoearner/two caregiver" family model.

## With this "two earner/two caregiver" family model,

- The family is supported by both parents working (typically both parents working full time).
- The child is raised by both parents caring for the child while the other parent is at work. Often the parents work opposing shifts so that child care costs (which are also very high) can be avoided. If parents work at the same hours, grandparents and other relatives from both the maternal and paternal sides of the family are often drawn in to care for the child while both parents are at work. Only in cases where both parents work at the same time and no family members are available are children brought to child care facilities. This new system of child care in turn means that important "attachments" are formed between the child and both parents to a much greater extent than in the "traditional" one earner/one caregiver family model.
- At divorce, the mother is not only capable of getting a full time job, but she typically already has a full time job. However, should the father be driven out of the child's life by the adoption of the "traditional model of divorce", the mother loses someone to help her care for the child while she is at work. This increases the difficulty of her maintaining a full time job and often leads to burn out, depression and a whole host of mental and physical problems which reduce her ability to work and/or parent the child. Eliminating the "free child care" offered by the father also increases child care costs for the mother at a time when the mother can least afford to pay for child care.
- At divorce, the father is not only capable of caring for the child, but has been caring for the child for several years and knows the child better and is more closely bonded to the child than any other caregiver with the possible exception of the mother. However, should the father be driven out of the child's life after divorce, the father may lose the motivation to work and provide income to support the child.

2. The traditional system of divorce and child support often leads to the loss of the father in the child's life. Many fathers are immediately forced out of the child's life by "ex-parte protection orders" issued to the mother the day the mother files for divorce. These ex-parte orders are all too easily obtained by the mother making false allegations of domestic abuse against the father at the time of separation.
A devoted father, who has never been accused of any crime in the past, is suddenly accused of being a drunken wife beater and child abuser. Being a civil proceeding, no evidence is required other than the mom's false allegations.

The child is, in effect, suddenly "kidnapped" from the father who must endure the loss of his child.. a fate worse than death to most parents. Members of this work group are asked to imagine how you would feel if you were suddenly told one afternoon that you were not allowed to go home and see your children. That is the fate many fathers must endure. But thanks to horrific gender bias in the court system, for many of these dads, it will only get worse.

Due to the fast paced changes in the modern work place, the separation of the couple is often preceded by the father losing his job. With most intact families already living on the edge from pay check to pay check, the financial crisis created by the father losing his job is one of the most common triggers of divorce. Ironically, the court in many of these cases will conclude that the father is "voluntarily unemployed" and "impute income" to the father who has suddenly lost his job and his family, giving him child support payments he has no ability to pay and indeed would not have been responsible for paying had he still been married and permitted to be with his family. As with the abuse charges, no evidence is required to impute income to the dad. Even worse, the court will often order the dad to pay the mom's attorney bills... thus he must pay off the very person who orchestrated the kidnapping of his children.

The father must now attempt to find a new job at the same time he is emotionally devastated by the loss of his family, and possibly financially devastated by the cost of attorney's bills associated with legal actions he typically did not initiate and child support payments he cannot possibly make. These child support payments are based upon the incomes of both parents but do not take into account the expenses of both parents. Should the father manage to find a new job, his wages can be immediately garnished (even if he somehow managed to keep up on his child support and attorney payments). The dad is thus falsely labeled as a "deadbeat" at his new job and quickly becomes a social outcast, often losing the new job that could have provided additional income for the child and the mother. If his attorney is honest, the attorney will tell the father that evidence of his innocence (and/or the mother's acts of perjury) is irrelevant in family court, which is more accurately referred to as "liars court".

This is because no mother in this State has ever been prosecuted for perjury. Instead, the mother will be rewarded for committing perjury by being designated the child's primary caregiver... even when there is no evidence that she was the primary caregiver. The father's chances of becoming the "primary caregiver" are therefore less than $10 \% \ldots$ even if he had cared for the child the majority of the time before the separation. Faced with the reality of a family law system devoid of justice, the father "cuts his losses", yields to this injustice and settle out of court "in the shadow of the law", with the promise that, if he pays his child support, he will still get to see his kid "every other weekend". Sadly, within two years, over two-thirds of all mothers move away from the father under the "presumption in favor of relocation" (RCW 26.09.520). The dad who mistakenly thought he would get to see his child every other weekend discovers too late that he may never see his child again. With sadness and bitterness, the dad is relegated to the role of a "pay check in the mail", forced into choosing between slavery of working to support a child he will never see or going to debtors prison. Not even bankruptcy can save him from the long arm of DCS. It should be no surprise that the group which suffers from the highest rates of suicide is divorced dads.

This work group is likely to hear from many dads who appear to be consumed by their anger towards the system that destroyed their relationships with their children. Some work group members have already stated that they are "turned off" by the angry and confrontational tone of such dads. However, work group members should keep in mind that many of these dads have faced truly horrific experiences in being deprived of their relationships with their children. Human beings are their relationships. When the State destroys either parent's relationship with their child, the State destroys that parent's very reason for living and working. We should therefore not be at all surprised that these father's come to this committee consumed by such bitterness.
3. The traditional system of child support also inflicts harm on the mother. The divorced mother is not much better off. She is lured into divorce by the State's promise of a steady stream of income from the dad (a guarantee she did not have while being married). Despite what it says in the parenting plan, she also no longer has to consult the dad about major decisions regarding the child. She quickly learns that the parenting plan is just a piece of paper that no judge will ever enforce. The dad is often required to pay for child care and health insurance (also not guaranteed during marriage). But what the mother loses is someone dedicated to helping her care for the child. Cooperation quickly turns to conflict. The dad, in failing emotional health has reduced job prospects and reduced motivation to work. His income fails and he falls behind on his child support. The mother faced with mounting bills and no income from the father also often falls victim to depression. Sadly, there is a strong connection between a depressed and divorced mom and her abuse of her child. She loses her temper and feels guilty about it later.

## 4. The person most harmed by the traditional system of child support is the

 child. The child, who has already been put through the trauma of divorce, and the loss of his or her relationship with the father, often is relocated into much cheaper housing and must also suffer through the loss of home, community, school peers, extended family, sports teams and a whole host of other losses. But the child's greatest loss is the loss of a father. It has been said that parents are to children like wings are to a bird. To lose one parent makes the child like a bird with only one wing. If the relationship with the child was important to both parents well being, the relationship with both parents is even more important to the child's psychological development. The loss of the father begins the downward spiral in the child's life that typically includes anxiety, depression, bitterness, poor sleep habits, poor school performance, school drop outs, drug abuse, eating disorders, early pregnancy, conduct disorders and possible imprisonment... all at huge costs to the State's taxpayers and the State's employers. Sadly, over 50 \% of all children of divorce lose their relationships with their fathers as a consequence, not of the divorce, but of the State sponsored "traditional divorce system" which needlessly deprives children of their fathers.
### 8.2 Why Fatherlessness is harmful to the development of the child:

Modern research into child development has revealed three highly relevant factors. The first line of research is "social learning theory". This theory, originally developed by Vygotsky to explain how children learn languages and develop complex cognitive concepts over time, has been used to transform educational programs around our State. Social learning theory is particularly relevant to the learning processes of very young children and thus is now universally used in our public Elementary Schools.

It has been confirmed that humans are far more "social" than we conceive ourselves to be. Our lives are built around and consist of human relationships. The most significant of these learning relationships is the relationships between children and their parents. Disrupting parent-child relationships therefore destroys the very fabric of a child's development.

The second line of research is attachment theory. It is now known that children form attachments very early in life to both parents. These attachments later become "working models of self and others" for both boys and girls. Secure attachment patterns are related to school success and later success in work and personal relationships. Insecure attachment patterns to either parent result in the mental health and social problems described above. Thus, fathers are not optional or expendable as once may have been believed.

The third line of research is brain development, typically (and artificially) divided into cognitive and/or affective neuroscience. This research has revealed that children in general, and some children in particular, are highly sensitive to "relationship stress". Relationship stress includes conflict between parents (often made much worse by the current legal system). It also includes loss of significant caregivers and relocation away from the child's community. This "genetic sensitivity to relationship stress" is why some children react so adversely to the loss of a parent.

It is therefore essential for proper brain development that relationship stress on children be reduced to the greatest extent possible. Yet the current system does just the opposite. It ignores the impact of loss of significant caregivers and relocation away from community on the child and promotes conflict between divorced parents.

Taken together, these three lines of research, each supported by hundreds of studies, leads to the conclusion that promoting the child's significant relationships with BOTH PARENTS is nearly always in the child's best long term interest. Ideally, the response to divorce that would benefit the child most would be to effect only those changes made absolutely necessary by the divorce (such as having the parents reside in two households instead of one). Beyond this, the child should still have significant access to both parents and arrangements to "reside" in both households. This is a dramatic departure from the current system of winners and losers. It envisions a future in which no one loses and cooperation, rather than conflict, is encouraged between parents.

The following is a summary of a research report from the Fatherhood Initiative (Federal Department of Health and Human Services Fact Sheet, June 21, 1999). This is only one of hundreds of studies that has documented the harmful effects of fatherlessness on children.

Father involvement in the lives of their children results in the following benefits to the children:

1. fewer behavioral problems.
2. higher levels of sociability.
3. higher grades in school.
4. lower risk of suspension, expulsion, or dropping out of school

When children did not have their fathers involved in their lives, they were more likely to suffer the following harms:

1. Girls were $21 / 2$ times more likely to suffer an early pregnancy.
2. Boys and girls were $53 \%$ more likely to commit suicide.
3. Boys were $63 \%$ more likely to run way from home.
4. Boys and girls were $37 \%$ more likely to abuse drugs.
5. Boys and girls were both more likely to commit a violent crime and end up in prison. .

In fact, entire books have been written on the harmful effects that fatherlessness has no children. It is now widely accepted that fatherlessness is a major cause of externalizing disorders in boys (such as conduct disorder) and internalizing disorders in girls (including anxiety disorders, eating disorders and depression). Thus, the costs to society of fatherlessness includes not only increased prison costs, but also lost worker productivity due to the mental health problems associated with fatherlessness. It therefore benefits our entire society if relationships between parents and children are preserved after divorce to the greatest extent possible.

## Because the data analysis in the Majority reports are based upon the traditional family model instead of the modern family model, the results are distorted, misleading and factually inaccurate.

- $\quad$ The Sterling and PSI reports are based upon an out dated model in assuming that the child never spends any time with the "non-custodial parent" (hereinafter referred to as the father) and that the father never spends any money on the child when the child is with the father. The Majority reports and the economic models they are based on assume that fathers do not have an equal need for a residence for the child and an equal need, or even any significant expenses relating to caring for the child.
- Residential credits should not be a deviation. Instead, they should be a presumption, explicitly incorporated into the child support obligation.
- The current model assumes that the father's only obligation to the child is financial. This is not true for intact families and it is even less true for divorced families. A father's commitment to his child should not end with the checkbook. Instead, he also has an "obligation" to continue to be involved in his child's life so that the child can be a bird with two wings.
- Lacking a "right of first refusal" clause, the traditional system of child support requires that a fully available father (who may be unemployed) is required to pay day care costs with imaginary "imputed income" rather than being allowed to care for the child without cost, which he would have been able to do without day care costs (and typically did do without day care costs) when the couple was married.
- The data in the PSI and Sterling reports also fail to take into account tax implications for fathers and mothers.
- $\quad$ The data in the reports also fails to account for numerous other hidden expenses faced by lower time fathers. For example, if one adds in the financial impact of requiring dads to pay for child care ( a requirement that does not exist for intact families), the divorced dad may have child care expenses far greater than are indicated in the economic table and far greater than is faced by any dad who is not divorced. Assuming 750 per month for child care, and 250 a month for medical insurance and dental bills, dads share could be 600 a month in addition to 600 for child support.
- Thus a "median" dad who nets 2000 a month could quickly wind up exceeding the $45 \%$ current cap even if he only has one child.
- The current system is so complex and difficult to understand, it requires parents who often do not have the money to pay $\$ 5,000$ or more for an attorney. This money would be better spent on caring for the child.
- Divorced dads, with no evidence of being anything other than a devoted father, are also often required to pay over \$10,000 for "parenting evaluations, another \$10,000 for Guardian Ad litems to represent the child, another \$10,000 for counseling and psychological testing, another $\$ 10,000$ for an appeal attorney, etc, etc, etc. All this is money that could have gone to the child. Instead it goes to what is a billion dollar domestic violence "industry".
- It is amazing that divorced dads have for the most part been able to maintain their composure despite this "system" abuse and being forced to watch their children's lives being destroyed.
- The PSI and Sterling reports provided to this workgroup, and the models they are based on are therefore outdated, inaccurate and a waste of this work groups time.


## The Child support system, as currently practiced, is in opposition to the clear language of the Washington State Parenting Act.

The Parenting Act's removal of the term "custodial parent" did not mean merely changing the words to "obligor" and "oligee". Instead, it was intended to change the way divorced parents should be viewed by the Courts by changing the concept away from fighting over ownership of the child to creating a cooperative plan for caring for the child after divorce and for preserving the child's relationships with both parents to the maximum extent possible.

For example, RCW 26.09.002 states in part: "The State recognizes the fundamental importance of the parent/child relationship to the welfare of the child; and that the relationship between the child and each parent should be fostered unless inconsistent with the child's best interest" (emphasis added).

In addition, two important, but little noted, terms or concepts were added to the Parenting Act as amendments to several sections of the Parenting Act in 2000 (when the Relocation Act of 2000 was added to the Parenting Act).

The first change was that the terms "custodial parent" and/or "primary residential parent" were both replaced in every section of the Parenting Act with the term "person with whom the child resides a majority of the time" (for example, see RCW 26.09.430). This precisely descriptive, but cumbersome phrase is typically shortened to "majority parent". Changing to this phrase explicitly acknowledges that the only difference between the two parents after divorce is that the child might reside with one parent more time than the child resides with the other parent. However, it also provides room for a third option, namely equal shared parenting. Because the child does not reside a 'majority of the time" with either 50-50 parent, both 50-50 parents are "minority" parents. This change in terminology thus creates a way for parents to compromise and remain equal after divorce just as they were equal before the divorce.

Up until this change in terminology, all divorces had to have a winner and a loser (the winner being the custodial parent, or later the primary residential parent). This adversarial structure increased conflicts between parents as they were forced to fight for the right to be the custodial or primary parent. Under this traditional system of divorce, the child was always the loser in that the child was always caught in the middle of this fight between the parents and often lost one of his or her parents.
Thus, by permitting parents to compromise on this issue, and creating a way for both parents to remain in the child's life after divorce, the change in language to "person with whom the child resides a majority of the time" was probably the most significant change that has ever occurred in Washington State family law. The person who created this concept was Bill Harrington, a leader in the Washington State Shared Parenting movement and the National Shared Parenting movement for the past 20 years. The person who supervised this change in language through the Washington State legislature in 2000 was Senator Jim Kastama, who has also been a long time advocate of retaining both parents in a child's life.

The second change in terminology, (also created by Bill Harrington) was the concept of a "principal residence" (see RCW 26.09.410). Prior to the introduction of this term, a child could only have one residence. This was called the "custodial residence" and later called the "primary residence". The term "principal residence" acknowledges that in shared parenting situations, the child has two important or principal residences. As used in the Parenting Act and the Relocation Act, the term "principal residence" is specifically tied to where the child spends the night on school nights. If the child spends a significant number of school nights at a residence (such is always the case with 5050 parents), then both 50-50 residences are "principal residences" of the child.

This change in terminology was not only intended to put the residences of both 50-50 parents on an equal footing after divorce, it was also intended to prevent either 50-50 parent from relocating the child away from the other 50-50 parent. Since both parents were "principal residences" but neither 50-50 parent is a "majority parent", neither parent has the right to give notice to move one of the child's principal residences outside of the school district.

This creates a "safe haven" for both parents and for residential stability for the children of 50-50 parents after divorce. This in turn reduces the need to fight over who gets the child during the divorce, by allowing parents to choose a third more "cooperative" way. This benefits the child not only because there is less conflict between parents, but more importantly, because the child does not have to face the risk of losing either parent.

A third change occurred in the 2007 Washington legislative session. Prior to this year, there was a "presumption against shared parenting" in the Parenting Act (RCW 26.09.187 (3) (b)). However, effective July 22, 2007, the restrictions to shared parenting were removed from the Parenting Act. The only restriction left in place is that shared parents must reside in "close geographic proximity". The Relocation Act further defines this proximity to be the "child's school district". (This requirement, that the child reside in the school district, is also a policy of every school district in the State).

Thus, Shared Parenting has come a long way in Washington State during the past 7 years. However, while the legislature wisely adopted the concepts of Shared Parenting and preserving the child's relationships with both parents, the Courts in Washington have been much slower, and even been a primary obstacle to shared parenting. It is difficult to understand why Court's have failed to follow the lead of the legislature. Perhaps they feel they are protecting the best interest of the child by consistently making extremely gender biased decisions in favor of the mother. However, the idea that one household is more important to the child's development than the other household is an incorrect and outdated notion which harms parents, children and is illegal here in Washington State. Thus the idea of a "custodial parent" harms fathers, mothers, children, schools, future relationships and the State.

There are in fact three kinds of parents that may occur after divorce. This work group only recognizes two of these kinds of parents, namely the traditional "custodial" and non-custodial" parents. But there are also Shared Parents, who both spend significant amounts of time with the child and both support "principal residences" of the child. This work group, and the Division of Child Support, should therefore change their terminology as well as their philosophical orientation to better reflect the notion that the child should retain both parents, and often has two "principal residences" or "Shared" residences after divorce. While this group should represent the interests of majority and non-majority parents, we should also recognize and represent this third group of "shared parents".

## Three examples of Shared parenting:

Example \#1: Nearly every family in North Bend has both parents working. I am aware of only one family in which the mom stays home on a full time basis taking care of the kids. For example, my next door neighbors have a small boy about to start school. The mom is a school teacher and she works five days a week. The dad is a landscaper and works a couple of days a week and then long hours on weekends. When both parents are gone, the grandparents come over and care for the boy. Thus, the mom cares for the kid two days a week, the dad cares for the kid three days a week and the grandparents care for the kid two days a week.
Example \#2: As a second example, in another family, they have two kids both in Elementary School (their girl is in second grade and is one of my daughter's best friends). The mom is a nurse and works four 10 -hour shifts during the week. The dad is a private building inspector and works mainly on weekends. He also writes his reports from home during the week while the kids are at school. I have never seen the grandparents. Thus the mom cares for the kids three days a week and the dad cares for the kids four days a week.
Example \#3: As a third example, my own work schedule back when my daughter was born was quite flexible. I typically taught outdoor education classes 12 hours a day on Saturdays and Sundays. I then taught Adult Education classes on Monday and Tuesday nights. My Ex worked very long hours five days a week as a Nursing assistant. Thus, my Ex cared for our daughter about $21 / 2$ days a week and I cared for her about $41 / 2$ days a week.
The point of describing these three examples is to show that shared parenting is no longer an unusual situation. If anything, Shared parenting is now the norm among intact parents. For the sake of child development, it should therefore be at least a possibility for parents after the get divorced.

### 8.3 Calculation of the Residential Credit using the "cross credit" method

There are at least three different ways to calculate a Parenting Time Adjustment or residential credit. This section will first introduce the method that is most in keeping with the intentions and reality of shared parenting. It will then address the drawbacks of the various other methods that have been proposed and/or used in other States (note that these other methods have been proposed mostly be people who do not understand shared parenting or are actively opposed to shared parenting. Thus the method I will describe next is the only method endorsed by Shared parenting advocates).
A basic principle of shared parenting is that parents should be given a "residential credit" or "parenting time adjustment" for any time they spend with their child. For all the reasons discussed above, it is important to retain both parents in the child's life to the greatest extent possible. Residential credits are what will make shared parenting more practical for more parents. The only method that treats both residences as incurring comparable expenditures is the "cross credit" method. In this method, each parents "income share" is compared to their "cost share" to determine the balance that either parent still owes as an "obligation transfer" to the other parent.

## Definitions:

"Total Combined Obligation" means the total cost of caring for the child during a month. In the traditional child support system, it was assumed that only the majority parent incurred costs for caring for a child. Thus, the total combined obligation went to the majority parent.
"Income share" means comparing each parents income to the combined income of both parents.
"Cost share" means comparing both parents cost (in terms of percentage of residential overnights the child is with that parent) to the total residential cost or total number of overnights. The daily cost share is determined by taking the total combined monthly obligation and dividing by 30 days. The monthly cost share is determined by multiplying the daily cost share times the average number of days per month the child is with that parent.
"Residential credit" is the monthly cost share of each parent.
"Transfer obligation" is the monthly income share minus the monthly cost share.
The child benefits by having as much time with each parent as possible. However, the child also benefits by having as much income from each parent as possible. The traditional child support method does not give the majority parent any time incentive to increase income and does not give the non-majority parent any financial incentive to spend time with the child. It should therefore be no wonder that divorced children live in poverty and get almost no time with the non-majority parent. By rewarding both parents for doing both things, the child ultimately benefits both financially and emotionally. If the parents have equal incomes, they will have equal "income shares". If parents have equal residential time with the child, then they will have equal "cost shares" In this specific case, neither parent will owe the other parent a transfer payment. However, if either the "income shares" or the "cost shares" are not equal, then one of the parents will owe a transfer obligation to the other parents. This formula explicitly recognizes that parents have two obligations to the child. The first is a financial (income) obligation. The second is a residential time (cost) obligation. These two parental obligations (time and income) are treated with equal importance as revealed by the examples shown in the following eight tables:

## Parenting Time Adjustment (PTA) "cross credit" calculation

Example \#1: For Median Combined Monthly Net Income, unequal income and unequal parenting time. (Traditional Parenting arrangement)

| PARENTING TIME ADJUSTMENT INCOME SHARE: 30-70 COST (TIME) SHARE: 80-20 | TOTAL AMOUNT | HIGHER TIME PARENT | LOWER TIME PARENT |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Economic Table.. Income ratio based on \% of combined income) <br> INCOME SHARE $=($ Combined Obligation X Income ratio) | \$600 | $\begin{aligned} 30 \% & \times \end{aligned} \begin{array}{r} 600 \\ = \end{array} \$ 180$ | $\begin{aligned} & 70 \% X \$ 600 \\ & =\$ 420 \\ & \text { (Pre credit child } \\ & \text { support) } \end{aligned}$ |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 80\% | 20\% |
| COST SHARE: <br> (amount paid directly) $=$ (combined total obligation $x$ \% time with child) |  | $\begin{array}{r} (\$ 600 \times 80 \%) \\ = \\ \$ 480 \end{array}$ | $\begin{aligned} & (\$ 600 \times 20 \%) \\ & =\$ 120= \\ & \text { Residential credit } \end{aligned}$ |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 420-\$ 120) \\ =\$ 300 \end{gathered}$ |
| Funds for child after transfer |  | $180+300=480$ | $420-300=120$ |
| Percentage of child funds after transfer |  | 80 | 20 |
| Amount Higher Time parent receives per day with the child (daily cost share) | \# days with child per month | 24 | $\begin{aligned} & 180+300= \\ & 480 / 24=20 \text { per day } \end{aligned}$ |
| Amount Lower Time parent receives per day with the child (daily cost share) |  | 6 | $\begin{gathered} 120 / 6=\$ 20 \\ \text { per day } \end{gathered}$ |

* day = a 24 hour period (see adjustment chart for credit for portions of a day
(The above method is adapted from the "straight line" cross credit method used in the Rogers Cost Share calculations and discussed on pages 30 to 32 of Rogers, R.M., (2005) A Brief Economic Critique of North Carolina's Child Support Guidelines. The only difference is that the math calculations have been more clearly specified to show how each parent's income share, cost share and residential credit are calculated).


## ADJUSTMENTS FOR PERIODS UNDER 24 HOURS

Periods under 24 hours, but equal to or more than 12 hours are counted as $1 / 2$ day. Periods under 12 hours on any given day are not counted.

The primary reason to consider half days is that many shared parenting arrangements are "split week" schedules whereby each parent has the child $31 / 2$ days a week. In addition, another popular schedule is the "extended weekend" schedule whereby the non-majority parent picks up the child at the release of school on Friday and returns the child to school on Monday morning. An extended weekend would count as $21 / 2$ days.

To maintain consistency of child support transfer payments every month, the total number of days to be credited to the minority parent may be added up on an annual basis and then divided by 12. Or the parents may elect to calculate the credit on a month to month basis. If a parent fails to exercise their time with the child per their obligation, then they would owe child support on that amount, just as they would owe child support if they failed to pay the full transfer amount.

There are several things to note about this "traditional parenting arrangement" table. First, if the child does not spend any time with the non-majority parent, there is no residential credit and thus no change in the transfer amount as determined by the economic table. Second, child costs associated with child support are clearly listed on a daily basis. In the case of $\$ 600$ per month total obligation dividing by 30 yields an obligation or estimated cost of meeting the child's basis needs of $\$ 20$ per day for the median family. The range in child costs per day runs from $\$ 10$ per day for minimum wage earners up to $\$ 40$ per day for high income parents. Thus if a minimum wage nonmajority parent spends their entire weekend taking care of their child and gives the majority parent the weekend off, that non-majority parent would receive a credit of 2 x $\$ 10=\$ 20$. Obviously, a parent is not going to spend the whole weekend with the child just to receive $\$ 20$. In addition, it is highly likely they will spend far more than $\$ 20$ during that weekend directly on the child. However, at least they will get a credit for $\$ 20$ so there will be a "perceived sense of fairness".

A common objection to residential credits is the claim that the majority parent has "higher costs" than the non-majority parent. These costs include having to provide a house and pay for clothing and school supplies. Such objections are usually raised by people who have never been non-majority parents. If anything the opposite is true. The child typically needs (and will demand) a room in both houses and clothes at both houses. In addition, majority parents typically have the child on school days when the child is gone most of the day.

By contrast the traditional non-majority parent has the child on weekends when the child gets to make demands on the parent all day. Any parent knows a child is much more expensive on the weekend than during the week.

Thus on a percentage of time basis, child caring costs are much higher for the nonmajority parent than they are for the majority parent. But the real benefit of this method is that it treats each parent equally and equally honors and acknowledges the time and income commitments each parent has made to the child.

The following charts show the residential credits for seven other common situations. Next is a chart for unequal incomes, but equal time. Then there is a chart for equal income but unequal time. These two charts confirm that this method treats time and income equally. Then, there is a chart for equal time and equal income.

Example \#2: For Median Combined Monthly Net Income, unequal income and equal parenting time.

| PARENTING TIME ADJUSTMENT INCOME SHARE: 30-70 COST (TIME) SHARE: 50-50 | TOTAL AMOUNT | LOWER INCOME PARENT | HIGHER INCOME PARENT |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Economic Table.. Income ratio based on \% of combined income) <br> INCOME SHARE $=($ Combined Obligation <br> X Income ratio) | \$600 | $\begin{aligned} 30 \% X & \$ 600 \\ = & \$ 180 \end{aligned}$ | $\begin{aligned} & 70 \% \times \$ 600 \\ & =\$ 420 \end{aligned}$ <br> (Pre credit child support) |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 50\% | 50\% |
| COST SHARE: <br> (amount paid directly) $=$ (combined total obligation $x \%$ time with child) |  | $\begin{array}{r} (\$ 600 \times 50 \%) \\ = \\ \$ 300 \end{array}$ | $\begin{aligned} & (\$ 600 \times 50 \%) \\ & =\$ 300= \\ & \text { Residential credit } \end{aligned}$ |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 420-\$ 300) \\ =\$ 120 \end{gathered}$ |
| Funds for child after transfer |  | $180+120=300$ | $420-120=300$ |
| Percentage of child funds after transfer |  | 50 | 50 |
| Amount Higher Time parent receives per day with the child | \# days with child per month | 15 | $\begin{gathered} 300 / 15=20 \\ \text { per day } \end{gathered}$ |
| Amount Lower Time parent receives per day with the child |  | 15 | \$20 per day |

With this example, we see that even though the higher income parent is making double what the lower income parent is making, both parents receive the same amount of money for each day they spend with the child.

Example \#3: For Median Combined Monthly Net Income, equal income and unequal parenting time.

| PARENTING TIME ADJUSTMENT INCOME SHARE: 50-50 COST (TIME) SHARE: 70-30 | TOTAL AMOUNT | $\begin{aligned} & \text { HIGHER } \\ & \text { TIME } \\ & \text { PARENT } \end{aligned}$ | $\begin{aligned} & \text { LOWER } \\ & \text { TIME } \\ & \text { PARENT } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Child Support Economic Table) Income ratio based on \% of combined income) <br> INCOME SHARE = (Combined Obligation <br> X Income ratio) | \$600 | $\begin{aligned} & 50 \% X \$ 600 \\ &=\$ 300 \end{aligned}$ | $\begin{aligned} & 50 \% x \$ 600 \\ & =\$ 300 \\ & \text { (Pre credit child } \\ & \text { support) } \end{aligned}$ |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 70\% | 30\% |
| COST SHARE: <br> (amount paid directly) $=$ (combined total obligation $x \%$ time with child) |  | $\begin{array}{r} (\$ 600 \times 70 \%) \\ = \\ \$ 420 \end{array}$ | $\begin{aligned} & (\$ 600 \times 30 \%) \\ & =\$ 180= \\ & \text { Residential credit } \end{aligned}$ |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 300-\$ 180) \\ =\$ 120 \end{gathered}$ |
| Funds for child after transfer |  | $300+120=420$ | $300-120=180$ |
| Percentage of child funds after transfer |  | 70 | 30 |
| Amount Higher Time parent receives per day with the child | \# days with child per month | 21 | $\begin{gathered} 420 / 21=20 \\ \text { per day } \end{gathered}$ |
| Amount Lower Time parent receives per day with the child |  | 9 | $\begin{gathered} \text { 180/9=\$20 } \\ \text { per day } \end{gathered}$ |

Note that for examples, \#2 and \#3, the transfer amount was the same (\$120), even though in the first case the 70-30 split was in terms of income difference and in the second case, the 70-30 split was in terms of time difference. Thus, this method treats time and money commitments to the child equally.

## Example \#4: For Median Combined Monthly Net Income,

 equal income and equal parenting time.| PARENTING TIME ADJUSTMENT INCOME SHARE: 50-50 COST (TIME) SHARE: 50-50 | TOTAL AMOUNT | FIRST PARENT | OTHER <br> PARENT |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Child Support Economic Table) Income ratio based on \% of combined income) <br> INCOME SHARE $=$ (Combined Obligation <br> X Income ratio) | \$600 | $\begin{aligned} & 50 \% X \$ 600 \\ &=\$ 300 \end{aligned}$ | $\begin{aligned} & 50 \% X \$ 600 \\ & =\$ 300 \\ & \begin{array}{l} \text { (Pre credit child } \\ \text { support) } \end{array} \\ & \hline \end{aligned}$ |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 50\% | 50\% |
| COST SHARE: <br> (amount paid directly) $=$ (combined total obligation $x \%$ time with child) |  | $\begin{gathered} (\$ 600 \mathrm{x} \\ 50 \%) \\ = \\ \$ 300 \end{gathered}$ | $\begin{gathered} (\$ 600 \times 50 \%) \\ = \\ \$ 300 \\ \text { Residential } \\ \text { credit } \end{gathered}$ |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 300-\$ 300) \\ =\$ 0 \end{gathered}$ |
| Funds for child after transfer |  | 300 | 300 |
| Percentage of child funds after transfer |  | 50 | 50 |
| Amount first parent receives per day with the child | \# days with the child per month | 15 | $\begin{gathered} 300 / 15=20 \\ \text { per day } \end{gathered}$ |
| Amount other parent receives per day with the child |  | 15 | $\begin{gathered} 300 / 15=\$ 20 \\ \text { per day } \end{gathered}$ |

This table shows that in the case where both parents have equal incomes and spend equal time with the child, there is no transfer payment. By contrast, under the current system, the so-called "non-custodial" 50-50 parent might have to make a transfer payment to the "custodial" 50-50 parent of $\$ 300$ per month. Thus, the proposed system is much fairer than the current system.

## Example \#5: For Low Combined Monthly Net Income,

 equal income and unequal parenting time.(Both parents at just above full time minimum wage)

| PARENTING TIME ADJUSTMENT INCOME SHARE: 30-70 COST (TIME) SHARE: 80-20 | TOTAL AMOUNT | HIGHER TIME PARENT | LOWER <br> TIME PARENT |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Economic Table.. Income ratio based on \% of combined income) INCOME SHARE $=($ Combined Obligation $X$ Income ratio) | \$390 | $\begin{array}{r} 50 \% \times \$ 390 \\ =\$ 195 \end{array}$ | $\begin{aligned} & 50 \% \times \$ 390 \\ & \text { = } \$ 195 \\ & \text { (Pre credit child } \\ & \text { support) } \end{aligned}$ |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 80\% | 20\% |
| COST SHARE: <br> (amount paid directly) = (combined total obligation $x$ \% time with child) |  | $\begin{array}{r} (\$ 390 \times 80 \%) \\ = \\ \$ 312 \end{array}$ | $\begin{aligned} & (\$ 390 \times 20 \%) \\ & =\$ 78= \end{aligned}$ <br> Residential credit |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 195-\$ 78) \\ =\$ 117 \end{gathered}$ |
| Funds for child after transfer |  | $195+117=312$ | $195-117=78$ |
| Percentage of child funds after transfer |  | 80 | 20 |
| Amount Higher Time parent receives per day with the child (daily cost share) | \# days with the child per month | 24 | $\begin{gathered} 312 / 24=13 \\ \text { per day } \end{gathered}$ |
| Amount Lower Time parent receives per day with the child (daily cost share) |  | 6 | $\begin{gathered} 78 / 6=\$ 13 \text { per } \\ \text { day } \end{gathered}$ |

This chart explicitly recognizes that at minimum wage there is, by definition, no difference between the incomes of the two parents. With a combined obligation of $\$ 390$, based upon a combined net income of $\$ 2600$ or individual net incomes of $\$ 1300$, the daily cost share equals $390 / 30=\$ 13$ per day. An important question is whether allowing the non-majority parent a residential credit of $\$ 78$ per month would place the majority parent below the SSR minimum for one parent with one child. Assuming SSR $=125 \%$ of Federal Poverty Guideline or $\$ 1374$, the answer is no as the majority parent would have a total monthly net income of $1300+78=1378$.

## Example \#6: For High Combined Monthly Net Income, unequal income and unequal parenting time.

For higher time parent at median monthly net income (\$2000) and lower time parent at high monthly net income $(\$ 6000)$

| PARENTING TIME ADJUSTMENT INCOME SHARE: 25-75 COST (TIME) SHARE: 80-20 | TOTAL AMOUNT | HIGHER TIME PARENT | LOWER TIME PARENT |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Economic Table.. Income ratio based on \% of combined income) <br> INCOME SHARE $=($ Combined Obligation $X$ Income ratio) | \$1200 | $\begin{array}{r} 25 \% X \$ 1200 \\ =\$ 300 \end{array}$ | $\begin{aligned} & 75 \% \times \$ 1200 \\ & =\$ 900 \\ & \text { (Pre credit child } \\ & \text { support) } \end{aligned}$ |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 80\% | 20\% |
| COST SHARE: <br> (amount paid directly) $=$ (combined total obligation $x$ \% time with child) |  | $\begin{gathered} (\$ 1200 \times 80 \%) \\ = \\ \$ 960 \end{gathered}$ | $\begin{aligned} & (\$ 1200 \times 20 \%) \\ & =\$ 240= \\ & \text { Residential credit } \end{aligned}$ |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 900-\$ 240) \\ =\$ 660 \end{gathered}$ |
| Funds for child after transfer |  | $300+660=960$ | $900-660=240$ |
| Percentage of child funds after transfer |  | 80 | 20 |
| Amount Higher Time parent receives per day with the child (daily cost share) | \# days with the child per month | 24 | 960/24=40 per day |
| Amount Lower Time parent receives per day with the child (daily cost share) |  | 6 | $\begin{gathered} 240 / 6=\$ 40 \\ \text { per day } \end{gathered}$ |

In all six cases described above, the funds for the child after transfer exactly match the cost incurred by that parent during that parents residential time with the child. This should be the purpose of the transfer payment. It is not to act as a hidden form of alimony. Rather it is to provide for the basic needs of the child while the child is with each parent as established by the combined income of the parents. In essence, the combined obligation is a pool of income specifically set aside for the needs of the child. This income is then divided between the parents based upon the percentage of time each parent spends with the child.

The following chart shows the presumed daily obligation for given monthly obligations. Multiplying the daily obligation times the number of days the child is with the nonmajority parent should yield the residential credit.

Presumed Daily Obligation = Combined Monthly Obligation /30

| Combined monthly net income | Presumed daily obligation | Combined Obligation for the first child | Presumed daily obligation | Combined Obligation for the first and second child | Presumed daily obligation | Combined Obligation for the first three children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2400 | 12 | 354 | 12 | 360 | 12 | 360 |
| 2500 | 12 | 375 | 15 | 460 | 15 | 460 |
| 2600 | 13 | 390 | 18 | 560 | 18 | 560 |
| 2800 | 14 | 420 | 25 | 760 | 25 | 760 |
| 3000 | 15 | 450 | 27 | 810 | 32 | 960 |
| 3200 | 16 | 480 | 29 | 864 | 38 | 1152 |
| 3400 | 17 | 510 | 30 | 918 | 40 | 1224 |
| 3600 | 18 | 540 | 32 | 972 | 43 | 1296 |
| 3800 | 19 | 570 | 34 | 1026 | 46 | 1368 |
| 4000 | 20 | 600 | 36 | 1080 | 48 | 1440 |
| 4200 | 21 | 630 | 38 | 1134 | 50 | 1512 |
| 4400 | 22 | 660 | 40 | 1188 | 53 | 1584 |
| 4600 | 23 | 690 | 41 | 1242 | 55 | 1656 |
| 4800 | 24 | 720 | 43 | 1296 | 58 | 1728 |
| 5000 | 25 | 750 | 45 | 1350 | 60 | 1800 |
| 5200 | 26 | 780 | 47 | 1404 | 62 | 1872 |
| 5400 | 27 | 810 | 49 | 1458 | 65 | 1944 |
| 5600 | 28 | 840 | 50 | 1512 | 67 | 2016 |
| 5800 | 29 | 870 | 52 | 1566 | 69 | 2088 |
| 6000 | 30 | 900 | 54 | 1620 | 72 | 2160 |
| 6200 | 31 | 930 | 55 | 1674 | 74 | 2232 |
| 6400 | 32 | 960 | 57 | 1728 | 77 | 2304 |
| 6600 | 33 | 990 | 58 | 1782 | 79 | 2376 |
| 6800 | 34 | 1020 | 60 | 1836 | 82 | 2448 |
| 7000 | 35 | 1050 | 63 | 1890 | 84 | 2520 |
| 7200 | 36 | 1080 | 65 | 1944 | 86 | 2592 |
| 7400 | 37 | 1110 | 67 | 1998 | 89 | 2664 |
| 7600 | 38 | 1140 | 68 | 2052 | 92 | 2736 |
| 7800 | 39 | 1170 | 70 | 2106 | 94 | 2808 |
| 8000 | 40 | 1200 | 72 | 2160 | 96 | 2880 |

Example \#7: Residential Credit for a "Split Time" Parenting Arrangement. (equal income and unequal parenting time)
(Both parents at median monthly net income (\$2200)
It is common (especially among parents who live far apart) for the child to spent the school year with one parent and the three school Holidays and summer vacation with the other parent. For example, one parent sent the work group the following question:

I have joint custody of my two children. My ex-wife is the primary caretaker. The court order has awarded her $\$ 653$ in child support payments. I would like to know whether I need to make a child support payment for months in which I assume the role of primary caretaker. For example, for 9 months of the year, during the time the children are attending school, my ex-wife is the primary caretaker. However, for the other 3 months the children reside with me. They live in a separate residence and $i$ am buying all of the food and other needs during that time period. Can I thus skip child support payments during those 3 months?

The above father asks how to calculate a "split time" parenting arrangement (shown on the next page). If we assume that both parents have the same income, the combined obligation would be about $2 x \$ 650=\$ 1300$. If we further assume that both children are over 12 years old, then using the current table, the parents combined net monthly income would be about $\$ 4400$, meaning each parent had income of $\$ 2200$. Using the proposed "cost share" table, the result would be almost the same as both tables are supposedly based upon a rate of $27 \%$. (There is about a $5 \%$ difference, but this is only because the existing table uses $28 \%$ for older kids and $26 \%$ for younger kids... the average would be nearly identical).

While the simple solution would be to have the minority parent skip child support during time he was the majority parent, this solution does not recognize that many different specific arrangements might occur under this general scenario. For example, the nonmajority parent may or may not have the two kids during the Holidays months. Also the majority parent may or may not have the kids during some of the three summer months. This is very likely given that most school districts now use a 10 week summer rather than a 12 week summer.

The solution is to count the \# of days on the residential schedule that the child actually spends in the care of each parent. Using the above example and assuming the children spend only the 10 summer weeks with the father and the remainder of the year with the mother, the two kids would be with the father for 7 days a week times 10 weeks a year for a total number of 70 days per year. Assuming the father gets two additional days per year, he would have a total of 72 days per year for an average of 6 days per month for an 80-20 annual split of days. Thus, the calculations would look like the following:

From the chart on the preceding page, with two children and a combined monthly obligation of $\$ 1300$, the daily obligation is $\$ 43$. The annual residential credit for the father would be $72 \times \$ 43=\$ 3096$ This is higher than the credit proposed by the father in the email ( $3 \times 653=1959$ ). This recognizes the fact that in this parenting arrangement, there will be two residences and both residences will have to have bedrooms for the children. Thus, the father will incur significant child costs all year long even though the children only spend the summer with him. This credit can be received in one of two ways. The simpliest way would be to divide the credit by 12 (3096/12=258) and subtract the monthly credit from the monthly child support transfer payment (653-258=\$395 per month). However, it can also be done by subtracting the credit from the three summer monthly payments and dividing the balance by three to determine how much the other parent will pay during the summer months. ( 3 x $653=1959 ; 3096-1959=1137 / 3=\$ 379$. Thus the mother should pay the father $\$ 379$ per month during the three summer months that the children spend with the father.

Example \#7: Residential Credit for a "Split Time" Parenting Arrangement. (equal income and unequal parenting time)
(Both parents at median monthly net income (\$2200)

| PARENTING TIME ADJUSTMENT <br> INCOME SHARE: 50-50 <br> COST (TIME) SHARE: 80-20 <br> TWO CHILDREN | TOTAL AMOUNT | $\begin{aligned} & \text { HIGHER } \\ & \text { TIME } \\ & \text { PARENT } \end{aligned}$ | $\begin{aligned} & \text { LOWER } \\ & \text { TIME } \\ & \text { PARENT } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Economic Table.. Income ratio based on \% of combined income) <br> INCOME SHARE $=($ Combined Obligation $X$ Income ratio) | \$1300 | $\begin{aligned} 50 \% X & \$ 1300 \\ = & \$ 650 \end{aligned}$ | $\begin{aligned} & 50 \% \times \$ 1300 \\ & =\$ 650 \\ & \text { (Pre credit child } \\ & \text { support) } \end{aligned}$ |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 80\% | 20\% |
| COST SHARE: <br> (amount paid directly) $=$ (combined total obligation $x \%$ time with child) |  | $\begin{gathered} (\$ 1300 \\ \times 80 \%) \\ = \\ \$ 1040 \end{gathered}$ | $\begin{aligned} & (\$ 1300 \times 20 \%) \\ & =\$ 260= \\ & \text { Residential credit } \end{aligned}$ |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 650-\$ 260) \\ =\$ 390 \end{gathered}$ |
| Funds for child after transfer |  | $\begin{aligned} & 390+ \\ & 650=1040 \end{aligned}$ | 650-390=260 |
| Percentage of child funds after transfer |  | 80 | 20 |
| Amount Higher Time parent receives per day with the child (daily cost share) | \# days with the child per month | 24 | $\begin{gathered} \text { 1040/24=34 } \\ \text { per day } \end{gathered}$ |
| Amount Lower Time parent receives per day with the child (daily cost share) |  | 6 | $\begin{gathered} 240 / 6=\$ 43 \\ \text { per day } \end{gathered}$ |

This number from the above chart is only slightly different from the child support amount as determined by the Daily Obligation table ( $\$ 390$ per month versus $\$ 395$ per month). This difference is due to a rounding error (due to the fact that the total obligation is not exactly $\$ 43$ per day). Note that if the dad also has the kids during any of the three week long school breaks, he would receive an additional credit of $7 \times \$ 43=$ $\$ 300$ per week. Thus, in addition to the cost of these two children being viewed as $\$ 43$ per day or $\$ 1300$ per month, it can also be viewed as $\$ 300$ per week.

## Example \#8: Residential Credit for a "Higher Income majority parent" Parenting Arrangement. <br> (unequal income and unequal parenting time) <br> (Majority parent has $60 \%$ of income and $60 \%$ of time with the child) (note that this is a typical situation when the father is the CP)

| PARENTING TIME ADJUSTMENT INCOME SHARE: 70-30 COST (TIME) SHARE: 70-30 TWO CHILDREN | TOTAL AMOUNT | HIGHER TIME PARENT | LOWER TIME PARENT |
| :---: | :---: | :---: | :---: |
| COMBINED OBLIGATION <br> (from Economic Table.. Income ratio based on \% of combined income) <br> INCOME SHARE $=($ Combined Obligation $X$ Income ratio) | \$1000 | $\begin{array}{r} 60 \% X \$ 1000 \\ =\$ 600 \end{array}$ | $\begin{aligned} & \text { 40\% X \$1000 } \\ & =\$ 400 \\ & \text { (Pre credit child } \\ & \text { support) } \end{aligned}$ |
| PERCENTAGE OF RESIDENTIAL TIME WITH THE CHILD | 100\% | 60\% | 40\% |
| COST SHARE: <br> (amount paid directly) = (combined total obligation $x$ \% time with child) |  | $\begin{gathered} (\$ 1000 \\ \times 60 \%) \\ = \\ \$ 600 \end{gathered}$ | $\begin{aligned} & (\$ 1000 \times 40 \%) \\ & =\$ 400= \end{aligned}$ <br> Residential credit |
| TRANSFER AMOUNT = Income share minus cost share |  | 0 | $\begin{gathered} (\$ 400-\$ 400) \\ =\$ 0 \end{gathered}$ |
| Funds for child after transfer |  | 600 | $400-0=400$ |
| Percentage of child funds after transfer |  | 60 | 40 |
| Amount Higher Time parent receives per day with the child (daily cost share) | \# days with child per month | 18 | $\begin{gathered} \text { 600/18=33 } \\ \text { per day } \end{gathered}$ |
| Amount Lower Time parent receives per day with the child (daily cost share) |  | 12 | $\begin{gathered} \text { 400/12=\$33 } \\ \text { per day } \end{gathered}$ |

In this example, the reason the father's income is higher than the mother's income is because of the gender bias of the courts. As was confirmed earlier in this analysis, fathers are typically not designated as the "majority time" parent unless there is something wrong with the mother. Such mothers typically have low incomes, and the data shows their incomes to be much less than that of typical "median mothers". Nevertheless, the above chart confirms that if each parents share of combined income is equal to their share of time with the child, there will be no transfer payment as each parent will spend their share of the combined obligation directly on the child during their residential time with the child. The above "residential credit" method is flexible in that it can be fairly applied to any income ratio and any residential time ratio situation. This should eliminate many of the current "deviations". We will next consider the drawbacks of other methods used to calculate residential credits

### 8.4 Drawbacks of arbitrary percentage of time thresholds

Some states require that the child reside with the non-majority parent a certain minimum percentage of time (such as 20 or $30 \%$ of the time) in order to receive a residential credit. However, an arbitrary "percentage of time " threshold suffers from several problems.

The first is that it ignores the obvious fact that the non-majority parent incurs expenses for the child every day the child is with that parent. An important study was conducted by Fabricius and Braver which has shed new light on how much non-majority fathers actually spend on their children while the children are in their care (Non-Child Support Expenditures on Children by Non-residential Divorced Fathers, Family Court Review, Vol. 41, 2003). Rather than asking majority mothers for this information (as the CES does) or non-majority fathers for this information, the authors deliberately sought out a less biased source of information... the children of divorce. In a survey of several hundred children of divorce, the authors found that fathers direct expenses on children increased in a linear fashion according to the amount of time the fathers spent with their children.

Contrary to the standard assumption of the Betson-Rothbarth model that NCPs' do not incur child costs, even fathers who were given very little residential time with their children still incurred significant direct expenses. For example, even when children only spent an average of $10 \%$ of their time with their father, $40 \%$ of those fathers provided a bedroom for the child. Given that housing is the single greatest component of child costs, this is a very surprising result that casts the "no NCP expense" assumption of the Betson-Rothbarth model into doubt. Equally surprising, of children who only spent $25 \%$ of their time with their fathers, $77 \%$ of those fathers provided the child with a bedroom of their own. This result suggests that most non-majority parents incur not only significant un-credited child costs, but child costs that are comparable to the child costs incurred by majority parents! On page 12 of their report, the authors concluded, "The current findings suggest that the typical assumptions about the economics of noncustodial fathers may simply be wrong".

In addition to ignoring the straight line increase in costs for non-majority parents, threshold models ignore the fact that the majority parent's expenses are reduced every day the child is not with that parent. While the majority parents expenses may not be lowered in a "straight-line: per day fashion, the non-majority parents non-credited expenses will always exceed those of the majority parent as the non-majority parent will have more days per year when the child is not with that parent yet the parent is still incurring child costs (such as for the room the child is not using).

A third problem with thresholds is that they creates two different kinds of non-majority parents. Those above the threshold are rewarded with a credit while those slightly below the threshold are not. This creates a "cliff effect" in that the non-credited expenses of the non-majority parent are not considered until they are very large. Thus, when they are finally considered, they are so large that they require the use of an inflated child cost "multiplier" (discussed next) to even out the award. Thus, any threshold would be contrary to the principle of equal treatment for all parents.

The whole point of residential credits is to treat all parents as equally as possible and to eliminate any distinction between parents in order to reduce conflict between parents after divorce. In addition, in the Fabricius study just described, the authors found no evidence to support a "cliff" model of expenses. Instead, they found just the opposite, namely on all expenses from clothing, to bicycles to bedrooms, there was a straight-line relationship between the amount of time the child spent with the non-majority father and the amount the father spent on the child.

A final problem of thresholds is that they are completely arbitrary. There is no evidence to support the contention that there should be a $30 \%$ rather than a $20 \%$ threshold or a $10 \%$ threshold. If anything, just the opposite has been shown to be the case. Even parents who only have their children $10 \%$ of the time are incurring significant costs associated with that visitation.

Since both parents incurred nearly identical fixed "child cost" expenses on a monthly basis (such as paying for a bed room for the child whether the child is in the bedroom or not), it is far more likely that the non-majority parent has higher daily costs than a parent who has a higher percentage of time with the child. Given the straight-line relationship just described the only equitable solution is a straight-line cross credit calculation. (For a more detailed comparison of the ratio of costs incurred by majority and non-majority parents, see Henman, P. and Mitchell, K., (2001) Estimating the Costs of Contact for non-residential parents: A budget standards approach, Journal of Social Policy, Volume 30, Issue 3, pp. 495-520).

### 8.5 Drawbacks of using a "cross credit multiplier" calculation

Some States use the cross credit method shown above, but add in a multiplier, typically 1.5 , to the calculation to give a preference to the higher costs supposedly incurred by the "majority" parent. There are several problems to the multiplier addition. The first is that it assumes that the economic table is does not accurately account for all child rearing costs after divorce and thus there should be a $50 \%$ increase to the amount in the cost table (raising the total obligation $150 \%$ ). There is no justification for this assumption. If anything, just the opposite is true. The parent with less time typically incurs far more un-credited expenses and has far fewer tax benefits than the "majority" parent. More important, giving one household a financial benefit over the other household just gets parents fighting over who will get the best household. One of the primary intentions of shared parenting is to reduce parental conflict after divorce. It is therefore important to eliminate as much as possible any distinctions between the parents that might promote conflict between them. Therefore adding a multiplier to either parent is not justified and in fact, harmful to the child.

It is worthwhile to examine where the idea of a $150 \%$ multiplier came from. As discussed earlier in this analysis, numerous studies have shown that the costs of having two separate households after divorce is at least $40 \%$ greater than the cost of an intact family household. Since the child support schedule is (erroneously) based upon an intact family household, opponents of shared parenting argue that there needs to be a $50 \%$ increase up to the actual cost so that the child's standard of living (and thus the custodial parents standard of living) remains the same after divorce as it was before divorce. But this is faulty reasoning in that it assumes a " $50 \%$ ghost income" that suddenly permitted a $50 \%$ rise in expenses after divorce.

In fact, the incomes of both parents typically fall after divorce. But assuming that they remain the same as they were before divorce, the two incomes will now have to support two households instead of one. This is exactly why Rogers argues that what matters after divorce is not the total combined income, but rather the average of the two incomes. As Rogers (2005) has correctly observed, "The average income is the maximum standard of living that can be sustained in both households".
Put another way, while before divorce each parent had access to the full $100 \%$ of combined income, after divorce each parent only has access to about 75\% of the combined income. Thus, if there is to be parity between parents to minimize conflict between parents, then both parents experience should experience a $25 \%$ drop in their standard of living after divorce (and the child will also experience a $25 \%$ drop in their standard of living). This is another reason to conclude that the current child support tables are 20 to 30 \% too high.

The State of Kansas addresses the problem of accounting for two houses by deducting the estimated cost of the second house from the income of the non-majority parent (thus lowering the combined income of the parents which lowers the combined obligation of the parents and lowers the \% obligation of the non-majority parent). The Kansas guidelines state:

The (child cost) schedules also include a built- in reduction from the average expenditures per child (the dissolution burden), because of the financial impact on the family of maintaining two households instead of one. (Kansas Child Support Guidelines, II (c).

While the Kansas solution does address the single greatest inequity between majority and non-majority parents, this correction is somewhat hidden in the table itself and does not address any other expenses incurred by the non-majority parent while the child is in their care. Thus, it would be more equitable to adopt a "total child cost" approach as advocated by Rogers and as used in this analysis.

If there is no reduction in the child support table (as we have proposed) and if a multiplier is to be used to represent the true economic situation after divorce, the multiplier should be $75 \%$, not $150 \%$. However, a much more honest solution is to simply reduce the economic table to the $15 \%$ flat rate we have proposed for "actual child costs", and then not use any multiplier at all. Even if the current table is retained (i.e., adopting the status quo option described above), it would still be more equitable to use the straight line cross credit calculation. In other words, the cross credit calculation yields the most equitable result regardless of the economic table it is used with.

Another argument used to rationalize a $150 \%$ multiplier is to adjust for parenting time that exceeds 33\% "threshold" of total time. The argument is that if a parent gets no credit for any time under $33 \%$ of time, then the total $100 \%$ obligation is for only $66 \%$ of time. This reasoning incorrectly assumes that the total obligation is actually $150 \%$ to allow for a $50 \%$ reduction at $33 \%$ of the time. In short, the multiplier is used to compensate for the "cliff effect" associated with a 33\% of time threshold. However, the problem is with the threshold itself as discussed above. If there is no threshold, there is no cliff effect and thus no need for a multiplier..

An additional problem is that the argument is factually incorrect. The total obligation was not determined based upon the child being with the majority parent $66 \%$ of the time. Instead, every method (including the Engel method, the Betson Rothbarth method and the USDA method) was based upon the clearly stated assumption that the child would be with the majority parent $100 \%$ of the time and that the non-majority parent incurred no costs directly associated with the child. Thus, the use of a multiplier cannot be justified by any economic argument. (for a more detailed discussion of the accounting errors introduced by using multipliers and thresholds to determine residential credits, see Rogers, R.M., (2005) A Brief Economic Critique of North Carolina's Child Support Guidelines, pages 33-38).

### 8.6 Drawbacks of a credit/debit method

Some States, such as Tennessee, have adopted a "stick and carrot" approach to shared parenting. If the minority parent cares for the child 30 to $50 \%$ of the time, they receive a significant residential credit. However, the traditional every-other-weekend parent receives no credit costs they incur while caring for the child.

Most controversial, if a minority parent fails to spend any time with the child, that parent is punished by having the child support obligation raised 20 to $30 \%$. This method was obviously not created by an educational psychologist. There is no benefit in punishing a parent for not spending time with the child. In fact, the resentment of being forced to keep up with visitation is likely to lead to the minority parent spending even less time with the child. Shared parenting is and should remain a voluntary choice. It is an honor and privilege to spend time with the child. A child does not benefit from spending time with a parent that does not want to spend time with the child.

Also this method makes no sense economically. The majority parent has already received $100 \%$ of the cost of raising the child via the assumptions used to create the Economic Table. Giving them 120 to $130 \%$ of the cost of raising the child reimburses them for costs they have not incurred. If a State wants to adopt such an approach, it should also reduce the economic table by 20 to $30 \%$. But this would just be robbing Peter to pay Paul. Certainly this method has no real benefit to either parent or to the child or to the traditional parenting arrangement or to shared parenting.

## Per diem methods:

Some states use arbitrary charts that give the non-majority parent a percent credit that rises based upon the number of days that parent spends with the child. The problem with these arbitrary methods is that they may not be fair to the higher or lower income parent and they may not be fair to the higher or lower time parent. If we are going to "fix the system" we should do it with a method that is fair to all parents, regardless of their income and regardless of their time spent with the child.

The cross credit method described above essentially is a per diem method in that the cost share of either parent is arrived at by dividing the total combined obligation 30 days to get a daily obligation. This daily obligation is then multiplied by the average number of days per month the child spends with that parent to determine that parents "cost share". The difference between this method and other "per diem" methods is that both parents are treated as equals, thus eliminating the current bias in favor of the majority parent and the current resentment of the non-majority parent.

## Other arguments in favor of Parenting Time Adjustments

Officials in States that have enacted parenting time adjustments have found that these residential credits increase the perceived fairness among non-majority parents. The adjustments acknowledge that non-majority parent's contribution to the child both financially and in terms of time and care given to the child. Increased "perception of fairness" also increases minority parent payments of child support.
Parenting time adjustments also increase parental involvement by minority parents. This in turn reduces adverse risk factors faced by children of divorce.

There have been two concerns raised by opponents of Parenting Time Adjustments. The first is that it may result in inadequate financial resources for the majority parent. However, if both parents are to be treated as equals, the financial resources and time commitment of both parents should be taken into consideration when adopting shared parenting arrangements. The second concern is that the minority parent may seek a residential credit, but not actually fulfill the time obligation in terms of time spent with the child. There are no studies that support this concern. Instead, non-majority parents are typically desperate to spend time with the child and build their relationship with their child during the limited time they get. However, any failure by either parent to comply with any provision in the couple's parenting plan should be deemed as "adequate cause" for the other parent to seek a modification of that plan and/or seek compensation for the loss of time/money as easily determined by the preceding tables.

A more common problem is the presence of logistical obstacles that may prevent the parents from following through on their agreements. For example, either or both parents may face job changes that make either a split week or alternating week schedule hard to follow. This is a problem for married couples as well as divorced couples. It requires parents to make great sacrifices in terms of careers, living arrangement and cooperation with another parent who they may not agree with to make shared parenting arrangements successful. It may even take the assistance of a "parenting coach" to help parents resolve conflicts in a flexible and creative way. But the reward for the parents and for the child is priceless as all of them get to retain their relationships with the child and the child gets the benefits of two wings instead of one.

## SECTION NINE: ADDITIONAL ISSUES RAISED BY PUBLIC COMMENT, BUT NOT INCLUDED IN THE LEGISLATIVE LIST OF ISSUES:

### 9.1 An issue that was raised many times during the public hearings on child support was the lack of accountability in terms of how custodial (higher time) parents spend the child support payments they receive.

Many lower time parents testified that their ex-spouses were able to retire on the child support payments while the lower time parent was driven to bankruptcy or had to take on a second job just to make ends meet. They point out that the funds which are supposed to go to the child never reach the child. The pointed out that the IRS demands accountability. They ask that custodial parents also be held accountable to at least make some kind of showing that the funds were spent on the child. Yet while these stories serve as further evidence that the current economic table is too high, as a practical matter, there will never be accountability. Therefore lower time parents should focus their energies on bringing more honesty to the Economic Table and not worrying about the lack of accountability of their former spouses.

One of the major objectives of nearly every proposal in this analysis was to reduce conflict between parents. Shared parenting by divorced parents requires a very clear line of separation between the parents. Therefore, any language that restricts or attempts to control or hold accountable how either parent spends the transfer payments, would only increase conflict between parents.

The only way to insure that money will actually be spent on the child is to restrict Child Support payments to the basic needs of the child and then spend the money not transferred on the child when the child is with you. Rather than complaining because the ex won't buy the child clothes or shoes that fit, all you can do is buy the child new shoes when the child is with you and then not complain when the new clothes and new shoes go over to the other house and you never see them again.

As parents we like to believe that we can protect our children from harm. We can not. We have no control over what happens to children when they are with the other parent. If we complain, all that does is create conflict and tension and stress for the child. The sooner we get away from complaining about the other parent and focus instead on how to improve the child's life when the child is with us, the better it will be for the child.

### 9.2 Additional Issue: Accountability for court ordered payments. All parents should be entitled to use child support obligations for equitable relief to recover court ordered costs against the other parent.

While parents cannot be held accountable for how they spend money that a court orders to them, both parents should be held accountable for refusing to pay the other parent any amount the court orders paid to the other parent or for failing to meet any other court ordered obligations to the other parent. It is in a child's best interest that both parents treat their obligations to the other parent fairly and responsibly. When a court orders both parents to pay a proportional share of child costs or medical costs, these obligations should rise to the same level and be treated in the same way as the child support obligation. These Court Orders are usually specified in the Child Support Order, but should also include obligations between parents incurred in any later court orders.

In either case, the parent who owes the obligation should be held accountable to the parent who is owed the obligation. For example, if child care costs are $\$ 400$ per month and the court orders that each parent pay $\$ 200$ per month, this obligation should be treated the same as any other child support obligation. If either parent fails to pay for their half of the child care costs, the other parent is typically forced to pay the entire amount. The question is how to recover these court-ordered joint expenses when one of the parents refuses to pay. If the parent owing child support fails to pay their half of the child care obligation, that $\$ 200$ should be added to future child support collections until the debt has been paid or other arrangements have been made to remove the debt (such as agreeing to care for the child such that the other parent no longer incurs child care costs).

On the other hand if the parent who is owed child support refuses to pay a courtordered obligation, and the other parent has been forced to pay, then the other parent should also be entitled to equitable relief by having their child support payments lowered or even eliminated until the obligation is balanced out. No parent should have to pay child support to the other parent when in fact the other parent owes that parent money per any existing court order.

### 9.3 Reconsideration of the "Economic Stability" Assumption*

The original income share model is based upon the assumption that a child's standard of living should not be harmed by divorce. This was the original justification behind child support payments... to maintain the stability of the prior "intact family" standard of living for the child. This assumption was also the basis for using surveys of intact family child expenses when setting obligations for families after divorce.

This assumption also included the hidden assumption that the family undergoing divorce was a "traditional" family whereby the father worked and the mother stayed home with the kids. In such a situation, the traditional system of child support might actually create stability for the child by maintaining the child's former standard of living. However, under the modern "two-earner/two-caregiver" family structure, with both parents already working and both parents already taking care of the child, the traditional child support system only leads to bitterness between parents and chaos for the child. This is because it is simply not possible to maintain the child's economic standard of living when parents have two households instead of one.

This leaves only two choices. Either we stay with the traditional child support system, keeping a system riddled with conflict and designating a "winner" and a loser" and thereby deprive the child of one of their caregivers in a misguided attempt to maintain economic stability for the child.

Or we go in a new direction. This time, instead of depriving the child of a caregiver, we lower the standard of living by an equal amount in both households in order that the child can retain both caregivers. Using this new "two caregiver" model, we explicitly acknowledge that maintaining emotional stability is more important to the child than maintaining economic stability.

In child developmental terms, there is a substantial body of research that supports the conclusion that children have far better outcomes when they can retain both of their current caregivers, than when they retain financial stability. In other words, emotional stability is far more important to child development than financial stability.

This analysis rejects the traditional child support calculations, not merely because they over-charge non-majority parents and drive them into bankruptcy, but because the traditional system ultimately causes children of divorce far more emotional harm than it provides in financial benefits. Some have claimed that there should be no relationship between providing child support and maintaining a relationship with the child. However, if a parent has to work two jobs just to make child support payments, that parent will not have the time or the energy left to maintain their relationship with the child. In addition, if a non-majority parent is so depleted of resources that they no longer have the funds to pay for a bedroom for the child or even gas to go pick up the child, they may not be able to exercise their time with the child even if they had the time and energy. Thus, there is always a relationship between the amount of time a parent has to spend to earn money for child support and the amount of time left over to spend with the child.

## CONCLUSION

What is proposed in this analysis is a change in course in how children are parented after divorce. The proposed changes would at least give parents the option of shared parenting after divorce. Shared parenting is difficult to impossible under the current system or winners and losers. It currently requires the lower time parent to give up their life savings and go deeply into debt making child support payments that could not possibly be made just from their annual earnings. It is difficult to imagine a dad doing shared parenting when he is living out of the trunk of his car and working two jobs trying to keep up with his child support payments. The proposed residential credits will more fairly distribute the burden of caring for the child on both parents.

This analysis also proposes a simplification of the child support tables. The proposed table, by reducing child support payments about 20\% (from 18\% to 15\%) may appear to be a "give away to dads". It is not. In fact, it is likely that fathers will lose much more money in the form of wages lost due to spending more time with the child than they would ever hope to gain in lower child support payments.

Mothers will see a financial benefit, despite lower child support payments, because they will be free to spend time they would otherwise have been tied down to caring for the child to pursue education and career advancement goals. Shared parenting thus may benefit mothers more financially than it costs them in child support payments.

However, the ultimate intention of this proposal is to place the best interest of the child above the interests of either parent by rewarding parents financially if they make a time commitment to their children. It is ironic that supporters of the traditional system place so much emphasis on the financial needs of the child that they have completely overlooked the fact that the emotional needs of children exceed their financial needs. Focusing solely on "financial" child support while failing to address "emotional" child support destroys childrens' lives by depriving them of someone they desperately need to have involved in their lives, their other parent. All credible research shows that for the vast majority of children, the best parent to children of separation and divorce is both parents. Instead of seeking out ways of facilitating dual parent involvement, our current public policy has established economic and legal roadblocks to shared parenting.

The end result in this misguided social policy is increased juvenile suicide, teenage pregnancy, juvenile delinquency, and teenage drug abuse, among many other childhood pathologies, all sharing a common variable, an absent parent. Continued parental involvement of the second parent (the one currently not included in the studies of the true ongoing costs of parenting), does indeed cost money. Such involvement is not a free good. But from the child's point of view, this investment is well worth the cost.

Child development specialists have recognized and documented the damaging effects of our society having hindered dual parent involvement for so many years. It is time to end the myth of a "single parent family" and acknowledge the fact that a child nearly always has two parents, even after divorce and even if the couple was never married in the first place. Reforming child support public policy from the ground up is essential if shared parenting is to become a viable option after divorce. Only then will we be able to turn the corner in improving the lives of our country s most important assets, our children.

Appendix 1: Answers to issues and laws that would have to be amended:

1. Whether the economic table should distinguish between children under twelve years of age and over twelve years of age: No
2. Whether gross or net income should be used for purposes of calculating the child support obligation: Net
3. Presumptive Minimum Obligation $\$ 25$ Per Month Per Child: The minimum standard should be set at $\$ 180$ based upon imputing minimum wage to both parents (see proposed Table) RCW 26.19.065(2).
4. Whether the economic table should start at $125 \%$ of the federal poverty guidelines and move upward in 100 dollar increments. Yes and $\$ 200$ increments
5. The Need Standard (Self-Support Reserve): The current needs standard should be replaced with 125\% of the federal poverty guidelines. RCW 26.19.065(2)
6. How to treat imputation of income for purposes of calculating the child support obligation, including whether minimum wage should be imputed in the absence of adequate information regarding income. Imputing Federal Median
Net: The current language should be amended such that in the absence of information to the contrary, a parent's imputed income shall be based on Washington State Minimum full time monthly net income. The federal median net standard should never be used. RCW 26.19.071(6)
7. Overtime Income/Income from Second Jobs: Income from overtime or second jobs should never be considered in the support calculation. RCW 26.19.075(1)(b)
8. Whether the estimated cost of child rearing, as reflected in the economic table, should be based on the Rothbarth model, the Engle model or some other basis for calculating the cost of child rearing. Changes to the Economic Table: The current economic table is based upon faulty data and is about $20 \%$ too high. It should be replaced with a more accurate "cost-based" table which uses a $15 \%$ flat rate for all income groups above the SSR.
9. Adjustments for children from other relationships: The whole family method, should be incorporated as a rebuttable presumption into the support schedule to reduce the number of deviations. RCW 26.19.075(1)(e).
10. Support Schedule Stops After $\$ 5000$ Combined Net: The support schedule should be extended to $\$ 8,000$ with a cap on child support payments of $\$ 1200$ at this combined monthly net income level. RCW 26.19.065(3)
11. Medical costs and child care: Neither should be included in the Economic Table. Health insurance should only be required if it is also required children of nondivorced families and can be obtained at a reasonable cost. RCW 26.09.105 Agreed medical and child care costs should be shared based upon percent of income.
12. NCP's Current Support Obligation Limited to $45 \%$ of Net Income: The support obligation of any parent should not exceed $25 \%$ for one child, $35 \%$ for two children and 45\% for three or more children. RCW 26.19.065(1)
13. Treatment of the residential schedule: All parents should receive a residential credit based upon the cross credit calculations using a simple percentage of income shares and cost shares as shown in the text. RCW 26.19.075 (1)(d)

## Appendix II: Estimate of the Cost of raising a child in Washington State

A common complaint raised by many workgroup members is the lack of credible information on the actual cost of child rearing in Washington State. This report will attempt to address that concern. We will first present estimates of child rearing costs produced by an independent agency, not in any way affiliated with any side of the child support schedule debate. We will then compare these estimates with national estimates from the USDA data and from the Rogers Cost Share website and with a University of Minnesota study. Based on all these estimates of actual child costs, an estimate of child rearing costs in Washington State will be presented based upon the most credible data available from these multiple sources on child rearing costs.

Section One: Self Sufficiency Standard Calculations (From thecalculator.org). The data contained in this analysis was derived from a national program focused on determining the "self sufficiency standard" (SSS) in regions throughout the United States. The SSS should not be confused with the SSR (the Self Support Reserve) or the federal poverty level. Instead, it is focused on determining "livable family wages" based upon actual family costs. The SSR is a "top down" program which uses a lump sum method to determine minimum living costs. The SSS is a bottom up program which first determines all the individual costs and then adds them together to determine a total cost.

The highly detailed data for numerous counties in the State of Washington was compiled by the Center for Women's Welfare at the University of Washington with assistance from the Workforce Development Council of Seattle-King County. This multi-year study, funded in part by a grant from Paul Allen, cost well over one million dollars to produce. It is therefore the most credible source available for determining actual child rearing costs here in Washington State. The complete 2006 Washington State Report (PDF) is available on line using the search term "Self Sufficiency Standard for Washington State". The purpose of this program is to estimate the total minimum living wage necessary to live in a particular county, based upon a computer program developed by the agency. The amount needed for self sufficiency varies depending on the county, the city within the county, the number of adults living in the household and the number of children living in the household.

After examining the data for over a dozen counties, three different combinations were selected for the present analysis, namely Seattle, Tacoma and unincorporated King County. These three areas were chosen for analysis due to the large number of divorced families living in these areas. In addition, these areas were chosen because actual costs are higher in these areas than in most of the counties in Washington State. Thus, these estimates represent minimum actual costs for child rearing, but in the some of the most expensive areas of Washington State.

The focus was on determining the marginal cost for one child in three locations in Washington State. The marginal cost was determined by subtracting the amount for a single person from the amount for a single person with one child to arrive at the one child cost. One child was chosen for analysis (instead of two or more children) because one child is the median number of children in divorced families in Washington State. This is also the simplest situation to analyze.

In addition, the analysis compared the "whole family cost" of two adults living together with one child, versus two adults living separately with the child residing with one of the adults. The complete analysis is in Appendix 1. In this section, we present a summary of the results. Table 1 below shows that the minimum cost for raising a child in King and Pierce County is about $\$ 891$ per month after subtracting a typical child tax credit of $\$ 150$ per month. However, the largest single expense is for child care which is $\$ 420$ per month. In addition, health care is estimated at $\$ 187$ per month. Subtracting both of these expenses (because they are outside of the Economic Table), the monthly child care cost for costs included in the Economic Table is $\$ 284$ per month. The biggest components include $\$ 170$ for food and $\$ 165$ for housing. Remarkably, there is very little difference in child rearing costs among these three areas (all were much higher than Eastern Washington).

Marginal cost for one child in Washington State in 2006

| Monthly Expenses | Adult <br> And Child <br> (King county) | Minus <br> Adult <br> cost <br> (King County) | Marginal cost For child Rural KC | Marginal cost For child Seattle | Marginal cost For child Tacoma | Average Marginal cost for one child |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Housing | \$919 | \$750 | 169 | 155 | 168 | 165 |
| Food | \$374 | \$212 | 162 | 163 | 179 | 170 |
| Transportation | \$283 | \$277 | 6 | 0 | 6 | 5 |
| Miscellaneous (inc clothing) | \$229 | \$132 | 97 | 95 | 91 | 95 |
| Subtotal without Tax credits | 1805 | 1371 | 434 | 414 | 444 | 435 |
| Minus monthly tax credits | XxX | XXX | 150* | 150* | 150* | 150* |
| Net Child cost excluding health care and child care | XXX | XXX | 284 | 264 | 294 | 285 |
| Health Care | \$270 | \$83 | 187 | 187 | 187 | 187 |
| Child Care | \$444 | \$0 | 444 | 444 | 368 | 420 |
| Monthly Expenses Total after tax credits | 2519 | 1454 | 915 | 895 | 849 | 892 |

## Section 2: Comparing Washington State estimate to national estimates

The section is an item-by item analysis of various child costs comparing Washington State estimates, as noted above, to the two most credible national estimates of child rearing costs. These are the 2001 CES/USDA estimate and the 2004 Rogers Cost Share estimates (for references on these see Analysis of Issues). After comparing these three estimates, a "best estimate" was determined for each category of expense. (See Table 2, next page).

Table 2: Comparing the Washington State estimate to national estimates

| Minimum marginal <br> child costs for one <br> child | $\mathbf{2 0 0 7}$ <br> Washington <br> State | $\mathbf{2 0 0 1}$ <br> CES/USDA <br> Low Income <br> Age 6-8 | $\mathbf{2 0 0 4}$ <br> Rogers <br> Low <br> Income <br> family | Best <br> Estimate of <br> child costs <br> (see text) |
| :--- | :---: | :---: | :---: | :---: |
| Housing | 165 | 191 | 85 | $\mathbf{1 7 0}$ |
| Food | 170 | 105 | 113 | $\mathbf{1 8 0}$ |
| Transportation | 5 | 73 | 75 | $\mathbf{7 0}$ |
| Misc. (inc clothing) | 95 | 90 | 89 | $\mathbf{9 0}$ |
| Total <br> (ignoring tax credits) | 435 | 459 | 380 | $\mathbf{5 1 0}$ |
| Minus tax credits | 150 | 150 | 150 | $\mathbf{1 5 0}$ |
| Net child cost <br> excluding health care <br> and child care | $\mathbf{2 8 5}$ | $\mathbf{3 0 9}$ | $\mathbf{2 3 0}$ | $\mathbf{3 6 0}$ |
| Health Care | 187 | 41 | 47 | 100 |
| Child care | $420 ?$ | 44 | 61 | $400 ?$ |
| Total child costs | $892 ?$ | 394 | 338 | $860 ?$ |
| $?=$ ? |  |  |  |  |

?= depending heavily on child care costs

## Note on each item:

Housing: The USDA estimate (\$191) is known to be high because it is based on a per capita estimation. The Rogers Cost Share estimate is known to be low because it is based upon a survey of housing costs in the SE United States. Washington State certainly has higher housing costs that the SE United States. A comparison survey of apartments in King County confirmed that 2 bedroom apartments cost about 150 to 200 more per month than one bedroom apartments. Therefore $\$ 170$ per month was chosen as the best marginal estimate of child housing costs for Washington State.

Food: The USDA estimate is known to be low because it does not include any "fast food" allowance. The Rogers estimate is also believed to be low as it is based upon the same CES data source as USDA. The Washington State estimate of $\$ 170$ was also believed to be slightly too low. Therefore an estimate of $\$ 180$ per month was used for child food cost as this amount is only $\$ 6$ per day for food for one child.

## Transportation

The Washington State estimate is believed to be low because it assumes the family will be using mass transit and perhaps not even own a car. This is unrealistic given the poor quality of the mass transit system here in Washington State. Therefore the USDA and Rogers estimate were used instead for an estimate of $\$ 70$ per month.

## Miscellaneous (including clothing)

All three estimates were remarkably similar considering they came from completely independent sources. Therefore an estimate of $\$ 90$ per month was used.

## Child Tax Credits

Rogers has a detailed analysis which yielded an average child tax credit of $\$ 277$ per month. However, the Washington State website indicated a child tax credit of $\$ 150$ per month. Therefore the Washington State estimate was used in the table. However, in the actual Washington State 2006 report, it was noted that the median child tax credit in Washington State was $\$ 247$ per month. Therefore the median family has a higher tax credit than the minimum family considered in this analysis. The 2006 Washington report also noted that the maximum tax credit in 2006 was $\$ 3000$ for one child for the Child Care Tax Credit and $\$ 1,000$ for the Child Tax Credit. Thus, the maximum child tax credit is about $\$ 330$ per month. They did not consider the personal exemption for the child. The Earned Income Credit was also dropped out of the analysis because, according to a detailed study performed by the authors, very few families in the U.S. (less than 10\%) actually receive this tax credit.

## Health Care

The Washington State estimate is too high because it assumed that the family would purchase health insurance. This is not an accurate assumption. In fact, poor people cannot afford and rarely buy health insurance. However, the national data was believed to be too low. Therefore an estimate of $\$ 100$ per month was used.

## Child Care

Child care costs vary depending on parents work schedule, child school schedule, and availability of friends and relatives. It therefore is extremely variable from one family to the next and should thus remain outside the table.

## CONCLUSIONS

While the actual cost of raising a child varies from one family to the next, it is possible to accurately estimate the minimum cost required to meet the basic needs of one child in Washington State based upon current (2006) and highly credible data gathered from over a dozen highly credible and largely independent sources.

The minimum net actual child rearing costs, excluding health care and child care, for all families in Washington State (intact and non-intact) for one child is estimated to be about $\$ 360$ per month. Although this figure was determined from data completely independent of the SSR data, this figure is identical to the SSR calculation, using $125 \%$ of the federal poverty guideline. This represents a convergence of bottom up Washington State data with top down federal estimates of minimum child rearing costs. This is therefore strong support for the "lump sum" choice of $\$ 360$ as a "best estimate" of minimum monthly child rearing costs here in Washington State. This amounts to \$30 per day for one child.

This estimate therefore complies with both State and federal requirements in that it uses the best available, scientifically derived and highly credible data, to determine an estimate of actual child rearing costs based upon studies of actual child rearing costs. It is thus a direct cost estimate and not an indirect proxy estimate (such as the Betson and Engel estimates). It is also a marginal estimate and not a per capita estimate (such as the USDA estimate). In addition, it is a Washington State estimate (unlike the Rogers Cost Share estimate which is based upon housing costs in the SE United States).

## Self Sufficiency Standard Calculations for Washington State

 (From thecalculator.org).The Self-Sufficiency standard for household living in Tacoma, Pierce County,

Number of people in your household
3
Gross Monthly wages at $\$ 7.50 / \mathrm{hr}$ /adult/40 hours per week $\$ 2,603$
Combined Annual Self-Sufficiency Gross Wage \$31,239.90

| Monthly Expenses | Adult and child | Minus <br> adult <br> cost | Marginal cost For child Tacoma | Family total living in two houses | Family Total living In one house | Additional cost for extra house |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Housing | \$851 | 683 | 168 | 1534 | \$851 | 683 |
| Child Care | \$368 | 0 | 368 | 368 | \$368 | 0 |
| Food | \$413 | 234 | 179 | 647 | \$629 | 18 |
| Transportation | \$255 | 249 | 6 | 504 | \$490 | 14 |
| Health Care | \$270 | 83 | 187 | 353 | \$314 | 39 |
| Miscellaneous (inc clothing) | \$216 | 125 | 91 | 341 | \$265 | 76 |
| Taxes | \$387 | 239 | 148 | 626 | \$436 | 190 |
| Subtotal of Monthly Gross Expenses | \$2,762 | 1613 | 1149 | 4375 | \$3,356 | 1019 |
| Combined Monthly net expense after tax | 2375 | 1374 | 1000 | 3749 | 2920 | 829 |
| Tax Credits |  |  |  |  |  |  |
| Child and Dependent Care Credit (CDCC) \$65 |  |  |  |  |  |  |
| Child Tax Credit (CT | C) |  | \$83 |  |  |  |
| Monthly Tax Credit | ubtotal |  | \$148 |  |  |  |

The marginal cost at net per month for one child, age 8 is 1000 minus 187 health care is 813 minus 368 for child care is 445 minus the monthly tax credit is 287 for one child for one month excluding child care and health care for the child.

Notes on above tables: The monthly total tax credit is almost certainly too low. It should be at least 200 /month. This would push the child cost down $40 /$ month. However, the transportation cost for the child is also certainly too low. Also the health cost for one adult is too low and the health cost for the child is too high. But on a whole, the numbers look reasonable.

## Self Sufficiency Standard household living in Unincorporated, King County,

| Number of people in your household |  |  |  |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monthly wages at \$8/hr per adult working 40 hours per week \$2,809 |  |  |  |  |  |  |
| Annual Self-Sufficiency Wage |  |  |  |  | \$33,711.08 |  |
| Monthly Expenses | Adult <br> And Child | Minus Adult cost | Marginal cost For child Rural KC | Family <br> Total living in 2 houses | Family total living in 1 house | Added cost for extra house |
| Housing | \$919 | \$750 | 169 | 1669 | \$919 | 750 |
| Child Care | \$444 | \$0 | 444 | 444 | \$444 | 0 |
| Food | \$374 | \$212 | 162 | 586 | \$570 | 16 |
| Transportation | \$283 | \$277 | 6 | 560 | \$546 | 14 |
| Health Care | \$270 | \$83 | 187 | 353 | \$314 | 39 |
| Miscellaneous | \$229 | \$132 | 97 | 361 | \$279 | 82 |
| Taxes | \$435 | \$264 | 171 | 699 | \$484 | 215 |
| Subtotal of Gross Monthly Expenses | \$2,955 | \$1,718 | 1237 | 4673 | \$3,558 | 1115 |
| Subtotal of Net Monthly expenses | 2520 | 1454 | 1066 | 3974 | 3074 | 900 |
| Tax Credits |  |  |  |  |  |  |
| Earned Income Tax Credit (EITC) |  |  | \$0 |  |  |  |
| Child and Dependent Care Credit (CDCC) \$63 |  |  |  |  |  |  |
| Child Tax Credit (CTC) |  |  | \$83 |  |  |  |
| Monthly Tax Credit Subtotal |  |  | \$146 |  |  |  |

The marginal cost at net per month for one child, age 8 is 1066 minus 187 health care is 879 minus 444 for child care is 435 minus the monthly tax credit is $\mathbf{2 8 7}$ for one child for one month excluding child care and health care for the child.

Comparing King county to Pierce county, the marginal cost for housing is about the same, even though the total cost for housing in King County is more. The main difference between the two counties is child care which is $\$ 76$ more or about $20 \%$ more in King County. Excluding child care, the cost in King county is about the same (287). Thus according to this calculator, the child cost in both counties is just under $\$ 300$ per month.

The cost for the extra household in this example is about $30 \%$.

This is the Self-Sufficiency standard for living in Seattle, King County, Number of people in your household 3

Gross Monthly wages at \$7.90/hr per adult 40 hours per week $\$ 2,780$
Annual Self-Sufficiency Wage
\$33,363.53

| Monthly Expenses | Adult <br> And Child | Minus <br> Adult cost | Marginal cost For child Seattle | Family <br> Total living in 2 houses | Family total living in 1 house | Added cost for extra house |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Housing | \$919 | \$764 | 155 | 1683 | \$919 | 764 |
| Child Care | \$444 | \$0 | 444 | 444 | \$444 | 0 |
| Food | \$375 | \$212 | 163 | 587 | \$570 | 17 |
| Transportation | \$54 | \$54 | 0 | 108 | \$108 | 0 |
| Health Care | \$270 | \$83 | 187 | 353 | \$315 | 38 |
| Miscellaneous | \$206 | \$111 | 95 | 317 | \$236 | 81 |
| Taxes | \$345 | \$194 | 151 | 539 | \$343 | 196 |
| Subtotal of Gross Monthly Expenses | \$2,614 | \$1,418 | 1196 | 4032 | \$2,935 | 1097 |
| Subtotal of Net Monthly Expenses | 2269 | 1224 | 1045 | 3493 | 2592 | 901 |
| Tax Credits |  |  |  |  |  |  |
| Earned Income Tax Credit (EITC) |  |  | \$39 |  |  |  |
| Child and Dependent Care Credit (CDCC) |  |  | \$68 |  |  |  |
| Child Tax Credit (CTC) |  |  | \$83 |  |  |  |
| Monthly Tax Credit Subtotal |  |  | \$190 |  |  |  |

The marginal cost at net per month for one child, age 8 is 1045 minus 187 health care is 858 minus 444 for child care is 414 minus the monthly tax credit is $\mathbf{2 2 4}$ for one child for one month excluding child care and health care for the child.

| Monthly Expenses | Marginal cost For child Rural KC | Marginal cost For child Tacoma | Marginal cost For child Seattle |
| :---: | :---: | :---: | :---: |
| Housing | 169 | 168 | 155 |
| Food | 162 | 179 | 163 |
| Transportation | 6 | 6 | 0 |
| Miscellaneous | 97 | 91 | 95 |
| Subtotal w/o tax cr | 434 | 444 | 414 |
| Health Care | 187 | 187 | 187 |
| Child Care | 444 | 368 | 444 |
| Total of Net Monthly Expenses | 1066 | 1000 | 1045 |

Comparison of Washington State Estimate to Minnesota 1999 Appendix 1 and New Hampshire "Basic Needs and Livable Wage" study*

| Minimum <br> marginal <br> child costs for <br> one child | Washington <br> State | 2001 <br> CES/USDA <br> Low <br> Income <br> Age 6-8 | 1999 <br> University <br> of <br> Minnesota <br> Estimate* | 2004 <br> New <br> Hampshire <br> Study* | Best <br> Estimate <br> of child <br> costs <br> (see text) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Housing | 165 | 191 | 206 | 191 | $\mathbf{1 7 0}$ |
| Food | 170 | 105 | 106 | 133 | $\mathbf{1 8 0}$ |
| Transportation | 5 | 73 | 48 | 14 | $\mathbf{7 0}$ |
| Misc. (inc <br> clothing) | 95 | 90 | 76 | 127 | $\mathbf{9 0}$ |
| Total (ignoring <br> tax credits) | 435 | 459 | 436 | $\mathbf{4 6 5}$ | $\mathbf{5 1 0}$ |
| Minus tax credits | 150 | 150 | 150 | $\mathbf{1 5 0}$ | $\mathbf{1 5 0}$ |
| Net child cost <br> excluding <br> health care and <br> child care | $\mathbf{2 8 5}$ | $\mathbf{3 0 9}$ | $\mathbf{2 8 6}$ | $\mathbf{3 1 5}$ | $\mathbf{3 6 0}$ |
| Health Care | 187 | 41 |  |  |  |
| Child care | $420 ?$ | 44 | 42 | 525 | $400 ?$ |
| Total child costs | $892 ?$ | 394 | 338 | 983 | $860 ?$ |

* See page 33 of the New Hampshire Commission to Study Child Support and Related Child Custody Issues, Final Report, 12/01/04.
** If the Minnesota study was converted into 2006 dollars, the amounts would raise by about $20 \%$ for a total child cost of about $\$ 343$.
?= depends heavily on actual child care costs
Minnesota's estimates are based in part on CES data for a single parent with an income of under $\$ 38,000$ (Low to middle income). Thus, it should be no surprise that they reach similar conclusions. However, it is likely that the Minnesota estimate suffers from the same (per capita) errors that are known to exist in the CES data base. Fro example, the housing costs are likely to be high. In addition, the health care and child care costs are extremely low because those responding to the CES survey tended to not report any health care or child care costs. Thus the median reported value was zero. However, those with costs were likely to be in the 400 range for child care as this is a median value for child care in Washington State and several other states. The food costs are likely to be low due to the (USDA) manner in which food costs are estimated. The Washington State estimate is therefore likely to be more accurate as it appears to be based upon actual food costs rather than a survey of various food items. Thus, the University of Minnesota study does not change the conclusion, based upon the University of Washington study, that net minimum child costs, excluding health care and child care is about $\$ 360$ per month.

| APPENDIX III: CEX RESPONDER CHARACTERISTICS(from the BLS webs CEX 2000 through 2005 Average annual expenditures of all consumer un |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| Income before taxes....\$44,649 \$47,507 \$49,430 \$51,128 \$54,453 \$58,712 |  |  |  |  |  |
| Income after taxes........ 41,532 | 44,587 | 46,934 | 48,596 | 52,287 | 56,304 |
| Age of reference person.... 48.2 | 48.1 | 48.1 | 48.4 | 48.5 | 48.6 |
| Ave. in consumer unit: |  |  |  |  |  |
| Persons......................... 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| Children under 18........... 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 |
| Earners.......................... 1.4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 |
| Percent homeowner........... 66 | 66 | 66 | 67 | 68 | 67 |
| With mortgage................... 39 | 40 | 41 | 41 | 42 | 43 |
| Without mortgage............... 27 | 26 | 26 | 26 | 25 | 25 |
| Renter.......................... 34 | 34 | 34 | 33 | 32 | 33 |

Ave annual expenses..... \$38,045 \$39,518 \$40,677 \$40,817 \$43,395 \$46,409


1/ Components of income and taxes are derived from "complete income reporters" only through 2003; (see glossary). Beginning in 2004 income imputation was implemented. As a result, all consumer units are considered to be complete income reporters beginning in 2004.

## CEX COOPERATION LEVELS in 1998

Below is information on the cooperation levels in the Interview Survey in 1998. The Interview Survey is a rotating panel in which about 7,000 sample units are contacted each calendar quarter. Allowing for bounding interviews and nonresponse (including vacancies), the number of participating sample units per quarter is targeted at approximately 5,000. Information on 1998 interview participation follows.

| Year | Consumer units designated for the survey | Type B or C $\frac{\text { ineligible }}{\text { cases }}$ | Eligible housing unit interviews |  |  | Response Rate for Eligible |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Interviews |
|  |  |  | Number of potential interviews | Type A nonresponse | Total respondent interviews |  |
| 1998 | 33,906 | 6,138 | 27,768 | 5,591 | 22,177 | 79.9\% |
| 98 Q | 8475 | 1535 | 6942 | 1398 | 5,544 | 80\% |

## COOPERATION LEVELS from 1999 on

Here is information on the cooperation levels in the Interview Survey from 1999 through 2003. It should be noted that there was an increase in the CE survey sample size beginning in 1999.

The Interview Survey is a rotating panel survey in which about 11,000 sample units are contacted each calendar quarter. Allowing for bounding interviews and nonresponse (including vacancies), the number of participating sample units per quarter is targeted at approximately 7,800 . Information on interview participation levels for the past five years follows.

Consumer
units Type B or C
Year designated ineligible for the cases survey

Eligible housing unit interviews

Response
Rate for
Eligible Interviews

|  |  |  | Number of <br> potential <br> interviews | Type A <br> nonresponse | Total <br> respondent <br> interviews |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| 1999 | 46,305 | 8,627 | $\frac{37,678}{}$ | 7,622 | $\frac{30,056}{}$ | $79.8 \%$ |
| 2000 | 47,498 | 8,752 | 38,746 | 7,736 | 31,010 | $80.0 \%$ |
| 2001 | 47,998 | 9,158 | 38,840 | 8,527 | 30,313 | $78.0 \%$ |
| 2002 | 49,501 | 9,336 | 40,165 | 8,838 | 31,327 | $78.0 \%$ |
| 2003 | 50,596 | 9,357 | 41,239 | 8,841 | 32,398 | $78.6 \%$ |

Type B or C cases are housing units that are vacant, nonexistent, or ineligible for interview. Type A nonresponses are housing units that the interviewers were unable to contact or the respondents refused to participate in the survey. The response rate stated above is based only on the eligible housing units (i.e., the designated sample cases less Type B and Type C ineligible cases).

## Appendix IV; Examples of data manipulation and distortion

The effect of over-charging lower time parents demonstrated in the many examples described above was largely hidden (and possibly deliberately hidden) in all four of the PSI and Sterling studies provided to this Work group and on the Division of Child Support Website. It is disturbing that the data was distorted in such an unscientific and fraudulent manner. Neither this work group, nor the legislature can make accurate decisions about the best interests of children and families affected by divorce if the data and tables they are presented are biased and distorted. To illustrate the subtle, but serious nature of this problem, we will present a few specific examples:

First, on page 1 of the January 2005 Report Executive Summary, the authors state (without citation): Custodial parents experience a 42-44 percent drop, on average, in their standard of living. In contrast, non-custodial parents experience an 11-18 percent drop, on average in their standard of living. On page 1 of Chapter One of the PSI 2005 Washington Report, the authors again make this same claim.

While there were no studies cited by the authors to support this conclusion, the claim is likely derived from the claim made on page 18 of the 2003 Sterling Report. This claim, when subjected to statistical examination, was shown to be pure fiction. Instead, the objective and detailed analysis by Dr. Braver and Dr. O'Conner attached to the 2006 Minority Report reached the conclusion that both parents suffer about equally after divorce. The statistical analysis of the median Washington divorced parent (described in detail later in this section) leads to the conclusion that at this moment, here in Washington State, the median higher time parent has a standard of living that is $31 \%$ greater than the standard of living of the median lower time parent. This actual result is nearly the opposite of that claimed by Sterling and PSI.

As an example of how tables have been systematically distorted, the following is Table 3.6 in the 2005 Sterling Report. This table was intended to support the claim that lower time parents are living high on the hog while higher time parents are living out in the street and therefore justify the claim in the Sterling Report that large increases in transfer payments, as proposed by Betson, are need in order to adjust for the claimed inequity between the wages of fathers and mothers.

There is no mention in the Sterling text that the data fails to account for tax benefits for the higher time parent, and fails to account for money the lower time spends directly on the child. However, despite ignoring all these failures, had the data been reported accurately, and had the table been presented fairly, even this flawed data leads to the opposite conclusion from that stated in the Sterling report:

This is how the Table appears in the 2005 Sterling Report:

## Sterling 2005 Table 3.6

Impact of Transfer payments on income shares in non-IV-D Orders

| Non IV-D Orders | NCP <br> Mean | NCP <br> Median | CP <br> Mean | CP <br> Median |
| :--- | :--- | :--- | :--- | :--- |
| Number of orders: 1,408 |  |  |  |  |
| Children on order: mean: 1.59: median 1 |  |  |  |  |
| Monthly net income | $\$ 2,930$ | $\$ 2,445$ | $\$ 2,132$ | $\$ 1,838$ |
| Share of parents combined income | $56.9 \%$ | $56.7 \%$ | $43.1 \%$ | $43.3 \%$ |
| Transfer payment | $\$ 488$ | $\$ 429$ | --- | --- |
| Transfer as share of NCP/CP net income | $17.0 \%$ | $17.3 \%$ | $30.6 \%$ | $21.7 \%$ |
| Net income after transfer | $\$ 2,443$ | $\$ 1,994$ | $\$ 2,622$ | $\$ 2,3$ |
| Share of combined net income after <br> transfer | $46.8 \%$ | $46.9 \%$ | $53.2 \%$ | $53.1 \%$ |
| When father is NCP and mother is CP <br> $(n=1,151)$ |  |  |  |  |
| Monthly net income | $\$ 3,201$ | $\$ 2,683$ | $\$ 1,993$ | $\$ 1,748$ |
| Share of parents combined net income | $61.0 \%$ | $59.9 \%$ | $39.0 \%$ | $40.1 \%$ |
| Monthly net income after transfer | $\$ 2,644$ | $\$ 2.151$ | $\$ 2,555$ | $\$ 2,255$ |
| Share of combined income after transfer | $49.9 \%$ | $49.1 \%$ | $50.5 \%$ | $50.9 \%$ |
| When mother is NCP and father is CP <br> $(\mathrm{n}=257)$ |  |  |  |  |
| Monthly net income | $\$ 1,713$ | $\$ 1,447$ | $\$ 2,752$ | $\$ 2,400$ |
| Share of parents combined net income | $38.4 \%$ | $37.0 \%$ | $61.6 \%$ | $63.0 \%$ |
| Monthly net income after transfer | $\$ 1,542$ | $\$ 1,274$ | $\$ 2,923$ | $\$ 2,584$ |
| Share of combined income after transfer | $34.4 \%$ | $32.8 \%$ | $65.6 \%$ | $67.2 \%$ |

## Problems with the above table:

1. There is no way to check on the accuracy of the author's data. There is no citation or source to obtain the underlying data. We are simply asked to take the author's word for it.
2. The table failed to report the standard deviations. One cannot accurately assess data unless one is given both the central tendency and the spread or standard deviation. Standard deviations (SD) were reported in only some of the Sterling tables: the SD's were all huge and 2 SD's led to dramatically negative values at the low end of the distributions, meaning that all the distributions were heavily skewed by a very small number of extremely high income parents.
3. The table should not have reported the means. In tables of heavily skewed distributions, reporting means is highly misleading. If one wants to report means, one should eliminate the outliers (typically defined as 3 SD outside the median). Otherwise one should only report medians as the best approximation of the central tendency of the distribution.
4. The table does not address the question of cost to raise a child. Transfer payment is not intended to equalize income. That is what alimony is for. Instead, transfer payments are supposed to focus on providing the actual costs associated with meeting the basic needs of the child (Not the basic needs of the higher time parent).
5. The table confirms that there is extreme gender bias in custody decisions. Fathers are higher time parents only $20 \%$ of the time in this study. In fact, in original court orders, fathers are higher time parents only $10 \%$ of the time. When the mom contests the order, fathers are almost never higher time parents This is despite numerous scientific studies showing fathers and mothers are equally good parents.
6. The table failed to make adjustments to both parents income to reflect the tax charges to the NCP and tax credit to the CP and the un-credited direct expenses of the NCP. These amounts are at least 10\% and typically 20\% of the NCP's net income and often exceed $20 \%$ of the NCP's net income. Had these adjustments been made, the incomes of the two parents before the transfer payment would have been nearly equal and the net incomes after the transfer payment would have confirmed that the net income of the mother (or CP) after transfer payment was much greater than the net income of the father (or NCP).
7. The table listed the transfer payments in the top bracket (no gender) but failed to list the transfer payments amounts and percentages by gender. Had this deleted data been included, and had the table included adjustments for tax credits and non-credited direct payments by the NCP for the child, a very interesting picture would have emerged (see more accurate table below).

First, fathers are most likely to be CP's only when the mother has an extremely low income. In such cases, the mother's transfer payment is set at only $12 \%$ of her income and the dad receives a meager $\$ 180$ per month. In fact, NCP mothers are far less likely to make child support payments than NCP fathers. Thus it most likely that the CP fathers will get nothing from the NCP mothers. In addition, the actually median transfer payments for all NCP's was $\$ 451$ (Not \$429) $(2445-1994=451)$. The actual median transfer gain for all CP's was $\$ 478$ (2308-1838=478). Besides the fact that these numbers do not match (almost $\$ 30$ is simply missing), the amount gained by the CP ( $\$ 478$ ) is almost $\$ 50$ more per month (or more than $10 \%$ higher) than indicated on the original table (\$429)! And when the NCP is a father, the median transfer payment rises to $\$ 532$. This is over $\$ 100$ more (and more than $20 \%$ higher) than was listed in the original table!

Tax credits to the CP are a matter of public record. Rogers has done a detailed analysis of these tax credits and concluded that the median tax credit benefit to the CP is about $\$ 277$ per month. (For an in-depth analysis of the tax credit issue, see Rogers, R.M., (2005) A Brief Economic Critique of North Carolina's Child Support Guidelines, pages 17 to 28).

Looking at child expenses of the NCP, two highly credible studies have confirmed that NCP child expenses are significant, even for NCP's who only see their child $10 \%$ of the time. Both studies confirmed that NCP child expenses are directly and linearly related to the amount of time the child spends with the NCP each month.
Thus, if an NCP cares for the child $20 \%$ of the time and the total obligation is $\$ 800$ per month, the uncredited child expense of the NCP is about $20 \%$ times $\$ 800$ or $\$ 160$ per month. (See Fabricius and Braver Non-Child Support Expenditures on Children by Non-residential Divorced Fathers, Family Court Review, Vol. 41, 2003 and Henman, P. and Mitchell, K., (2001) Estimating the Costs of Contact for non-residential parents: A budget standards approach, Journal of Social Policy, Volume 30, Issue 3, pp. 495520).

Revised Sterling 2005 Table 3.6 Impact of Transfer payments on income shares in non-IV-D Orders (providing a more accurate depiction of the data)

| Non IV-D Orders Number of orders: 1,408 Children on order: median 1 | NCP <br> Median | $\begin{aligned} & \text { NCP } \\ & \text { SD } \end{aligned}$ | CP <br> Median | $\begin{array}{\|l\|} \hline \text { CP } \\ \text { SD } \end{array}$ | Combine d Median |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Monthly net income | \$2,445 | ?? | \$1,838 | ?? | 4283 |
| Share of parents combined income | 56.7\% | ?? | 43.3\% | ?? | 100 |
| Transfer payment | -451 | ?? | +478 | ?? | 721 |
| Transfer as share of NCP net income | 17.3\% | ?? | -- | -- | 17.3\% |
| Net income after transfer | \$1,994 | ?? | \$2,308 | ?? | 4302 |
| Income to need ratio NCP/850 or CP/1140 | 2.34 |  | 2.02 |  | 3.00 |
| Share of combined net income after transfer | 47\% | ?? | 53\% | ?? |  |
| Estimate of monthly adjustment for tax credit (277 from Rogers) |  | ?? | +277 | ?? | +277 |
| Net income after median tax credits | \$1,994 | ?? | \$2,585 | ?? | 4579 |
| Share of combined net income after transfer and after adjusting for taxes and NCP costs | 46\% | ?? | 56\% | ?? |  |
| Income to need ratio NCP/850 or CP/1140 | 2.34 |  | 2.26 |  | 3.2 |
| Minus 20\% NCP un-credited direct child cost (20\% times 721=144) | 144 |  |  |  |  |
| NET INCOME AFTER ALL CREDITS | 1850 |  | 2585 |  | 4435 |
| Share of combined net income after transfer and after adjusting for taxes and NCP costs | 42\% | ?? | 58\% | ?? |  |
| NET AFTER ALL CREDITS <br> Income to need ratio NCP/850 or CP/1140 | 2.18 |  | 2.26 |  | 4\% |
| Income to need ratio NCP/1000 CP/1140 | 1.85 |  | 2.26 |  | +22\% |
| When father NCP \& mother CP ( $\mathrm{n}=1,151$ ) |  |  |  |  |  |
| Monthly net income | \$2,683 | ?? | \$1,748 | ?? | 4431 |
| Share of parents combined net income | 60\% | ?? | 40\% | ?? |  |
| Transfer payment | - 532 | ?? | +507 | ?? | 886 |
| Transfer as share of NCP net income | 20\% | ?? | -- | -- | 20 |
| Monthly net income after transfer | \$2,151 | ?? | \$2,255 | ?? | 4406 |
| Share of combined net income after transfer | 49\% | ?? | 51\% | ?? |  |
| Estimate of monthly adjustment for tax credit 277 and NCP direct costs ( $20 \%$ x $886=177$ ) | -177 | ?? | +277 | ?? |  |
| Net income after adjustment | \$1,974 | ?? | \$2,532 | ?? | 4506 |
| Share of combined net income after transfer and after adjusting for taxes and NCP costs | 44\% | ?? | 56\% | ?? |  |
| Income to need ratio NCP/850 or CP/1140 | 2.32 |  | 2.22 |  | 5\% |
| Income to need ratio NCP/1027 CP/1140 | 1.92 |  | 2.22 |  | 16\% |
| When mother NCP \& father CP ( $\mathrm{n}=257$ ) |  |  |  |  |  |
| Monthly net income | \$1,447 | ?? | \$2,400 | ?? |  |
| Share of parents combined net income | 37\% | ?? | 63\% | ?? |  |
| Transfer payment | 173 | ?? | 184 | ?? |  |
| Transfer as share of NCP net income | 12\% | ?? | -- | -- |  |
| Monthly net income after transfer | \$1,274 | ?? | \$2,584 | ?? |  |
| Share of combined net income after transfer | 33\% | ?? | 67\% | ?? |  |
| Estimate of monthly adjustment for tax credit and NCP direct costs ( $10 \%$ Net) | -145 | ?? | +145 | ?? |  |
| Net income after adjustment | \$1,129 | ?? | \$2,729 | ?? |  |
| Share of combined net income after transfer and after adjusting for taxes and NCP costs | 30\% | ?? | 70\% | ?? |  |

Table Citation: The underlying orders were randomly chosen from the pool of orders. Copies of the entire pool of orders and copies of the orders used to create this table are available from the authors at the following web address:
Poverty Threshold =850 for one, 1140 for two. And 1430 for three.
The more accurate table reveals that when the incomes are adjusted for actual tax and direct expenses of the NCP dad, the median net transfer payment rises to about $\$ 800$. This represents over 30 \% of the NCP father's net income and results in the median NCP father living just above the poverty level. Thus it is the NCP parent who is currently forced to live out on the street by the current transfer payment and not the CP.

In addition, not even the medians in this table capture the true economic picture of the median divorced family here in Washington State. Instead, the medians in this table represent only the central tendency of "non IV-D orders". These are typically people who can afford to spend $\$ 10,000$ to $\$ 20,000$ on an attorney (actually they can't afford it, but they do anyway). As Table 3.7 (Impact of transfer payments in IV-D orders) confirms, the incomes in Table 3.6 are about twice as high as the incomes in Table 3.7. This class of parents (middle to upper income parents) are far more likely to elect to have the mother be voluntarily under-employed. This alone can account for much of the differences in income depicted in Table 3.6.

It is revealing to examine in closer detail the ratios of incomes reported in Tables 3.6 When NCP mothers' median income is compared to CP mothers median income, the ratio is $\$ 1,447 / \$ 1,748$ or $83 \%$. The ratio of NCP fathers' median income to median fathers CP income is $\$ 2,683 / \$ 2,400$ or $112 \%$. As the authors failed to report standard deviations, it is difficult to tell if these differences are statistically significant. However, it can be concluded that median NCP mothers are much more different from CP mothers than NCP fathers are different from CP fathers. Put another way, gender bias in the family court system is so great that a father is unlikely to be designated a CP of his child unless the mother has significant issues that place her well outside the norm of most mothers.

This gender bias extends to child support awards. On Table 3.6, NCP father's transfer amounts were $20 \%$ of their median net income even before adjusting for additional expense factors incurred only by the NCP. By contrast, payments by NCP mothers were not only one third the dollar amount of NCP fathers, but were also a much lower percent of the NCP mothers net median income (only $12 \%$ ). .

It is disturbing that there is such extreme gender bias in the family court system. It is equally disturbing that State taxpayer dollars were spent paying for such gender biased, unreliable and inaccurate reports as the PSI and Sterling Reports. Children are not served when the interests of voluntarily divorced mothers are placed above the interests of the divorced children, who had no say in whether the family should get divorced and were more negatively impacted by the divorce than either of the parents. Children and the legislature are best served by unbiased, and more honest reporting of data.

## Appendix 5: Comparison of Sterling 2003 Income To Need (ITN) Claims to Actual Income To Need (ITN) Ratios

| Non-IV-D Orders <br> (median) | Sterling <br> $\mathbf{2 0 0 3}$ <br> (gross <br> after <br> transfer) | Sterling <br> 2005 <br> (net <br> after <br> transfer) | Sterling <br> 2005 (net <br> after <br> transfer <br> and <br> credits) | Sterling <br> Mom CP <br> (net after <br> 507 <br> transfer) | Sterling <br> 2005 <br> mom (net <br> after <br> transfer <br> and <br> credits) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CP INCOME | ??? | 2308 | 2585 | 2255 | 2532 |
| ITN ratio of <br> CP and child <br> (D=1140) | 2.73 | 2.02 | 2.26 | 1.98 | 2.22 |
| NCP INCOME | $? ? ?$ | 1994 | 1850 | 2151 | 1974 |
| ITN ratio of NCP <br> (D=850) | 3.97 | 2.34 | 2.18 | 2.53 | 2.32 |
| ITN Difference <br> (NCP - CP) | 1.24 | .32 | .08 | .55 | .10 |
| \% change= <br> ITN Difference / <br> CP | $45 \%$ <br> $(41 \%)$ | $16 \%$ | $4 \%$ | $28 \%$ | $5 \%$ |
| ITN ratio of NCP if <br> using more <br> appropriate divisor <br> (D=850+177=1027) | $? ? ? ?$ | 1.94 | 1.80 | 2.09 | 1.92 |
| ITN Difference <br> (NCP - CP) | $? ? ?$ | $<.08>$ | $<.46>$ | .11 | $<.30>$ |
| \% change= <br> ITN Difference / <br> CP | $? ? ?$ | $<4 \%>$ | $<26 \%>$ | $5 \%$ | $<16 \%>$ |
| ITN Total | 6.70 | 3.96 | 3.98 | 4.07 | 4.14 |

The above chart (taken from Sterling 2003 and data in the revised Table 3.6 from Sterling 2005) confirms that, once tax credits are added to the CP mom's income and direct child expenses are subtracted from the NCP dad's income, the median NCP father is either at the same Income to Needs level as the mom or worse off after divorce than the median CP mom.

The real problem, hidden in the Sterling 2003 claims, is with the divisor term used and how the divisor term is calculated. While it was not stated in the Sterling report what term they used or how it was calculated, it is common to use the "one person" row in the Federal Poverty Guideline as the divisor for the NCP. This amount in 2007 was $\$ 850$. For the CP, it is common to use the "Two person" row in the Federal Poverty Guideline (i.e., mom and child make two persons). This amount is $\$ 1140$. However, these two amounts (850 and 1140) assume that the NCP incurs no expenses while with the child and ignores the tax credits to the CP. Looking only at child expenses of the NCP, the two highly credible studies listed above both confirmed that NCP child expenses are significant, even for NCP's who only see their child $10 \%$ of the time.

Moreover, both studies confirmed that NCP child expenses are directly and linearly related to the amount of time the child spends with the NCP each month. Thus if the median total obligation is 886 and the median amount of time the child spends with the NCP is $20 \%$ of the time, then a conservative estimate of the un-credited child expense incurred by the NCP is $20 \%$ times $886=177$. Thus the NCP father's real "minimum need" is not 850 per month, but $850+177=1027$. When this is used in the divisor term for the NCP father, and the actual income available to each parent is used in the numerator, the actual income to need ratio for the median NCP dad is $16 \%$ less than the income to need ratio for the median CP mom. (note that for the same reasons, if the dad spent $30 \%$ of the time with the child, the dads standard of living would be $24 \%$ less than the mom's standard of living). This result is in complete contradiction to the claim made in Sterling 2003 that the median NCP had a 41\% greater standard of living than the median CP.

This may explain why public comment given to the 2005 child support work group ran 100 to 1 against further increases in child support. It also may explain why the demographic group most likely to commit suicide is NCP fathers. Their rates of suicide are not only many times greater than the rate of suicide of CP moms, but they are also greater than the rates of suicide of teenagers and those living in extreme poverty (the other two high suicide groups).

Of interest to the present work group would be how much of a reduction in child support payments would be needed to equalize the median NCP and CP standards of living? This question is somewhat misleading as the purpose of child support is not to equalize the living standards of the two parents but to provide for the basic needs of the child. However, if the focus is on the child and the child spends significant time in each household, it is worth looking at how much of an increase in NCP child support would be needed so that the child could have a near equal experience in both households.

Put another way, if one were to reduce child support payments from $17 \%$ to $15 \%$, what would be the result in terms of living standards for both parents?
Another important question would be what the resulting standards of living in both households would be if the legislature were to adopt the Betson-Rothbarth Economic Table, thus raising the combined obligation for the median family from $17 \%$ to $21 \%$ ?

The following table addresses these questions. This Table confirms that Sterling's claim that "the non-custodial parent has a 41\% higher standard of living than the custodial parent and child"(Sterling, 2003, page 18) is a complete fiction. Even when viewed in the light most favorable to the CP, and without any adjustments for tax credits to CP or child costs to NCP, and even when using a divisor of 850 for the NCP (i.e., assuming the NCP has no expense and therefore no cost for the child), there is only a $21 \%$ difference in the cost of living between the two families. Thus, even using all of Sterling's hidden assumptions, the difference is half that stated in their 2003 report.

If one takes tax credits to the CP and child costs of the NCP into account, and uses an appropriate divisor term for both parents, the CP's standard of living is 12\% greater than the NCP's standard of living using the $17 \%$ rate in the current Table.

A Comparison of Income to Need Ratios for the current 17\% economic table, a $15 \%$ table and the BR proposed $21 \%$ economic table.
(Note: These rates apply to CNMI of 4200, higher rates apply for lower CMNI's)

| Analysis of median family income to need ratios | Current 17\% Table | Cost Share 15\% Table | BetsonRothbarth 21\% Table |
| :---: | :---: | :---: | :---: |
| Combined Obligation | 714 | 630 | 882 |
| NCP obligation (transfer) | 407 | 359 | 503 |
| CP income after transfer | 2207 | 2159 | 2303 |
| NCP income after transfer | 1993 | 2041 | 1897 |
| CP ITN before credits and costs (1140 as divisor) | $\begin{aligned} & \hline 2207 / 1140= \\ & 1.94 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2159 / 1140= \\ & 1.89 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2303 / 1140= \\ & 2.02 \\ & \hline \end{aligned}$ |
| NCP ITN before credits and costs (850 as divisor) | $\begin{aligned} & 1993 / 850= \\ & 2.34 \end{aligned}$ | $\begin{aligned} & 2041 / 850= \\ & 2.40 \end{aligned}$ | $\begin{aligned} & 1897 / 850= \\ & 2.23 \end{aligned}$ |
| ITN NCP-CP change | . 40 | . 51 | . 21 |
| \%= ITN change/CP ITN | $\begin{aligned} & .40 / .1 .94= \\ & 21 \% \end{aligned}$ | $\begin{aligned} & .51 / 1.89= \\ & 27 \% \\ & \hline \end{aligned}$ | $\begin{aligned} & .21 / 2.02= \\ & 10 \% \end{aligned}$ |
| Available CP income after adding CP 277 tax credit | 2484 | 2436 | 2580 |
| NCP child cost at $20 \%$ TS | 143 | 126 | 176 |
| Available NCP income after subtracting child costs | $\begin{aligned} & 1993-143= \\ & 1850 \end{aligned}$ | $\begin{aligned} & 2041-126= \\ & 1915 \end{aligned}$ | $\begin{aligned} & 1897-176= \\ & 1721 \end{aligned}$ |
| CP income to need ratio Using 1140 as a divisor | 2.18 | 2.14 | 2.26 |
| NCP income to need ratio using 850 as a divisor | 2.09 | 2.25 | 2.02 |
| \% difference Change/ NCP ITN using 850 as a divisor | $\begin{aligned} & .09 / 2.09= \\ & 4 \% \end{aligned}$ | $\begin{aligned} & \hline .11 / 2.14= \\ & 5 \% \end{aligned}$ | $\begin{aligned} & .24 / 2.02= \\ & 12 \% \end{aligned}$ |
| NCP income to need ratio Using appropriate divisor | 1.86 | 1.96 | 1.68 |
| \% difference <br> Change/ NCP ITN <br> Using appropriate divisor | $\begin{aligned} & .23 / 1.86= \\ & 12 \% \end{aligned}$ | $\begin{aligned} & .18 / 1.96= \\ & 0 \% \end{aligned}$ | $\begin{aligned} & .58 / 1.68= \\ & 35 \% \end{aligned}$ |

Table based on a total combined income=4200, CP income=1800, NCP income 2400 Income share=43-57\% (ignoring tax benefits to the CP), Time share 70-30\%.
NCP child cost = total obligation times an assumed $20 \%$ time share.

## Calculation of the appropriate divisor terms:

CP: all three assume CP has $100 \%$ of child costs and the divisor is therefore 1140.
NCP: The commonly used term 850 assumes the NCP has no child costs. However, if one adds the actual NCP child cost, then the divisor terms would be: Current table: 850 +143 = 993;
Cost Share 15\% Table: $850+126=976$; Betson-Rothbarth $21 \%$ Table: $850+176=$ 1026
If the rate were lowered to $15 \%$, then this difference would be lessened. The CP would still enjoy a $9 \%$ greater standard of living. Ominously, however, if the Betson-Rothbarth $21 \%$ Table is adopted, even the median NCP's standard of living would be pushed down to near the poverty level (1.46) such that the CP would have a standard of living that would be $35 \%$ higher than the NCP.

The NCP's actual standard of living would be just above the poverty level for one person (1.68). Given that the poverty level in Washington State is 1.25 (or 125\% of the federal poverty level), the median NCP would be only . 43 away from the poverty level.

Thus, the median wage earner with a monthly net income 2400 or a gross income of about 2700 or an annual gross income of $\$ 32,400$ would be reduced to barely being able to make a rental payment on the cheapest one bedroom apartment. In other words the CP would be living high on the hog while the NCP would be living out of the trunk of their car. This is not a very good formula for shared parenting and would only increases the chances that the child will lose their relationship with the NCP, typically their father. Such a disparity in living standards would only increase the animosity of NCP's and likely result in lower child support payments to CP's by NCP's who felt there was no chance for them to keep up with their payments. In either case, if the Betson-Rothbarth Table is adopted, children of divorce would be the real victims.

## Conclusions

The claims made on page 18 of the 2003 Sterling report perpetuate the myth that after divorce, mothers and children live in poverty while dads live in luxury. The truth is that after divorce both parents live near the poverty level. However, after taking known and undisputed credits and debits into account, and using an appropriate divisor that recognizes that the child still has two households and that both parents have child costs, the parent who suffers the most under the current economic table is the NCP. Their standard of living is $31 \%$ lower than the CP standard of living. The BetsonRothbarth Table would make this situation much worse, with the NCP having a standard of living that is $53 \%$ lower than the CP. A $15 \%$ obligation rate would divide the burden of raising the child a little bit more equitably, but still result in the CP having a standard of living that is $20 \%$ greater than the NCP.

This analysis of the Sterling 2003 and 2005 reports also raises other serious concerns. Given that the authors have distorted the data to the degree shown above, how can any of their data or any of their claims be trusted? None of the Sterling data in any of their three reports shows consistency, even when using their own assumptions. There is no consistency across either the rows or down the columns. This leads to the conclusion that the data has been manipulated during every step of the process. Thus, the Sterling claims are as unreliable and invalid as the Weitzman claims made in the early 1980's. This, in turn leads to the conclusion that the Sterling reports are not worth the paper they were printed on.

A final concern is why any State agency would continue to hire a consultant who produced such obviously distorted reports? Why does such blatantly distorted data continues to appear on the DCS website? Why have hard copies of these reports been mailed to all the members of this work group? Are State workers so devoid of training in statistical analysis that they cannot tell when the data in a report has been distorted and reported in a fundamentally dishonest way? Or (even worse) are workers in State agencies actively conspiring with the authors of these reports in an attempt to deceive this work group and deceive the legislature?

## Appendix 6: Questions for Dr. Betson 12/01/07

Dr. Betson,
Your presentation at the last workgroup meeting answered many of my questions. The following is a list of my remaining questions. I realize that you may not have answers to all of these questions. However, any answers you can give me to any of these questions would be greatly appreciated. These questions are based primarily on pages $4,5,6,7,8 \& 18,19,20$ of the 2006 Oregon PSI report, and Appendix pages 1-2 and A1-5 of the 2005 Washington PSI report. Regards, David Spring

Q1: Starting with page 4 of the 2006 Oregon report, in the second sentence, you stated that the CEX survey is based on quarterly interviews of 5,500 consumer units. Then a few sentences below that, you note that the data used in your study was from the interview component of the CEX from the first quarter of 1998 through the first quarter of 2004. However, in 1999, the CEX expanded their quarterly interviews to about 7500 per quarter. So the 5500 figure you referred to in the Oregon study was just for 1998, and it would have been more accurate to state that for the final five years of the data used in your study, it was based upon quarterly interviews of 7500 interviews per quarter. Would you agree with that?

Q2: The intention of the CEX is to survey families for five quarters, but the actual data on costs and expenses is for the final four interviews for one year of data on cost and expenses. So while new families are being added each quarter, in general, this rotating panel of families can be thought of as about 7500 families per year. However, many of these families are "non-responders and incomplete responders". So I am wondering if you can supply me with a break down of first, the original total number of consumer units in your 1998 to 2004 sample, and second the number of non-responders, and incomplete responders, (preferably broken down by one, two, three four and five quarter responders), and third the number of single member households and the number of non-intact households that were excluded from your samples as well as any other households that were excluded from your final sample and the reason(s) for their exclusion. The purpose of this question is to see how you got from the CEX sample for those six years to the sample you used in constructing your model.

Q3: For example, on page 4, you noted that you deleted any units that did not have at least three of the final four interviews completed. How many household units were excluded by that assumption and what demographic characteristics can you provide about those who were excluded?

Q4: What I am hoping you can tell me is what the total number of consumer units you started with and what the total number of units were that you dropped at each stage of the analysis due to non-responses or incomplete responses or any other exclusions.

Q5: On page 4, a couple of lines later, you state that you made some restrictions. The first restriction you made was that the unit had to contain a married couple between the ages of 10 to 60 years old. So I have a few questions about this restriction, which apparently was made after deleting the non-responders and incomplete responders: First, what was the sample size before these restrictions were made?

Second, what was the number of single person households that were deleted from this prior sample? Third, what was the number of non-intact (single parent) households that were deducted from the prior sample?
Fourth, what other deletions were made from the prior sample to arrive at the included sample?

Q6: The second restriction you made was to eliminate any units which had another adult living in the household other than the married couple. I would also like to know how many consumer units were eliminated from the sample by this restriction.

Q7: After all these restrictions, you note that the resultant sample size is 9,245 consumer units where 3,338 were married without children and 5,907 were married with children under the age of 18 . Were there any other subsequent restrictions that were made to construct your model? If so, what were they and how many units were eliminated from your final sample by these subsequent restrictions?

Q8: Turning next to page 6, and looking at Table 2 on page 6, the first row shows that childless couples have an average total expenditure of over \$44,000 and the typically married couple with two children has average total expenditures of almost $\$ 50,000$. But going down a couple of rows, the $50^{\text {th }}$ percentile for childless couples is only less than $\$ 39,000$ and the $50^{\text {th }}$ percentile for a family with two children is only $\$ 44,460$. You noted in the text below the chart that the distributions were skewed. So I assume that later on when you ran your statistical analysis, you made some kind of correction for the fact that you were dealing with non-normal distributions. I am wondering what computer program you used in your analysis and what correction(s) you used?

Q9: Does the Rothbarth model assume that adults who spend more on alcohol and tobacco have a higher standard of living that those who spend less on those two things?

Q10: Since I do not drink and I do not smoke cigarettes, would Rothbarth conclude that I do not have a very high standard of living? Or would he just delete me from his sample, because I do not fit his assumptions?

Q11: At the top of page 18, you note the crucial assumption of your model, namely that "when total spending is held constant, additional children will increase spending on adult clothing". Would you agree that this is one of your main assumptions?

Q12: On page 13 of "Cost Shares Child Support Guidelines" (2001), Mark Rogers states: For the argument that Betson-Rothbarth methodology leads to an accurate estimate of child costs to be true, one would have to believe that when a household has an additional child, the adults suddenly decide to drink more alcohol, smoke more tobacco, and go on spending binges for adult clothes. Common sense tells us that there is less consumption of these particular goods after having an additional child."

What is your response to this critic who says that your method is based upon the inaccurate assumption that "parents are selfish"?

Q13: On page 19, in the text you noted that 595 families reported no purchases of adult clothing so they were dropped from the analysis. So would you agree that these 595 families simply did not fit your model?

Q14: You noted that the 595 families that did not spend money on adult clothing were deleted from the sample. Why didn't you retain these families and simply assign them a value of one dollar to the purchase of adult clothing?

Q15: What percentage of the 595 families dropped from your analysis were families with children compared to families without children?

Q17: Is it fair to conclude that had these 595 families been included in your analysis by attributing one dollar to their adult clothing spending, that this would have raised the variation in your sample and therefore reduced the explained variation of your model?

Q18: Looking next at Table 7 at the bottom of page 19, this table shows all the variables from the previous page and is based on 8,650 observations. I assume you used some kind of computer program to generate the table. What program did you use and could you send me the data file used to create this Table?

Q19: At the bottom of page 20, foot note 7 says "the figure was constructed to reflect a couple between the ages of 36 to 45 years old with a high school education and where only the husband works. The children are assumed to be between the ages of 6 to 12 years old". I am wondering why you made all of these assumptions?

Q20: At the meeting, you claimed that you had to make these assumptions to get the chart. However, it seems to me you could have easily combined various variables so you did not have to make these assumptions. So I am wondering why this was not done? I am also wondering if you could send me the data file and the statistical table used to make this chart on page 20 ?

Q21: At the meeting you stated that the chart would have been the same had you used a different set of assumptions. So I am wondering if you can send me the statistical file, chart and figure using different assumptions, namely that both parents are working. After all, this is a far more common situation than the one you used and therefore the data file should have a much bigger sample size and therefore be more reliable. The child can be the same age, and both parents can still have a high school diploma.

Q22:Going back to page 19, it appears as if one of the variables (a36to 45) which was the age used to build your model has been deleted from the table: Could you send me the table with this variable added back in?

Q23: I assume that you have another table, like the table on page 19 only with the specific assumptions you used to build the graph on page 20 . I am wondering if you can send me a copy of that table?

Q24: The following questions are about the 2005 Washington State PSI Report, Appendix 1-2, mainly dealing with the Table labeled as Exhibit 1-1. Looking at the second column, would you agree that all those "greater than 100\%" amounts show that the CES survey was not accurate for amounts under $\$ 40,000$ ?

Q25: Looking next at column F, percent of expenses devoted to child care, were the figures in this column determined using the data from all age groups, or are they based upon the 6 to 12 age group? Also was this estimate derived from the entire sample or only those families wherein the mother did not work? In other words, what were the assumptions used to make this estimate of child care costs and what was the total sample size for both the married couples with children and the married couples without children in each income bracket?

Q26: Moving to column G, extra-ordinary medical costs, the table indicates that that your model assumes the child has health care costs of about $3 \%$. However, the text below the chart multiples this 3\% by the estimated percentage of total child costs ( $26 \%$ ), and thereby subtracts less than one percent from the total cost. Thus your model assumes that medical costs will be less than $\$ 30$ per month for a family making $\$ 36,000$ per year. Is that correct?

Q27:But since these medical costs are outside of the table, if the actual cost for the child's medical insurance and other major medical expenses is $\$ 250$ per month (as is stated at the bottom of the page), then this represents about $8 \%$ of the combined monthly net income. Doesn't this mean that the NCP is being credited with an assumed expense of less than $1 \%$ to construct the Economic Table from which he must pay but then the NCP is being billed at an average rate of $8 \%$ ?

Q28: The final question has to do with the data in Exhibit 1-2 in the 2005 Washington PSI report, on Appendix page 1-5 entitled, "Updated Table of Support Proportions (Rothbarth Estimator): Each of the cells in this Table have two values. For example, the lower right hand cell (for six children and $\$ 9,375$ in monthly income) has an upper value of $28.77 \%$ and a lower value of $9.28 \%$. I assume that the upper value is the value used to construct the proposed Economic Table. However, what is the lower value? I assume the lower value is the actual value derived from the data set. Is that correct?

Thank you for your assistance in answering these questions. Please feel free to email me back if you would like clarification on any of these questions or if you have any questions for me.

Regards, David Spring

## Appendix 7: A Voter's Guide to Economic Table Options

Prepared by David Spring, January 5, 2008
One way to make a decision is to have an election. After all, we live in a Democracy at that implies that at some point there is going to be a vote. This Voter's Guide has been prepared to help Voters understand what their Options are in terms of the positions of the leading Candidates. Voters may also choose a "write in" Candidate.

## STEP ONE: CHOOSE A POLITICAL PARTY

In this Election, the Candidates can be lumped into two distinct "Political Parties". These are the Income Shares group and the Cost Shares group. These two major groups can be separated based upon some core characteristics:

## INCOME SHARES GROUP NORMATIVE VALUES:

1. It is in the best interest of the child to have only one home after divorce.
2. The child's need for financial stability in this one home is greater than the child's emotional need to retain a relationship with both parents after divorce.
3. The financial need of the child is best measured by considering only the economic spending patterns of INTACT families.
4. The best method to determine the cost of child rearing is by using an indirect proxy (such as food or adult clothing) and using the differences in spending patterns between intact families with and without children to estimate the cost of children.
5. Child Support obligations are determined based upon the Post Divorce Income of the parents and the pre-divorce estimate of spending on the child. In other words, the post divorce income of both parents is considered, but not the post-divorce expenses of both parents.

## COST SHARES GROUP NORMATIVE VALUES:

1. It is in the best interest of the child to have two homes after divorce.
2. The child's need for emotional stability in retaining a relationship with both parents after divorce is greater than the child's need for financial stability.
3. The financial need of the child is best measured by considering the economic spending patterns of INTACT and NON INTACT families.
4. The best method to determine the cost of child rearing is by using an direct cost estimates of either bottom up spending patterns (adding together estimates of costs of individual items) and/or top down direct cost estimates (using estimates of total child rearing costs using differences in spending patterns between intact and/or non-intact families with and without children to estimate the cost of children.
5. Child Support obligations are determined based upon the Post Divorce Income of the parents and the pre-divorce estimate of spending on the child. However, the post divorce income of both parents and the post-divorce expenses of both parents are relevant in determining an equitable sharing of the financial burden of child rearing.

Here in Washington State, we do not believe in "cross-over" voting. You therefore are required to declare your party affiliation in order to vote: (PICK ONLY ONE)
$(\quad)$ INCOME SHARES PARTY
$(\quad)$ COST SHARES PARTY

## A Voter's Guide to Economic Table Options, Page 2

## CHOOSING A CANDIDATE

Just as there are a wide range of views within political parties, so are there a wide range of options within both the Income Shares group and the Cost Shares group. The following are brief summaries of the position statements of each candidate, organized roughly in ascending order of percentage of obligation to combined net income. Note that all estimates of combined obligation are only for the first child and exclude child care and health care which are estimated to added from $3 \%$ to $7 \%$ of combined net income.

COST SHARES CANDIDATES (YOU MUST HAVE SELECTED THE COST SHARES PARTY TO VOTE FOR ONE OF THESE CANDIDATES):
( ) Rogers Cost Shares Model focus is on placing equity of division of obligation above all else. The best way to reduce conflict between parents after divorce is to fairly divide up the burden of child rearing. Rogers believes this cannot be accomplished with a simple Table. Therefore the Table will be replaced with a computer program. The computer program is itself based upon surveys of actual costs in post divorce families. Rogers Cost Shares is therefore a "bottom up" method. The exact pre and post divorce financial circumstances of both parents will be entered into this program to determine the obligation of each parent. Combined obligation is estimated to be $12 \%$ of net combined income, but can be lower or greater depending on the actual financial circumstances of each family and the actual financial needs of each child.
( ) Combined Cost Shares Model uses a combination of bottom up and top down methods to triangulate around a central tendency to determine child rearing costs. Focus is on simplicity, predictability and a "perception of fairness" to achieve greater cooperation and compliance after divorce. Combined obligation is estimated to be 15\% of net combined income which is divided between parents based upon equal consideration of both the parents' ratio of income and the parents' ratio of time spent caring for the child.
( ) Flat Rate Model, also called the Wisconsin model or the New York Model, is very similar to the Combined Cost Share model in that a variety of mainly bottom up methods was used to estimate actual child rearing costs. Focus is also on simplicity, predictability and a "perception of fairness" to achieve greater cooperation and compliance after divorce. Thus, there is a strong aversion to using a regressive table. Combined obligation is estimated to be $17 \%$ of net combined income which is divided between parents based solely upon the parents' ratio of income. A "residential credit" may also be given, but it would not give full credit to the minority time parent for time spent caring for the child. Of all the Cost Share candidates, this model is the closest to the "status quo" option of the current Economic Table.
( ) Melson Model, also called the Delaware model, focuses first on subtracting out the basic financial needs of each parent. The remaining income left of each parent is then used to establish the ratio of financial obligation for the child. While cost-based, court orders are typically higher under the Melson model such that combined obligation is estimated to be about $\mathbf{2 0 \%}$ excluding child care and health care. A "residential credit" may also be given, but it would not give full credit to the minority time parent for time spent caring for the child.

INCOME SHARES CANDIDATES (YOU MUST HAVE SELECTED THE INCOME SHARES PARTY TO VOTE FOR ONE OF THESE CANDIDATES):
There are two "Rothbarth" candidates and two "Engel" Candidates. The Rothbarth candidates use spending on adult items as an indirect proxy to estimate child spending. The Engel Candidates use spending on food as an indirect proxy to estimate child spending. Rothbarth estimates are typically about $10 \%$ less than the Engel estimates.
( ) Marginal Rothbarth Model. Recommended by Angus Deaton (1986), who claimed that this model represented a "lower bound" for child rearing costs. Deaton used "non-food-related" spending of very low income intact families (Sri Lanka sample) to determine that child costs were about 11\% of total spending. Using $10 \%$ below the marginal Engel model, combined obligation is estimated for a US CEX sample to be $\mathbf{1 5 \%}$ of net combined income which is divided between parents based upon their chare of total income. A "residential credit" may also be given, but it would not give full credit to the minority time parent for time spent caring for the child. This model is closest to the Combined Cost Share model favored by Combined Cost Shares advocates.
( ) Marginal Engel Model. Recommended by Robert Williams (PSI-1987). Williams used food spending in intact families as an indirect proxy to estimate child costs and determined that child costs were about 19\% of total family spending. Three Florida State PHD Economists (2004) replicated Williams marginal Engel method with a 19992003 CEX sample and determined that child costs (excluding child care and health care) had fallen slightly during the past 20 years and thus are now only $17 \%$ of total family spending. This is the model selected by the Washington State legislature to make the current Economic Table. Therefore a vote for this option is a vote for a $19 \%$ (actually $23 \%$ to $16 \%$ regressive Table) rate and would preserve the "Status Quo."
( ) Per Capita Rothbarth Model. This is the model invented by and recommended by Dr. Betson. Like the Deaton Rothbarth model, it uses spending on adult items in intact families to estimate child costs. However, as the three Florida State PHD economists have pointed out, Dr. Betson added a "per capita" adjustment to the original Rothbarth method. This adjustment raised the estimate about 7\% (from 15\% to 22\%) without any change in the underlying CEX data. Apparently, Dr. Betson added this adjustment factor in order to insure that the standard of living in the child's primary household would be as high as possible. Combined Obligation is estimated to be $\mathbf{2 2 \%}$ of combined income divided between the parents based upon ratios of income.
( ) Per Capita Engel Model. This model was also invented by, but not recommended by Dr. Betson. Like the Williams-Engel model, it uses spending on food items in intact families to estimate child costs. However, as the three Florida State PHD economists have pointed out, Dr. Betson added a "per capita" adjustment to the original Engel method. This adjustment raised the estimate about 7\% (from 19\% to 26\%) without any change in the underlying CEX data. Apparently, Dr. Betson added this adjustment factor in order to insure that the standard of living in the child's primary household would be as high as possible. Combined Obligation is estimated to be $26 \%$ of combined income divided between the parents based upon ratios of income.
( ) Write-In Candidate: For those who do not believe in the two party system.

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