

1996

GD39/20,1/R47

DOD21 5897 STATE OF COLORADO CHILD SUPPORT COMMISSION

FINAL REPORT



JANUARY 1996

CHILD	CHILD SUPPORT COMMISSION				
Name Statutory Category					
Gina Weitzenkorn, Chair	Family Law Section - Colorado Bar Association				
Gilbert Reyes	Male Custodial Parent				
Cheryl Carney	Female Custodial Parent				
Vacant	Male Noncustodial Parent				
Vacant	Female Noncustodial Parent				
John B. (Jack) Rigg	Joint Custodial Parent				
M. Eloisa Gutierrez	Parent in Intact Family				
Vacant	Judge				
Larry Martin	Magistrate				
Vacant	State Court Administrator Designee				
Diane Young	State Child Support Enforcement Division				
Ingrid Holmes	County Child Support Attorney (Adams County)				
Brian Field	Director of County Dept. of Social Services (Arapahoe County)				
Frank Schoengarth	Administrator of County Delegate CSE Unit (Jefferson County)				
Robert G. Williams	Public Member				
Honorable Peggy Kerns	Member of Colorado House of Representatives				
Honorable Gigi Dennis	Member of Colorado Senate				

Mary Ann Hicks

Assistant to the Commission

CHAPTER I

INTRODUCTION AND RECOMMENDATIONS

This report contains the findings of the Colorado Child Support Commission in its review of the Colorado Child Support Guidelines. Based on these findings, the Colorado Child Support Commission has five recommendations for revisions to the Colorado Child Support Guidelines.

Purpose of the Colorado Child Support Commission

The Colorado Child Support Commission was created pursuant to Colorado statute \$14-10-115 (18)(a). The statute states that the commission was to review the child support guidelines and general child support issues and make any recommendations for changes to the governor and to the general assembly. The statute also states that the commission must consider economic data on the cost of raising children and analyze case data on the applications of, and deviations from the guidelines to be used in the commission's review to ensure that deviations from the guidelines are limited.

The review conducted by the Colorado Child Support Commission also meets the requirement of the Family Support Act of 1988 [P.L. 100-485] which mandates that states must review their guidelines every four years. Furthermore, the review is consistent with federal regulations [45 CFR 302.56] which require that the review must include an assessment of the most recent economic data on child-rearing costs and a review of case data to ensure that deviations from guidelines are limited.

Organization of the Colorado Child Support Commission

The state statute mandates that the commission shall consist of no more than seventeen members. Governor Romer appointed fourteen members to the commission on May 25, 1995. Three positions on the commission, a Judge, a male non-custodial parent, and a female non-custodial parent, have not been filled. The representative of the state court administrator resigned his position when he resigned from the state court administrator's office and he has not been replaced. The members of the commission learned of their appointments in June 1995 and the first meeting of the Commission was held on July 28, 1995. The commission met twice a month from August through November 1995 in Denver.

Public Meetings

Three public meetings were held throughout the state, in Pueblo, Fort Collins and Grand Junction. The commission advertised the public meetings, but public participation was very limited. The commission also received letters and written comments from members of the community concerning child support.

The input that was received from the public did not indicate any deep seated dissatisfaction with the child support guidelines. Members of the public are upset about enforcement of child support orders, once the court enters an order of support pursuant to the child support guidelines. The comments included concern about custodial parent's inability to receive child support after it has been ordered by the court as well as comments about overly aggressive enforcement tactics to collect child support. Other concerns included the rigidity of the judicial system and the perceived high cost of attorneys.

Issues and Recommendations

Given the short time frame that the commission had to review the issues before it and to make recommendations to the governor and general assembly, the commission focused its attention on the review of the guidelines, deviations, and matters that will be addressed in this report. The commission believes that other issues such as the definition of gross income for child support calculations, postsecondary education, enforcement of child support orders, and shared custody support should be addressed but this commission is not prepared to make recommendations concerning those issues at the present time. More time and resources are needed in order to address adequately those and other issues as well.

The following are the issues addressed and recommendations developed by the Colorado Child Support Commission.

Issue 1: Tax Exemptions for Child(ren) Due Support

The current statute at C.R.S. 14-10-115 (14.5) states that:

Unless otherwise agreed to by the parties, the court shall allocate the right to claim dependent children for income tax purposes between the parties. These rights shall be allocated between the parties in proportion to their contributions to the costs of raising the children...

The current and proposed child support guidelines are calculated with the assumption that the custodial parent receives the tax exemption for the children. This factor impacts the amount of the child support that the non-custodial parent is ordered to pay. However, given the above statutory language, the non-custodial parent is entitled to the tax exemption if his or her income exceeds that of the custodial parent.

RECOMMENDATION 1: TAX EXEMPTIONS FOR CHILD(REN) DUE SUPPORT

The Commission recommends that the statute be amended to state that:

Unless otherwise agreed to by the parties, the court shall allocate the right to claim dependent children for income tax purposes to the custodial parent except in cases of shared custody In shared custody cases these rights shall be allocated between the parties in proportion to their adjusted gross incomes for child support calculations...

Issue 2: Determination of Potential Income

C.R.S. 14-10-115 (7)(III)(b)(I) states that:

If a parent is voluntarily unemployed or underemployed, child support shall be calculated based on a determination of potential income; except that a determination of potential income shall not be made for a parent who is physically or mentally incapacitated or is caring for a child <u>two years of age or younger</u> for whom the parents owe a joint legal responsibility.

The commission learned that the underlined phrase above has led to different interpretations by different courts. Some courts interpret this to mean that this phrase applies until the third birthday of a minor child and others interpret it to mean that it applies until the second birthday of a minor child. This section was intended to apply to situations when it is difficult for custodial parents to obtain day care for young children and therefore it is difficult for parents to work outside of the home. The commission believes that it is also important that the statute be applied uniformly throughout the state.

RECOMMENDATION 2: DETERMINATION OF POTENTIAL INCOME

The commission recommends that the above underlined phrase be changed to read <u>under the</u> age of thirty months.

<u>Issue 3:</u> Treatment of Social Security Benefits Received by Minor Children

The Commission learned that at the present time, Social Security benefits received by minor children due to the death or disability of a step-parent is included in the child support calculations for the determination of the child support owed by natural parents. This is included as income for the minor children pursuant to C.R.S. 14-10-115(16.5) or as gross income of the custodial parent pursuant to C.R.S. 14-10-115 (7)(I)(A). Colorado law clearly states that the income of a stepparent, if he or she is alive and employed, cannot be included in either the custodial or non-custodial parent's income for the calculation of child support. However, if the step-parent dies, the children may be entitled to receive Social Security benefits from that step-parent's account. In turn, the amount of the Social Security benefits is considered income to the children under the current child support guidelines, thus it reduces or negates the non-custodial parent's share of the child support obligation. Because Social Security benefits are a fraction of the deceased step-parent's income, however, the children have less income available than what was available to them when the step-parent was alive. Reducing the non-custodial parent's share of the child support obligation also reduces the economic resources available to the children. This also applies if the custodial parent is disabled and actually receives Social Security Disability benefits for the minor child(ren).

RECOMMENDATION 3: TREATMENT OF SOCIAL SECURITY BENEFITS RECEIVED BY MINOR CHILDREN

C.R.S. 14-10-115 (16.5) be amended to include an additional sentence. The sentence would state that, "Social Security benefits received by the minor children as a result of the disability of the custodial parent, or the death or disability of a step-parent are not to be included as income for the minor children for the determination of child support. However, any social security benefits actually received by the custodial parent as a result of the disability of the custodial parent shall be included in the gross income of the custodial parent."

C.R.S. 14-10-115 (7)(I)(a) be clarified to state that Social Security benefits received as a result of the death or disability of a step-parent of the children shall not be included as income of the parent or the child(ren) for the determination of child support.

<u>Issue 4:</u> Health Care Expenditures on the Child(ren)

The Child Support Commission felt that the existing scattered provisions dealing with health expenses should be grouped into one section of the Child Support Guideline Statute.

Currently, health expenses are mentioned in three subsections:

- C.R.S.14-10-115(2) (a) Addresses the provision of medical insurance, dental insurance, deductibles and co-payments;
- C.R.S.14- 10-115 (12) Addresses extraordinary medical expenses; and
- C.R.S. 14-10-115(13.5) Addresses the allocation of health insurance premiums.

RECOMMENDATION 4: HEALTH CARE EXPENDITURES ON THE CHILD(REN)

The following proposed language consolidates issues concerning health care expenditures on the child(ren).

The child support order shall also provide for the child(ren)'s current and future medical needs by ordering either parent or both parents to: initiate medical or medical and dental insurance coverage for the child(ren) through currently effective medical or medical and dental insurance policies held by the parent(s); purchase medical or medical and dental insurance for the child(ren), or provide the child(ren)'s current and future medical needs through some other matter.

Health insurance premiums. The payment of a premium to provide health insurance coverage on behalf of the children subject to the order shall be added to the basic child support obligation and shall be divided between the parents in proportion to their adjusted gross income.

The amount to be added to the basic child support obligation shall be the actual amount of the total insurance premium that is attributable to the child who is the subject of the order. If this amount is not available or cannot be verified, the total cost of the premium should be divided by the total number of persons covered by the policy. The cost per person derived from this calculation shall be multiplied by the number of children who are the subject of the order and who are covered under the policy. This amount shall be added to the basic child support obligation and shall be divided between the parents in proportion to their adjusted gross incomes.

After the total child support obligation is calculated and divided between the parents in proportion to their adjusted gross incomes, the amount calculated in paragraph () of this subsection () shall be deducted from the obligor's share of the total child support obligation if the obligor is actually paying the premium. If the obligee is actually paying the premium, no further adjustment is necessary.

Prior to allowing the health insurance adjustment, the parent requesting the adjustment must submit proof that the child(ren) has been enrolled in a health insurance plan and must submit proof of the cost of the premium. The court shall require the parent receiving adjustment to submit annually proof of continued coverage of the child(ren) to the delegate child support enforcement unit, and the other parent.

Child(ren) reside in area not covered by the health insurance policy. If a parent who is ordered by the court to provide medical or medical and dental insurance to the child(ren) has insurance which excludes coverage to the child(ren) because they reside outside the geographic area covered by the insurance policy, the court shall order separate coverage for the child(ren) if the court determines coverage is available at a reasonable cost.

Coverage for child(ren)'s health insurance is an excessive amount of the order. Where the application of the premium payment on the child support guidelines results in a child support order of fifty dollars or less, or the premium payment is twenty percent or more of the parents gross income, the court or delegate child support enforcement unit may elect not to require the parent to include the child(ren) on an existing policy or to purchase insurance. The parent shall, however, be required to provide insurance when it does become available at a reasonable cost.

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RECOMMENDATION 4: HEALTH CARE EXPENDITURES ON THE CHILD(REN)

Uninsured Medical Expenses. Reasonable uninsured medical expenses in excess of \$250 per year per child which are recurring and can reasonably be predicted by the court at the time of establishment or modification of a child support order, shall be included in the worksheet calculation. Non-recurring or subsequently occurring uninsured medical expenses in excess of \$250 per year per child, shall be separately divided between the parties in proportion to their adjusted gross incomes. Such expenses shall include, but not be limited to, insurance co-payments and deductibles, such reasonable costs are reasonably necessary for orthodontia, dental treatment, asthma treatments, physical therapy, and any uninsured chronic health problem. At the discretion of the court or by agreement of the parties, professional counseling or psychiatric therapy for diagnosed mental disorders may also be considered as an extraordinary medical expense.

The schedule of basic child support obligations includes an allowance for \$250 per year per child for uninsured medical and dental expenses.

§(3)(b)(II) Be Amended. The following proposed amendment conforms to the newly located health expense section of the statute.

(II)When a child support order is entered or modified, the parties may agree, or the court may require the parties to exchange financial information, including verification of insurance and its costs, pursuant to paragraph (2) of subsection (7) of this section and other appropriate information once a year or less often, by regular mail, for the purpose of updating and modifying the order without a court hearing. The parties shall use the approved standardized child support guideline forms in exchanging such financial information. Such forms shall be included with any agreed modification or an agreement that a modification is not appropriate at the time. If the agreed amount departs from the guidelines, the parties shall furnish statements of explanation, which shall be included with the forms and shall be filed with the court. The court shall review the agreement pursuant to this subparagraph (11) and inform the parties by regular mail whether or not additional or corrected information is needed, or that the modification is granted, or that the modification is denied. If the parties cannot agree, no modification pursuant to this subparagraph (11) shall be entered; however, either party may move for or the court may schedule, upon its own motion, a modification hearing.

<u>Issue 4:</u> Assessment of the Most Recent Economic Data on Child-Rearing

The current Colorado Child Support Guidelines are based on the Income Shares model, which was developed under the Child Support Guidelines Project funded by the U.S. Office of Child Support Enforcement and administered by the National Center for State Courts. The Income Shares model has been described as follows:

The Income Shares model is based on the concept that the child should receive the same proportion of parental income that he or she would have received if the parents lived together. In an intact household, the income of both parents is generally pooled and spent for the benefit of all household members, including any children. A child's portion of such expenditures includes spending for goods used only by the child, such as clothing, and also a share of goods used in common by the family, such as housing, food, household furnishings, and recreation.¹

Because household spending on behalf of children is commingled with spending on behalf of adults for the largest expenditure categories (i.e. food, housing, and transportation), the proportion allocated to children cannot be directly observed even if the specific spending patterns are examined. This commingling of household expenditures is the most important reason that equitable child support awards are so difficult to set on a case-by-case basis.

Since the child's share of household consumption cannot be directly observed, it must be estimated based on the best available economic evidence on child-rearing expenditures. This evidence provides estimates of expenditures on children as proportions of parental income levels across a broad spectrum of family incomes.

The current Colorado Child Support Guidelines, which were first drafted in 1986 and updated in 1991, are based on the national Income Shares model recommended by the Child Support Guidelines Project. Like other states basing their guidelines on this model, Colorado relied on national data for child-rearing expenditures because valid state-specific estimates do not exist. Specifically, the figures in the Basic Child Support Schedule are based on economic estimates of child-rearing expenditures as a proportion of household consumption by Thomas Espenshade published in *Investing in Children* (Urban Institute Press: Washington, D.C.,

¹ Robert G. Williams, *Development of Guidelines for Child Support Orders, Part II, Final Report*, Report to U.S. Office of Child Support Enforcement, Policy Studies Inc., (March 1987) p. II-69.

1984). The Espenshade estimates were derived from national data on household expenditures from the 1972-73 Consumer Expenditure Survey conducted by the U.S. Bureau of Labor Statistics.

The Espenshade parameters were used by the Child Support Guidelines Project to build the economic tables used in the Guidelines. Using those parameters as a starting point, staff from the Project:

- Derived estimates of parental income spent on children as a proportion of net income;
- Deducted average amounts for child care and children's health care (actual costs are added back into a child support obligation on an individual basis);
- Incorporated a self support reserve;
- Converted the net income tables to a gross income base; and
- Expanded the estimates of proportions into a Schedule suitable for use in guidelines.²

The Family Support Act of 1988 [P.L. 100-485, §128] required that the U.S. Department of Health and Human Services "...conduct a study of the patterns of expenditures on children in 2-parent families, in single-parent families following divorce or separation, and in single-parent families in which the parents were never married...." The research to develop new economic data under that mandate was conducted by Dr. David Betson of University of Notre Dame, through the University of Wisconsin Institute for Research on Poverty. For his research, Dr. Betson used data from the national 1980-86 Consumer Expenditure Survey. His

² See Development of Guidelines for Child Support Orders, pp. II-67 – II-80, and II-131 – II-140.

updated estimates were published in one report and further analyzed in another.³ Dr. Betson developed new estimates using five different estimating models, with detailed national data on household expenditures drawn from the 1980-86 Consumer Expenditure Survey administered by the U.S. Bureau of Labor Statistics.

Of the models used by Dr. Betson for these new estimates of child-rearing expenditures, the "Rothbarth estimator" seems to have the most economic validity and plausibility. As discussed in more detail below, this estimator defines equivalent well-being between households (with and without children, for example) in terms of their level of spending on "adult goods." In our judgment and in the judgment of Dr. Betson, estimates based on this Rothbarth model constitute the best available evidence on child-rearing costs for use in the development of child support guidelines Schedules.

In Chapter II, we discuss these new economic data are examined in more depth, provide an overview of the approaches used to estimate economic parameters for the existing and proposed Schedules, and provide resulting estimates of the proportion of parental net income spent on children.

³ David M. Betson, Alternative Estimates of the Cost of Children from the 1980-86 Consumer Expenditure Survey, Report to U.S. Department of Health and Human Services (Office of the Assistant Secretary for Planning and Evaluation), University of Wisconsin Institute for Research on Poverty (September 1990); Lewin/ICF, Estimates of Expenditures on Children and Child Support Guidelines, Report to U.S. Department of Health and Human Services (Office of the Assistant Secretary for Planning and Evaluation), Lewin/ICF (October 1990).

RECOMMENDATION 5: REVISED SCHEDULE OF BASIC CHILD SUPPORT OBLIGATIONS BASED ON NEW ECONOMIC RESEARCH ON CHILD-REARING EXPENDITURES

Using the economic findings from Dr. Betson's research, we have developed a proposed new economic table for the Colorado Child Support Guidelines, using a methodology similar to the one used to develop the economic Schedules for the existing guidelines. Dr. Betson's research provides estimates of the proportion of household *consumption* expenditures ascribed to children. Using the same data set from which he derived estimates of these parameters, we developed estimates of the proportion of household *net* income spent on children across a broad income spectrum. We also deducted average expenditures on child care, estimated health insurance, and estimated children's extraordinary medical expenses from these proportions. (In the Income Shares model, these child-rearing costs are added to the basic child support calculation as actually incurred.)

In the proposed economic tables, the self support reserve has been increased to correspond with increases in the poverty level for a single adult since the Schedule was developed in 1986. (The 1991 revision did not update the self support reserve.) These numbers are the basis for construction of economic tables based on *net* income. The final Schedule is developed by converting the net income table to gross income using withholding tables for a single obligor.

In Chapter III, we describe the steps involved in developing the proposed Schedule based on relevant economic evidence, as well as the specific assumptions made in the course of that development. Further detail is provided in Appendix I, Technical Computations.

In Chapter IV, we summarize the key assumptions implicit in the development of the proposed Schedule that are likely to have the most impact on how the tables are used.

In Chapter V, we compare the existing Schedule to the proposed Schedule.

In Chapter VI, we present a brief summary and conclusions.

CHAPTER II

NEW ECONOMIC DATA ON CHILD-REARING COSTS

At the foundation of the guidelines Schedule are economic estimates of the costs of child rearing. Child-rearing costs are estimated as a proportion of total family spending on consumption. By relating a family's consumption expenditures to total income, we can then derive estimates of spending on children as a proportion of net or gross family income. The relationship between consumption spending on children to total household consumption spending, and thus to net and gross family income, is depicted in Figure 1.





General Economic Approach to Measuring Child-Rearing Costs

As briefly discussed in Chapter I, most household spending on children cannot be directly observed. Parents can separately track, and account for, spending on such

categories as children's clothing, educational expenses, and child care. However, for those expenditure categories accounting for the bulk of child-related costs, spending on children is inextricably intertwined with spending on adults. These categories of pooled family expenditures include food, housing, utilities, home furnishings, transportation, most recreation, and most health insurance. To determine how much of the household budget is spent on children, it is necessary to devise and apply an estimation methodology that indirectly calculates the children's share.

Several economic methodologies have been developed to produce such estimates. Most attempt to estimate the marginal, or extra, costs of child rearing relative to expenditures in the absence of any children. They do so by comparing expenditures between two households that are equally well off economically, one with children and one without. The additional expenditures by the household with children are deemed to be the costs of child rearing.

An example, shown below, illustrates this method. In this example, the households are both assumed to have two adults and are considered to be equally well off. Family A has no children, while Family B has two children:

	Family A	Family B	
Number of Children	0	2	
Income	\$18,000	\$30,000	
Children's Additional Cost		\$12,000	
Children's Share of Total		\$12,000	/ \$30,000 = 40%

In this example, Family B must spend \$12,000 more to be as well off as Family A. That \$12,000 can be considered as the marginal cost of the children. Since \$12,000 is 40 percent of \$30,000, we would estimate the total cost of the two children to be 40 percent of parental income at this level of earnings. The methodology can also be applied to compare expenditures by equally well off

households with varying numbers of children. This yields estimates of additional costs of a second and third child, for example.

In order to estimate the children's share of expenditures in this manner, it is necessary to construct a standard of well-being that is independent of income. Only with such a standard can we consider two families to be equally well off, one with children and one without, even though they have different incomes. Several such standards of well-being have emerged from the economic literature on child-rearing costs.

"Engel" Estimator

The traditional standard of well-being is the proportion of household income spent on food, which declines as incomes increase. This standard is the basis for the "Engel" methodology for estimating child-rearing costs. This methodology was used in the development of the U.S. poverty standard, the Bureau of Labor Statistics equivalency scale, and was used by Dr. Thomas Espenshade to estimate child-rearing costs that are the basis for the economic Schedule in Colorado's existing guidelines.

This standard is based on findings from more than a century ago by economist Ernst Engel that as a family's income increases (holding family size constant), the percentage of the family's expenditures on food decrease, even though total spending increases. This means that a family's spending on food increases more slowly than income. Espenshade has documented that this pattern still exists in his research. Under this standard, total expenditures devoted to food are deemed to be a valid indicator of economic well-being. Thus, if two families of different size spend the same proportions of their incomes on food, they are deemed to be equally well off.⁵

⁵ For an excellent lay explanation of the various economic methods of measuring child rearing costs, see Lewin/ICF, *Estimates of Expenditures on Children and Child Support Guidelines* (Chapter 2).

Espenshade used the Engel estimator for the estimates of child-rearing expenditures upon which the existing Colorado guidelines Schedule is based. He first estimated the relationship between family income and spending on food. He then compared household expenditures for families with and without children spending like amounts on food (and therefore presumed to be equally well off). Following the procedure described above, he then estimated the "extra" spending on one child and the proportion of household spending allocated to one child. The procedure was also applied to estimate the marginal cost for a second child and then a third. With this methodology, Espenshade estimated that families allocate 26 percent of their consumption spending to one child, 41 percent to two children, and 51 percent to three children.⁶

Rothbarth Estimator

The "Rothbarth" estimator uses a different standard for measuring the economic well-being of households. As stated by Lewin/ICF, economist Erwin Rothbarth "... argued that the best way to measure expenditures on children is to assess children's impact on their parents' consumption."⁷ Rothbarth assumed that well-being should be determined by comparing the levels of "excess income" available once necessary expenditures on all family members have been made, with excess income defined to include luxuries (alcohol, tobacco, entertainment, and sweets) and savings.

Studies which have used the Rothbarth methodology to estimate child-rearing costs — including Betson's — have limited the definition of excess income to those goods which are assumed to be used only by adults, usually adult clothing, alcohol, and tobacco. In fact, Betson tested the sensitivity of his estimates to several alternative definitions of "adult goods:" adult clothing alone, and adult clothing

⁶ Thomas J. Espenshade, *Investing in Children: New Estimates of Parental Expenditures* (Washington, D.C.: Urban Institute Press, 1984).

⁷ Estimates of Expenditures on Children, p. 2-16.

plus tobacco and alcohol. He found there was little variation in results with these changes in definition. This finding suggests that his estimates have not been significantly compromised by any data inadequacies in the measurement of spending for tobacco and alcohol.

Betson used this standard of well-being (i.e. household expenditures on adult clothing, tobacco, and alcohol) as well as others to compare spending by families with and without children, who were equally well off. He then derived estimates of spending for two children compared with one, and three children compared with two. His estimates of the average proportion of consumption expenditures allocated to children are 25 percent for one child, 37 percent for two, and 44 percent for three.

Choice of Estimators

Among economists, no consensus has emerged that any single estimator is better than another. All have their limitations and biases. As a result, the Lewin/ICF report issued by the U.S. Department of Health and Human Services does not express any opinion concerning the single best estimator of child-rearing costs. Rather, it states that the various estimates should be considered as expressing a range of results. Of the estimates derived, however, which include several other formulations, only the Rothbarth and Engel methodologies are without serious problems of empirical specification. The primary bias of the Engel methodology, according to the Lewin/ICF Report, is that it is theoretically most likely to <u>overstate</u> child-rearing expenditures. In contrast, the primary bias of the Rothbarth methodology is that it is likely to <u>understate</u> child-rearing expenditures.

From a theoretical point of view, the Rothbarth methodology seems to be at least as strong as the Engel methodology. Indeed, there seems to be growing support for the Rothbarth methodology among economists. Not only does Dr. Betson favor the Rothbarth estimates as the best single source of data on child-rearing expenditures, but the most recently published study using the earlier 1972-73 Consumer Expenditure Survey also relied on a Rothbarth type of methodology.⁸

An additional consideration is that the Rothbarth estimates are approximately in the middle of the range of the estimates constructed by Betson using an array of different models. Of the various methodologies used by Betson to develop estimates of child-rearing costs using data from the 1980-86 Consumer Expenditure Survey (CEX), the Rothbarth approach seems to have yielded the most plausible results. In contrast, the Engel estimates based on this data set are lacking in plausibility, sometimes even exceeding per capita shares (a equal division of household costs between all family members). Thus, in our view, the sound theoretical basis of the Rothbarth methodology, in conjunction with the implausible results from the Engel methodology, renders the Rothbarth estimator to be the preferred choice for revision of the guidelines Schedule based on the most recent research on child-rearing costs.

Other Issues Pertaining to Estimates of Child-Rearing Costs

(1) Use of national data for state guidelines

Like all state guidelines using economic studies on child-rearing expenditures, the Colorado guidelines are based on national data. The specific source of the data is one of the periodic Consumer Expenditure Surveys conducted by the Bureau of Labor Statistics. These surveys are used because they are the most detailed available source of data on household expenditures. They track household expenditures and income through two components: (1) a diary of household spending; and (2) an interview survey. This produces in-depth information on household expenditures and income. The Consumer Expenditure Survey is conducted for a large sample of households. For Dr.

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⁸ Edward P. Lazear and Robert T. Michael, *Allocation of Income Within the Household* (Chicago: University of Chicago Press, 1988).

Betson's research, for example, he was able to begin with data on a sample of more than 26,000 households. Even after excluding irrelevant groups (e.g. single individuals, widowed single parent households), he was left with an analysis sample of 8,519 observations for the research relating to child-rearing expenditures.

Data of this depth and quality are simply not available at the state level. Moreover, replication of the Consumer Expenditure Survey at the state level would be extremely costly. Because of the methods that must be used to estimate child-rearing costs, the absence of such data precludes the development of accurate estimates specific to a given state. This is why no state has attempted to develop such a data source and conduct its own research on child-rearing expenditures. Even if a state such as Colorado did so, however, there is no reason to expect that the results would differ significantly from national results. The findings from the national research yield estimates of the proportion of parental expenditures allocated to children. There is no *a priori* reason to believe that the estimates of these proportions at the state level would vary much from national estimates.

(2) Use of data from intact families to determine child support levels

The child-rearing expenditures discussed in this report are estimates from samples of two-parent households. This is appropriate since the Income Shares model (upon which the Colorado guidelines are based) seeks to apportion to the child the amount that the parents would have spent if the household were intact.

Since child support is required only when the household is not intact, some have argued that child-rearing expenditure data from single-parent families should be used as the basis for child support levels. Although such data have generally not been available in the past, Dr. Betson did formulate such estimates in his research. However, those estimates are based on much smaller sample sizes than the estimates for two-parent households. Unfortunately, even if valid data exist on expenditure patterns in one-parent households, such data do not provide meaningful guidance for setting child support awards. In economic terms, the "costs" of child-rearing are defined by what parents actually spend on their children — at least above a minimum (i.e. poverty) level. For a middle class child, for example, the only way of determining whether part of that child's costs should include a new bicycle, Nintendo game, or own bedroom is by observing how other parents at that same income level divide their income between their own needs and those of their children. All economic studies on child-rearing costs have found that parents spend more on children as they have more income available. The relevant question is, how much of that additional income do they spend on the children?

It is well known that single-parent households with children have less money to spend than intact families. Therefore, any study of such households will observe a lower level of spending on children overall than would be observed in two-parent households. The fact that single-parent households actually <u>do</u> spend less income on children than two-parent households does not mean that they <u>should</u> spend less if the other parent has the means to provide more child support.

A simple example will help to illustrate this point. Assume that two different single-parent households exist, each with two children, and each with income before child support of \$1,000 per month. Assume also, that in the absence of child support each of these households would spend \$600 per month on the two children. Finally, assume that the noncustodial parent in the first case had monthly income of \$5,000, while the noncustodial parent in the second case had monthly income of \$1,000. Clearly, the noncustodial parent in the first case should pay substantially more child support than the noncustodial parent in the first the children's standard of living would have been much higher if the first household were intact than if the second household were intact.

That spending on the children in the two single-parent households in this example was the same level (and much lower than it should be given the incomes of the noncustodial parents) has no relevance to the child support determination except as it reflects the custodial parent's ability to contribute. This demonstrates why it is appropriate to rely on child-rearing data from two-parent households rather than one-parent households for determination of child support obligations.

(3) U.S. Department of Agriculture estimates of child-rearing costs

The most widely distributed estimates of child-rearing expenditures are those produced by the U.S. Department of Agriculture's Family Economics Research Group (FERG). The most recently published figures are based on data from the 1987 Consumer Expenditure Survey (CEX), updated to 1993 dollar levels using the Consumer Price Index (CPI).⁹ The FERG methodology is a hybrid approach that differs substantially from the marginal cost methodologies discussed above. FERG allocates estimated expenditures separately for each major category, using different methods for different classifications.

Food and health care expenditures are allocated among each family member using proportions derived from the National Food Consumption Survey conducted by the U.S. Department of Agriculture and the National Medical Care Utilization and Expenditure Survey conducted by the U.S. Department of Health and Human Services. Expenditures on children's clothing, education, and child care, which are directly reported in the CEX, are divided equally among each child in the household. The most problematic aspect of the methodology is the treatment of housing, transportation, and miscellaneous other expenses. These are all apportioned among all members of the household on a simple per capita basis. Thus, in a household with two parents and two children, for example, the total housing costs would be equally divided among all four family members.

⁹ Mark Lino, "Expenditures on a Child by Families: 1993", *Family Economics Review* (vol. 7, no. 3, 1994).

This per capita, or average cost, division of some expenditures between parents and children assumes a conclusion about the real allocation of those costs. For purposes of child support, a marginal cost approach to estimating costs of childrearing is a more appropriate method. Child support is commonly understood to provide for the costs of children. It seems very unlikely that the costs of children would proportionately equal the adult's initial costs in those categories of expenditures. For this reason, the FERG methodology does not provide as good a foundation for child support Schedules as one of the other methodologies discussed above.

Despite these methodological differences, FERG's published estimates of childrearing costs are quite close to the proportions recommended for Colorado based on Dr. Betson's Rothbarth estimator. This is shown in the age-specific childrearing estimates presented in Figure 2. (The one child is 8 years old, the 2 children are 8 and 10 years old, and the three children are 4, 8, and 10 years old). FERG has estimated that parents spend 22 percent of household consumption for one child, compared with Betson's estimate of 25 percent; 37 percent for two children compared with Betson's 35 percent, and 43 percent for three children, compared with Betson's 39 percent. Note that these are average estimates, and that they vary at different levels of consumption expenditures. This similarity gives additional confidence in the Rothbarth estimates. Although the FERG methodology is not as appropriate for direct utilization as a base for child support, the estimates based on this methodology provide another useful benchmark.



Expenditures on Children as a Proportion of Net Income

Our discussion has focused up to now on the proportion of consumption expenditures allocated to children. Of more interest is the estimated proportion of net income spent on children. As discussed in more detail in Chapter III, we have derived such estimates from Dr. Betson's findings on consumption expenditure shares. Using the same database he used for his earlier research, Dr. Betson for the purposes of this report estimated the proportion of net income spent on one, two, and three children in fourteen income categories (inflated to February 1995 dollars from a 1983 constant dollar base).

As shown in Table 1 and depicted in Figure 3, the proportion of net income spent on children declines as income increases, although the level of spending (i.e., actual dollars) on children increases as income increases.

- For one child, spending is estimated to be approximately 26 percent for one child in the lowest income category, declining to 16 percent in the highest.
- For two children, spending is estimated to be 38 percent in the lowest income category, declining to 24 percent in the highest.
- For three children, spending is estimated to be 45 percent in the lowest income category, declining to 28 percent in the highest.

These proportions include average spending for child care and children's health care. As discussed in Chapter III, these amounts are deducted from the estimates prior to construction of a guidelines Schedule.

Like Espenshade's estimates which are used as the basis for Colorado's existing guidelines, Betson's Rothbarth estimates show consumption spending declining as a proportion of net income as income increases. Yet, Betson's estimates show those proportions declining more rapidly than the Espenshade estimates, with the result that expenditures on children as a proportion of net income are somewhat lower using the Rothbarth parameters than they are using the Espenshade parameters.

Net Income	Percent of Net Income Spent On					
(1995 Dollars)	One Child	Two Children	Three Children			
Less than \$10,127	25.64	37.82	45.26			
\$10,128 < \$15,190	25.44	37.48	44.82			
\$15,191 < \$20,254	25.28	37.20	44.47			
\$20,255 < \$25,318	25.15	36.99	44.20			
\$25,319 < \$30,381	25.05	36.83	44.00			
\$30,382 < \$35,445	23.62	34.71	41.46			
\$35,446 < \$40,509	22.67	33.31	39.78			
\$40,510 < \$45,573	21.12	31.03	37.06			
\$45,574 < \$50,636	20.95	30.80	36.74			
\$50,637 < \$60,764	19.91	29.24	34.90			
\$60,765 < \$70,892	19.41	28.47	33.99			
\$70,893 < \$81,019	18.64	27.35	32.64			
\$81,020 < \$91,147	17.75	26.03	31.05			
\$91,148 < \$101,274	17.44	25.57	30.50			
\$101,275 +	15.88	23.26	27.75			

			Table 1				
PROPORTION	OF	NET	INCOME	SPENT	ON	CHILDRE	V
(Based	on	Roth	barth/Bet	son Est	ima	tes)	



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CHAPTER III

DEVELOPING A SUPPORT SCHEDULE FROM ESTIMATES OF CHILD EXPENDITURES

Estimating expenditures on children in intact households is only one step in developing a Schedule of Basic Child Support Obligations. The purpose of this chapter is to describe the additional procedures and assumptions used to move from child expenditures to a Schedule of Basic Child Support Obligations. A more technical discussion of the material in this chapter is presented in Appendix I.

There are two stages in the development of a Schedule of Basic Child Support Obligations that build upon the estimates of child-rearing expenditures.

The first stage is the development of a table of support proportions that relates child expenditures in different household sizes to net income. This relationship using the Rothbarth estimates developed by Betson is shown in Table 1 and Figure 3 in the previous chapter. Further adjustments were made to those proportions (1) to exclude the portion of expenditures accounted for by child care and the child's share of health insurance premiums and extraordinary medical expenses; (2) to extend the proportions to households with four, five, and six children; and (3) to develop a method of smoothing the proportions between income ranges to eliminate the gaps in support obligations that would otherwise exist.

The second stage is the development of a support schedule from the table of support proportions. Specifically, since the table of proportions is specified in terms of net income, a method of translating gross to net income must be defined. In addition, the Schedule of Basic Child Support Obligations incorporates a self support reserve to ensure that the support obligation (other than the \$20-\$50 monthly minimum) does not reduce the obligor's net income below a level necessary to maintain a minimum (poverty) standard of living.

Building a Table of Support Proportions

There are seven steps in developing a table of support proportions from the Rothbarth estimates of child expenditures. These steps include:

- Updating the net income brackets for changes in the cost of living since the time the data were collected;
- (2) Deducting from child expenditures the portion attributable to child care;
- (3) Deducting from child expenditures the child's portion of medical expenses (i.e. health insurance premiums and extraordinary medical expenses);
- (4) Calculating the relationship between consumption spending and net income;
- (5) Computing child expenditures as a proportion of net income;
- (6) Extending the estimates for one, two, and three-child households to households with four, five, and six children; and
- (7) Computing marginal proportions between income ranges to avoid notches in support obligations.

(1) Updating the Net Income Brackets

The Rothbarth estimates are based on annual *Consumer Expenditure Survey* (CEX) data from 1980 through 1986 compiled by the Bureau of Labor Statistics. The CEX income data specified in constant 1983 dollars were updated to February 1995 using statistics on changes in the consumer price index (CPI) since the time the data were collected.

(2) Deducting Costs of Child Care

The Income Shares model currently used in Colorado is meant to be a basic support obligation to which are added the costs of work-related child care and extraordinary medical expenses. The table of support proportions specifically excludes the child's share of expenditures related to these items. Adjustments for these expenditures can be accommodated because the CEX database identifies expenditures for each commodity. To make the adjustment, child care expenses are computed as a proportion of consumption spending and then subtracted from the Rothbarth estimates of child expenditures as a proportion of consumption spending. Child care costs <u>per child</u> ranged from 0.62 percent of consumption spending in the lowest income range (i.e. annual net incomes of less than \$10,128) to 1.28 percent of consumption spending in households with annual net incomes between \$45,574 and \$50,637.

(3) Deducting the Child's Share of Unreimbursed Medical Expenses

The adjustment for unreimbursed medical expenses is similar to the adjustment for child care costs, although not as easily computed since medical expenses are not itemized for each household member. Therefore, to compute an adjustment for medical expenses, we assumed that the child's share of those expenditures was the same as the child's share of all consumption spending. Once this share was computed and defined as a proportion of consumption, it was subtracted from the Rothbarth estimates of child expenditures as a proportion of consumption spending. The child's share of extraordinary medical expenses in one-child households ranged from 0.33 percent of consumption spending for households with annual net incomes between \$10,128 and \$15,190 to 0.59 percent in households with annual net incomes between \$20,255 and \$25,318.

(4) Calculating the Relationship Between Consumption and Net Income

Net income using CEX data was defined as gross income, less adjustments for federal, state, and local taxes; social security (FICA) taxes; and union dues. For all but relatively low income households, net income generally exceeds consumption spending. The difference takes the form of savings and increases in household net worth (e.g. principal payments on a mortgage). In order to convert expenditures on children as a proportion of consumption spending to child expenditures as a function of net income, the relationship between consumption and net income must be computed. Not surprisingly, that ratio decreases as net income for households with annual net incomes below - \$30,383, it represents only about 64.8 percent of net income for households with annual net incomes in excess of \$101,275.

(5) Computing Child Expenditures as a Proportion of Net Income

Once the previous steps have been completed, the computation of child expenditures as a proportion of net income is straightforward. That is, the costs of child care and extraordinary medical expenses are subtracted from the Rothbarth estimates of child expenditures as a proportion of consumption, and the revised proportions are multiplied by the ratio of consumption to household net income. The resulting proportion relates child expenditures to net income.

(6) Extending the Rothbarth Estimates to Larger Household Sizes

The CEX data do not allow estimates of child expenditures to be developed for households with more than three children because the number of households on which the estimates would be based is too small. Yet estimates for four, five and six-child households were developed as part of an earlier study.¹⁰ That study used the Espenshade parameters to estimate child-rearing expenditures and Bureau of Labor Statistics (BLS) data on equivalent consumption levels for different family sizes to project consumption levels for households with more children. The study developed ratios to extend the proportion of net income spent on three-child households to households with larger numbers of children. The ratios were assumed to be constant across income ranges and were used as multipliers to extend the Espenshade estimates.

This information guided the assumptions used to extend the Rothbarth estimates to larger household sizes. As in the earlier study, the assumption was adopted that as the number of children increases, the children's share of consumption spending increases at a constant rate for all income ranges, but that the constant decreases as the number of children increases. That is, although child expenditures as a proportion of consumption spending increase as more children are added to the household, the expenditures per child decrease; a fact which is consistent with the Rothbarth estimates for one, two, and three-child households.

A further assumption was made to account for the finding that the Rothbarth estimates showed smaller increases in child expenditures as a proportion of consumption spending relative to the Espenshade estimates. For example, the Rothbarth estimates show child expenditures increasing an average of approximately 47 percent as a second child is added to the household and 20 percent for the addition of a third child. The comparable Espenshade estimates were 55 and 25 percent respectively. As a result, we assumed that the Rothbarth estimates for four, five, and six-child households would continue to be lower than the Espenshade estimates. We further assumed that they would be lower in approximately the same proportion than they were lower for one, two, and three-child households.

¹⁰ R. Williams, *Development of Guidelines for Child Support Orders: Final Report*, report to the U.S. Office of Child Support Enforcement; Policy Studies Inc. (September 1987).

(7) Computing Marginal Proportions Between Income Ranges

The previous adjustments result in a table that relates levels of net income to the proportion of income spent on children in one to six-child households. One further adjustment, however, is needed before the table can be used to prepare a Schedule of Support Obligations that will not result in "notches" in obligation amounts as income increases. The method adopted for the Rothbarth estimates is the same approach that was used in developing the current Colorado Schedule of Basic Child Support Obligations. That is, the Rothbarth estimates are assumed to apply at the midpoint of each net income range. For net incomes that lie between these midpoints, marginal proportions were computed so that obligations would increase gradually as income increases.

An example will illustrate why this method of smoothing the support Schedule is needed. Assume we have two, two-child households, one earning between \$25,319 and \$30,383 annually (\$2,110-\$2,532 per month) and the other earning between \$30,384 and \$35,446 (\$2,532-\$2,954 per month). The proportion of net income spent on the two children in the lower income household is estimated to be 33.88 percent. The comparable proportion in the higher income household is estimated to be 32.28 percent. If actual income in the first household were \$2,500, the total support obligation would be \$847 monthly ($$2,500 \times .3388$). If actual income in the second household were \$2,600, the total monthly support obligation would be \$839 ($$2,600 \times .3228$); \$8 less per month than the support obligation in the lower income household. The use of marginal proportions between the midpoints of income ranges eliminates this effect and creates a smooth increase in the total support obligation as household income increases.

Summary

After this last adjustment, the table of support proportions, shown below in Table 2, can be prepared. (Table 2 is derived from Table 1 in the previous chapter as explained in Appendix I.) This table of support proportions is analogous to a tax rate schedule. Each net income midpoint in the table is associated with two proportions for each number of children being supported. The first proportion is applied to the income midpoint and the proportion just below it is applied to income between that midpoint and the next highest midpoint. An example best illustrates how this procedure results in a basic support obligation if the net income and the number of children are known.

Assume that the noncustodial parent has monthly net income of \$1,500 and the custodial parent has \$1,000. The computation of a child support obligation for two children using the information in Table 2 involves the following four basic steps.

<u>Step 1:</u> Add the monthly net incomes of both parents (\$1,500 + \$1,000 = \$2,500) and compute their proportionate share of combined income. Custodial parent earns 40 percent of combined net (\$1,000/\$2,500), while noncustodial parent's share is 60 percent.

<u>Step 2:</u> Use the combined income from Step 1 to compute a basic support obligation using the proportions in Table 2.

- Find the income midpoint just below the combined net income (i.e. \$2,321) and multiply the amount by the proportional support for two children: [\$2,321 x .3388] = \$786.
- Subtract the midpoint from the combined net income of the parents and multiply by the marginal proportion: [(\$2,500-\$2,321) x .2349] = \$42.

MONTHLY	One Child	Two Children	Three Children	Four Children	Five Children	Six Children
422	0.2459	0.3595	0.4265	0.4713	0.5109	0.5466
	0.2282	0.3536	0.3536 0.4182 0.4621 0.5009		0.5359	
1055	0.2353	0.3560	0.4215	0.4658	0.5049	0.5402
	0.2495	0.3279	0.3848	0.4252	0.4609	0.4932
1477	0.2394	0.3480	0.4110	0.4542	0.4923	0.5268
	0.2273	0.3275	0.3835	0.4238	0.4594	0.4916
1899	0.2367	0.3434	0.4049	0.4474	0.4850	0.5190
	0.2233	0.3181	0.3685	0.4072	0.4414	0.4723
2321	0.2343	0.3388	0.3983	0.4401	0.4771	0.5105
	0.1583	0.2349	0.2833	0.3131	0.3394	0.3631
2743	0.2226	0.3228	0.3806	0.4206	0.4559	0.4878
	0.1391	0.1891	0.2092	0.2312	0.4559	0.2681
3165	0.2114	0.3050	0.3578	0.3953	0.4285	0.4585
	0.0909	0.1314	0.1550	0.1713	0.1857	0.1987
3587	0.1973	0.2846	0.3339	0.3690	0.4000	0.4280
	0.1697	0.2387	0.2721	0.3007	0.3259	0.3488
4008	0.1944	0.2797	0.3274	0.3618	0.3922	0.4196
anospinick###################################	0.1309	0.1897	0.2440	0.2476	0.2684	0.2871
4641	0.1857	0.2675	0.3133	0.3462	0.3753	0.4061
	0.1496	0.2130	0.2482	0.2743	0.2973	0.3181
5486	0.1801	0.2591	0.3033	0.3351	0.3633	0.3887
	0.1317	0.1927	0.2283	0.2523	0.2735	0.2926
6330	0.1737	0.2502	0.2933	0.3241	0.3513	0.3759
	0.1153	0.1700	0.2050	0.2265	0.2456	0.2628
7173	0.1668	0.2408	0.2829	0.3126	0.3389	0.3626
	0.1477	0.2213	0.2696	0.2979	0.3229	0.3455
8018	0.1648	0.2388	0.2815	0.3111	0.3372	0.3608
	0.1068	0.1527	0.1781	0.1968	0.2133	0.2282
10739	0.1501	0.2169	0.2553	0.2821	0.3058	0.3272

Table 2PROPOSED TABLE OF SUPPORT PROPORTIONS

Add the two obligation amounts: \$786 + \$42 = \$828. This obligation represents the monthly amount estimated to have been spent on the children jointly by the parents if the household had remained intact.

<u>Step 3:</u> Pro-rate the basic support obligation between the parents based on their proportionate shares of net income: (1) noncustodial parent's share is \$828 x .60 = \$497, (2) custodial parent's share is \$828 x .40 = \$331. The noncustodial parent's computed obligation is payable as child support. The custodial parent's computed obligation is retained and is presumed to be spent directly on the child. This procedure simulates spending patterns in an intact household in which the proportion of income allocated to the children depends on total family income.

Building a Schedule of Basic Child Support Obligations

The two additional steps involved in building a Schedule are (1) converting gross to net income, and (2) incorporating a self support reserve into the Schedule at low levels of net income. The proposed Schedule of Basic Child Support Obligations (gross income version) that incorporates these adjustments is displayed in Table 3 attached at the conclusion of this chapter.

Converting Net to Gross Income

The Schedule of Basic Child Support Obligations is specified in terms of gross annual income. Yet, the support obligations using the table of proportions are computed for the equivalent net income. Thus, some method must be defined for converting net to gross income. The method could be made complex by treating earned and unearned income differently and attempting to simulate the tax effects for alternative assumptions about the noncustodial parent's share of income and alternative household circumstances. Such an approach, however, is likely to be cumbersome to administer. The approach used to build the Schedule of Basic Child
Support Obligations shown in this report makes the following assumptions to simplify the conversion process:

- All income is treated as earned income subject to taxes;
- All income is assumed to be earned by a noncustodial parent with no dependents; and
- Only adjustments for federal and state taxes and FICA are considered. These adjustments assume two federal and one state withholding allowance and rates for FICA applicable in 1995. Federal taxes incorporate the Earned Income Tax Credit (EITC).

Obviously, these assumptions ignore situations where not all income is fully taxable (e.g. tax breaks for home mortgages), where both parents have income and claim different numbers of dependents, and where other taxes (e.g. local taxes) further reduce net income. Nevertheless, in modeling the differential tax impacts associated with different family situations, we have found that adjustments to account for the actual tax impacts generally serve to <u>increase</u> the total net income available for support, <u>increase</u> the total support obligation, and, except in unusual circumstances (e.g. all income is earned by the custodial parent), <u>increase</u> the noncustodial parent's share of that obligation.

Self Support Reserve

Most of the support obligations shown in the Schedule are computed using the table of proportions. Exceptions to this rule are made for low income households. The current Colorado Schedule uses a self support reserve based on the 1984 federal poverty level for one

The inclusion of a self support reserve ensures that obligors have sufficient income to maintain a minimum standard of living. Below that minimum, a support obligation is not computed. The Schedule using the Rothbarth parameters shown in Table 3 includes a reserve of \$530 net (\$565 gross) per month. This is equivalent to 85 percent of the 1995 federal poverty guideline for one person.¹¹ Below this amount, absent a deviation, the court is directed to set a minimum support order (e.g. \$20-\$50 per month) to establish an obligor's duty to support his or her children. The Schedule shown in Table 3 assumes that the court would set a minimum order of \$20-\$50 per month.

For incomes above the self support reserve, the support Schedule incorporates a further adjustment to maintain the self support reserve for the obligor. That is, the proportions shown in Table 2 are phased in gradually until the point at which the obligor can pay his/her support obligation <u>and</u> have sufficient remaining income to maintain a minimum standard of living.

The additional adjustment for low income obligors follows several principles that deserve to be recognized.

- ► The support obligation is never less than \$20-50 per month. Thus, if the difference between the obligor's net income and the self support reserve is less than \$50 per month (e.g. an obligor with monthly net earnings of \$575), the obligor would pay the minimum \$50.¹²
- The support obligation should be less than 100 percent of the difference between the self support reserve and the obligor's net income so that there is an incentive to work. For example, if the obligor's net earnings are \$600 per month, the income available for support would be \$70 (i.e. \$600 \$530). If the support obligation is set at \$70 per month, however, there would be no incentive for the

¹² \$50 is a recommended minimum. Obviously, this amount is discretionary and the State could set a higher or lower amount. Current Colorado guidelines set the minimum at \$20-\$50 per month.

¹¹ Federal Register Vol. 60, No. 27 (February 9, 1995) pp. 7772-7774.

obligor to earn more than the self support reserve because he/she realizes no monetary advantage from the additional work effort. Thus, the support obligation is set at an amount which is less than 100 percent of the difference. (This computation is explained more fully in Appendix I.)

The support obligation should increase as the number of children due support increases. That is, the support obligation for an obligor with four children should be greater than the obligation for an obligor with two children.

All three principles are used to phase in the support proportions in Table 3. An example will help to illustrate the impact of this adjustment. Assume an obligor earns \$736 per month gross (\$653 net), equivalent to a 40-hour work week at minimum wage, and that support is being computed for two children based on that income. Strict application of the Betson/Rothbarth version of the Income Shares model would recommend a support obligation of \$233 per month. The income available for support after subtracting the \$530 self support reserve would be \$123. By applying a further low income adjustment to the support calculation, however, the obligation is reduced to \$112 per month.

Other Adjustments

The support obligation computed using the Rothbarth parameters is meant to be a <u>basic</u> obligation. To that obligation should be added the costs of other necessary expenditures, such as work-related child care costs and extraordinary medical expenses in excess of \$250 per year per child. As mentioned above, these additional costs of child rearing are <u>not</u> factored into the table of support proportions (Table 2).

11/28/95	Table 3 COLORADO						
Proposed Monthly Basic Child Support Obligations							
COMBINED GROSS MONTHLY INCOME	ONE CHILD	TWO CHILDREN	THREE CHILDREN	FOUR CHILDREN	FIVE CHILDREN	SIX CHILDREN	
100 200 300 400 500 600	\$20 - \$50 PER MONTH, BASED ON RESOURCES AND LIVING EXPENSES OF OBLIGOR AND NUMBER OF CHILDREN DUE SUPPORT						
650	61	62	63	63	64	65	
700	90	91	92	93	94	95	
750	120	121	122	124	125	126	
800	153	155	156	158	160	162	
850	175	187	189	191	193	195	
900	184	220	222	224	227	229	
950	190	246	248	251	254	257	
1000	200	285	289	292	295	298	
1050	208	314	322	325	329	332	
1100	213	321	340	344	348	352	
1150	225	339	388	393	397	401	
1200	236	356	422	437	442	447	
1250	241	365	432	460	465	470	
1300	250	3/7	44/	494	499	504	
1350	259	389	401	509	533	539	
1400	200	401	475	525	507	607	
1450	277	415	403 502	540	602	642	
1550	200	423	517	571	619	662	
1600	304	437	530	586	635	680	
1650	313	445	544	602	652	698	
1700	322	472	558	617	669	716	
1750	331	484	572	632	685	733	
1800	340	496	586	648	702	751	
1850	349	508	600	663	719	769	
1900	358	520	614	678	735	787	
1950	366	532	628	694	752	805	

Chapter III

11/28/95		11	Table 3			
		C	OLORAD	0		
. 1	Proposed	Monthly B	asic Child	Support (Obligation	s
	roposeu	Monthly D	asic cillia	Support	Jongation	5
COMBINED				[
GROSS	ONE	TWO	THREE	FOUR	FIVE	SIX
MONTHLY	CHILD	CHILDREN	CHILDREN	CHILDREN	CHILDREN	CHILDREN
INCOME		一 国际空港	i int	6. 695, 5		6 J.M.
2000	374	544	642	709	769	822
2050	382	555	656	724	785	840
2100	391	567	669	740	802	858
2150	399	579	683	755	818	876
2200	407	591	697	770	835	894
2250	415	603	711	786	852	911
2300	423	615	725	801	868	929
2350	432	626	739	816	885	947
2400	440	638	753	832	902	965
2450	448	650	766	847	918	982
2500	456	661	779	861	933	998
2550	462	670	790	873	946	1013
2600	469	680	801	885	959	1027
2650	475	689	812	897	972	1041
2700	482	699	823	909	985	1055
2750	489	708	834	921	999	1069
2800	495	717	845	933	1012	1083
2850	502	727	856	945	1025	1097
2900	509	736	866	957	1038	1111
2950	515	746	877	969	1051	1125
3000	522	755	888	982	1064	1139
3050	528	765	899	994	1077	1153
3100	535	774	910	1006	1090	1167
3150	542	784	921	1018	1103	1181
3200	547	791	930	1028	1114	1192
3250	552	798	939	1037	1125	1203
3300	557	805	947	1047	1135	1214
3350	561	812	956	1056	1145	1225
3400	566	819	964	1065	1155	1236
3450	571	826	972	1074	1165	1246
3500	575	833	981	1084	1175	1257
3550	580	840	989	1093	1185	1268
3600	585	847	998	1102	1195	1279

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11/28/95	Table 3 COLORADO							
Proposed Monthly Basic Child Support Obligations								
COMBINED GROSS MONTHLY INCOME	ONE CHILD	TWO CHILDREN	THREE CHILDREN	FOUR CHILDREN	FIVE CHILDREN	SIX CHILDREN		
0050	C 000	054	4000		1005	(1000		
3650	589	854	1006	1112	1205	1289		
3700	594	861	1014	1121	1215	1300		
3750	599	975	1023	1130	1225	1311		
3850	608	892	1040	1140	1235	1322		
3900	613	888	1040	1143	1245	1342		
3950	617	894	1053	1164	1254	1350		
4000	621	899	1059	1171	1269	1358		
4050	625	905	1066	1177	1276	1366		
4100	629	911	1072	1184	1284	1374		
4150	633	916	1078	1191	1291	1382		
4200	637	922	1084	1198	1299	1389		
4250	641	927	1090	1205	1306	1397		
4300	646	933	1097	1212	1313	1405		
4350	650	939	1103	1219	1321	1413		
4400	654	944	1109	1226	1328	1421		
4450	658	950	1115	1232	1336	1429		
4500	662	955	1121	1239	1343	1437		
4550	666	961	1128	1246	1351	1445		
4600	670	966	1134	1252	1358	1453		
4650	672	970	1138	1257	1363	1459		
4700	675	974	1143	1263	1369	1464		
4750	678	978	1147	1268	1374	1470		
4800	680	982	1152	1272	1379	1476		
4850	683	985	1156	1277	1385	1481		
4900	686	989	1160	1282	1390	1487		
4950	688	993	1165	1287	1395	1493		
5000	691	996	1169	1292	1400	1498		
5050	693	1000	1174	1297	1405	1504		
5100	696	1004	1178	1301	1411	1509		
5150	699	1008	1183	1307	1417	1516		
5200	701	1012	1188	1312	1422	1522		
5250	704	1016	1192	1317	1428	1528		

Developing a Support Schedule from Estimates of Child Expenditures

Chapter III

11/28/95	Table 3							
	COLORADO							
1	Proposed Monthly Basic Child Support Obligations							
COMBINED				1				
GROSS	ONE	TWO	THREE	FOUR	FIVE	SIX		
MONTHLY	CHILD	CHILDREN	CHILDREN	CHILDREN	CHILDREN	CHILDREN		
INCOME								
5300	707	1020	1197	1323	1434	1534		
5350	713	1028	1205	1332	1444	1545		
5400	718	1035	1214	1341	1454	1556		
5450	723	1043	1222	1351	1464	1567		
5500	728	1050	1231	1360	1475	1578		
5550	734	1057	1239	1370	1485	1589		
5600	739	1065	1248	1379	1495	1600		
5650	744	1072	1256	1389	1505	1611		
5700	750	1080	1265	1398	1515	1621		
5750	755	1087	1273	1407	1526	1632		
5800	760	1095	1282	1417	1536	1643		
5850	766	1102	1290	1426	1546	1654		
5900	771	1110	1299	1436	1556	1665		
5950	776	1117	1307	1445	1566	1676		
6000	781	1124	1315	1454	1576	1686		
6050	785	1130	1322	1461	1584	1695		
6100	789	1136	1329	1469	1592	1704		
6150	793	1141	1336	1477	1601	1713		
6200	797	1147	1343	1485	1609	1722		
6250	801	1153	1350	1492	1618	1731		
6300	806	1159	1357	1500	1626	1740		
6350	810	1165	1364	1508	1634	1749		
6400	814	1171	1371	1516	1643	1758		
6450	818	1177	1378	1523	1651	1767		
6500	822	1183	1385	1531	1660	1776		
6550	826	1189	1392	1539	1668	1785		
6600	830	1195	1399	1546	1676	1794		
6650	834	1201	1406	1554	1685	1802		
6700	838	1207	1413	1562	1693	1811		
6750	842	1213	1420	1570	1702	1820		
6800	846	1219	1427	1577	1710	1829		
6850	851	1225	1434	1585	1718	1838		
6900	855	1230	1441	1593	1727	1847		

11/28/95	Table 3 COLORADO							
Proposed Monthly Basic Child Support Obligations								
COMBINED GROSS MONTHLY INCOME	ONE CHILD	TWO CHILDREN	THREE CHILDREN	FOUR CHILDREN	FIVE CHILDREN	SIX CHILDREN		
0050	050	1000	1110	1001	1705	1050		
6950	859	1236	1448	1601	1/35	1856		
7000	863	1243	1456	1608	1744	1866		
7050	867	1249	1463	1617	1753	18/6		
7100	872	1250	14/1	1626	1762	1886		
7150	8//	1263	14/9	1634	1772	1896		
7200	882	1269	1487	1643	1781	1906		
7250	886	12/6	1494	1651	1790	1916		
7300	891	1283	1502	1660	1/99	1926		
7350	890	1289	1510	1009	1809	1935		
7400	900	1296	1518	16//	1818	1945		
7450	905	1303	1525	1686	1827	1955		
7500	910	1309	1533	1702	1946	1905		
7550	914	1310	1541	1703	1955	1975		
7650	919	1323	1549	1720	1965	1985		
7050	924	1329	1557	1720	1805	2005		
7750	920	1343	1572	1723	1993	2005		
7800	933	1345	1580	1746	1803	2015		
7850	942	1356	1588	1754	1902	2025		
7900	947	1363	1595	1763	1911	2005		
7950	952	1369	1603	1771	1920	2055		
8000	956	1376	1611	1780	1930	2065		
8050	961	1383	1619	1789	1939	2075		
8100	966	1389	1626	1797	1948	2085		
8150	970	1396	1634	1806	1958	2095		
8200	975	1403	1642	1814	1967	2105		
8250	980	1409	1650	1823	1976	2115		
8300	984	1416	1657	1832	1985	2125		
8350	989	1423	1665	1840	1995	2134		
8400	993	1429	1672	1848	2003	2143		
8450	997	1435	1679	1856	2012	2152		
8500	1001	1441	1687	1863	2020	2162		
8550	1005	1447	1694	1871	2029	2171		

11/28/95	Table 3					
	COLORADO					
1 1	Proposed 1	Monthly B	asic Child	Support (Obligation	S
COMPINED						
CROSS	ONE	TWO	TUDEE	FOUR	FIVE	SIY
MONTHI V	CHILD	CHILDREN	CHILDREN	CHILDREN	CHILDREN	CHILDREN
INCOME	CIIILD	CIIILDIGEN	CHILDREN	CITEDICE	CIIILDICLI	CIIILDICEI
INCOME	1			1		1
8600	1009	1453	1701	1879	2037	2180
8650	1013	1459	1708	1887	2046	2189
8700	1018	1465	1715	1895	2055	2198
8750	1022	1471	1722	1903	2063	2207
8800	1026	1477	1729	1911	2072	2216
8850	1030	1483	1737	1919	2080	2226
8900	1034	1489	1744	1927	2089	2235
8950	1038	1495	1751	1934	2097	2244
9000	1042	1501	1758	1942	2106	2253
9050	1046	1507	1765	1950	2114	2262
9100	1051	1513	1772	1958	2123	2271
9150	1055	1519	1779	1966	2131	2280
9200	1059	1525	1787	1974	2140	2290
9250	1063	1531	1794	1982	2149	2299
9300	1067	1537	1801	1990	2157	2308
9350	1071	1543	1808	1998	2166	2317
9400	1075	1549	1815	2006	2174	2326
9450	1079	1555	1822	2013	2183	2335
9500	1084	1561	1829	2021	2191	2345
9550	1088	1567	1837	2029	2200	2354
9600	1092	1573	1844	2037	2208	2363
9650	1096	1579	1851	2045	2217	2372
9700	1100	1585	1858	2053	2225	2381
9750	1104	1590	1864	2060	2233	2389
9800	1107	1595	1871	2067	2241	2397
9850	1111	1601	1877	2074	2248	2406
9900	1115	1606	1883	2081	2256	2414
9950	1118	1611	1890	2088	2264	2422
10000	1122	1617	1896	2095	2271	2430
10050	1125	1622	1903	2102	2279	2439
10100	1129	1627	1909	2110	2287	2447
10150	1133	1633	1916	2117	2294	2455
10200	1136	1638	1922	2124	2302	2463

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11/28/95	Table 3 COLORADO							
Proposed Monthly Basic Child Support Obligations								
COMBINED GROSS MONTHLY INCOME	ONE CHILD	TWO CHILDREN	THREE CHILDREN	FOUR CHILDREN	FIVE CHILDREN	SIX CHILDREN		
10250	1140	1642	1029	0101	2210	0471		
10250	1140	1643	1928	2131	2310	24/1		
10300	1143	1654	1935	2130	2317	2480		
10350	1147	1659	1941	2145	2325	2488		
10400	1150	1653	1947	2152	2332	2490		
10500	1154	1669	1953	2150	2339	2503		
10550	1157	1674	1955	2105	2340	2519		
10600	1164	1678	1905	2171	2353	2516		
10650	1167	1693	1971	2170	2301	2520		
10700	1170	1699	1977	2104	2308	2535		
10750	1170	1693	1988	2191	2373	2549		
10800	1177	1698	1994	2204	2389	2556		
10850	1180	1703	2000	2210	2396	2564		
10900	1184	1708	2006	2217	2403	2571		
10950	1187	1713	2012	2223	2410	2579		
11000	1190	1718	2018	2230	2417	2586		
11050	1194	1722	2024	2236	2424	2594		
11100	1197	1728	2030	2243	2432	2602		
11150	1201	1734	2038	2251	2441	2612		
11200	1205	1740	2045	2260	2450	2621		
11250	1209	1747	2053	2269	2459	2631		
11300	1214	1753	2061	2277	2469	2641		
11350	1218	1760	2069	2286	2478	2651		
11400	1222	1766	2076	2294	2487	2661		
11450	1226	1772	2084	2303	2497	2671		
11500	1231	1779	2092	2311	2506	2681		
11550	1235	1785	2100	2320	2515	2691		
11600	1239	1791	2107	2329	2524	2701		
11650	1243	1798	2115	2337	2534	2711		
11700	1248	1804	2123	2346	2543	2721		
11750	1252	1810	2131	2354	2552	2731		
11800	1256	1817	2138	2363	2562	2741		
11850	1261	1823	2146	2371	2571	2751		

11/28/95	Table 3						
1	COLORADO						
	Proposed 1	Monthly B	asic Child	Support (Obligation	S	
				Support		-	
COMPINED							
CROSS	ONE	TWO	TUDEE	FOUR	FIVE	CTV	
MONTHI V	CHILD	CHILDREN	CHILDDEN	CHILDREN	CHILDREN	CHILDREN	
INCOME	CHILD	CHILDREN	CHILDREN	CHILDREN	CHILDREN	CHILDREN	
Income	L	I I				1	
11900	1265	1830	2154	2380	2580	2761	
11950	1269	1836	2162	2389	2590	2771	
12000	1273	1842	2169	2397	2599	2781	
12050	1278	1849	2177	2406	2608	2790	
12100	1282	1855	2185	2414	2617	2800	
12150	1286	1861	2193	2423	2627	2810	
12200	1290	1868	2200	2431	2636	2820	
12250	1295	1874	2208	2440	2645	2830	
12300	1299	1881	2216	2449	2655	2840	
12350	1303	1887	2224	2457	2664	2850	
12400	1307	1893	2231	2466	2673	2860	
12450	1312	1900	2239	2474	2682	2870	
12500	1316	1906	2247	2483	2692	2880	
12550	1320	1912	2255	2491	2701	2890	
12600	1324	1918	2261	2498	2708	2897	
12650	1327	1922	2266	2504	2714	2904	
12700	1330	1927	2271	2510	2720	2911	
12750	1333	1931	2276	2515	2726	2917	
12800	1336	1935	2281	2521	2733	2924	
12850	1339	1940	2286	2527	2739	2930	
12900	1342	1944	2291	2532	2745	2937	
12950	1345	1949	2297	2538	2751	2943	
13000	1348	1953	2302	2544	2757	2950	
13050	1351	1957	2307	2549	2763	2957	
13100	1354	1962	2312	2555	2769	2963	
13150	1357	1966	2317	2561	2775	2970	
13200	1360	1971	2322	2566	2782	2976	
13250	1363	1975	2327	2572	2788	2983	
13300	1367	1979	2332	2578	2794	2989	
13350	1370	1984	2338	2583	2800	2996	
13400	1373	1988	2343	2589	2806	3003	
13450	1376	1992	2348	2595	2812	3009	
13500	1379	1997	2353	2600	2818	3016	

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11/28/95	Table 3 COLORADO							
Proposed Monthly Basic Child Support Obligations								
COMBINED GROSS MONTHLY INCOME	ONE CHILD	TWO CHILDREN	THREE CHILDREN	FOUR CHILDREN	FIVE CHILDREN	SIX CHILDREN		
13550	1382	2001	2358	2606	2825	3022		
13600	1385	2006	2363	2612	2831	3029		
13650	1388	2010	2368	2617	2837	3035		
13700	1391	2014	2373	2623	2843	3042		
13750	1394	2019	2379	2629	2849	3049		
13800	1397	2023	2384	2634	2855	3055		
13850	1400	2028	2389	2640	2861	3062		
13900	1403	2032	2394	2646	2868	3068		
13950	1406	2036	2399	2651	2874	3075		
14000	1410	2041	2404	2657	2880	3081		
14050	1413	2045	2409	2663	2886	3088		
14100	1416	2050	2414	2668	2892	3094		
14150	1419	2054	2420	2674	2898	3101		
14200	1422	2058	2425	2680	2904	3108		
14250	1425	2063	2430	2685	2911	3114		
14300	1428	2067	2435	2691	2917	3121		
14350	1431	2072	2440	2697	2923	3127		
14400	1434	2076	2445	2702	2929	3134		
14450	1437	2080	2450	2708	2935	3140		
14500	1440	2085	2455	2714	2941	3147		
14550	1443	2089	2461	2719	2947	3154		
14600	1446	2094	2466	2725	2953	3160		
14650	1450	2098	2471	2731	2960	3167		
14700	1453	2102	2476	2736	2966	3173		
14750	1456	2107	2481	2742	2972	3180		
14800	1459	2111	2486	2748	2978	3186		
14850	1462	2116	2491	2753	2984	3193		
14900	1465	2120	2496	2759	2990	3200		
14950	1468	2124	2502	2765	2996	3206		
15000	1471	2129	2507	2770	3003	3213		

CHAPTER IV

SUMMARY OF KEY ASSUMPTIONS AFFECTING APPLICATION OF THE GUIDELINES

The design of the Schedule of Basic Child Support Obligations is based on a number of key economic decisions and assumptions which are documented throughout the text of the report and the technical appendix. In this chapter, we have highlighted the design assumptions which may be the most significant for application of the guidelines to individual cases.

(1) Guidelines based on net income, then converted to gross income. These guidelines are designed to provide child support as a specified proportion of an obligor's *net* income. As discussed in Chapter III, a table of child support based on obligor *net* income is developed before converting the tables to gross income. The tables are converted to gross income for three reasons:

- Use of gross income greatly simplifies use of the child support guidelines because it obviates the need for a complex gross to net calculation in individual cases;
- ► Use of gross income can be more equitable because it avoids noncomparable deductions that may arise in making the gross to net calculation in individual cases; and
- Use of gross income does not cause child support to be increased when an obligor acquires additional dependents, claims more exemptions, and therefore has a higher net income for a given level of gross income.

In converting the schedule to a gross income base, we have assumed that the obligor claims one exemption (for filing, two for withholding) and the standard

deduction. This is the most favorable assumption that can be made concerning an obligor's filing status. Obligors with more than one exemption, or with itemized deductions, would have a slightly higher obligation under an equivalent net income guideline.

(2) Tax exemptions for child(ren) due support. The Schedule presumes that the noncustodial parent does not claim the tax exemptions for the child(ren) due support. In computing federal tax obligations, the custodial parent is entitled to claim the tax exemption(s) for any divorce occurring after 1984, unless the custodial parent signs over the exemption(s) to the noncustodial parent each year. Given this provision, the most realistic presumption for development of the Schedule is that the custodial parent claims the exemption(s) for the child(ren) due child support.

(3) Income assumed to be taxable. Because the Schedule has withholding tables built into it, the design assumes that all income of both parents is taxable.

(4) Self-support reserve. Incorporated into the Schedule is a "self-support reserve" for obligors. Under this concept, an obligor is ordered to pay only a minimum order - \$50 per month - if his/her income is less than the poverty standard for one person. Similarly, if the obligor's income is just above the poverty level, the child support is adjusted downward from that level that would otherwise be calculated based on the Table of Proportions shown in Chapter III. This downward adjustment is meant to leave the obligor with enough income *after payment of child support* to live at or above the poverty standard for one person.

(5) Schedule does not include expenditures on child care, extraordinary medical, and children's share of health insurance costs. The Schedule is based on economic data which represent estimates of total expenditures on child-rearing costs up to age 18. The major categories of expenditures include food, housing, home furnishings, utilities, transportation, clothing, education, and recreation. Excluded from these figures are average expenditures for child care, childrens' extraordinary medical care, and the childrens' share of health insurance.

These costs are deducted from the base amounts used to establish the Schedule because they are added to child support obligations as actually incurred in individual cases. Deducting these expenditures from the base amounts avoids double-counting them in the child support calculation.

(6) Schedule includes expenditures on ordinary medical care. Although expenditures for the children's extraordinary medical care and the children's share of health insurance are to be added to the child support obligation as actually incurred in individual cases, it is assumed that parents will make some expenditures on behalf of the children's *ordinary* medical care (i.e. uninsured out-of-pocket expenses). The Schedule amounts in this report is based on the assumption that expenditures on ordinary medical care are up to \$250 per year per child, with higher amounts divided between the parents in proportion to their incomes.

(7) Schedule is based on average expenditures on children 0 - 17 years. Child-rearing expenditures are averaged for children across the entire age range of 0 - 17 years. Expenditures would be higher for teen-aged children, and lower for pre-teen children. For various technical reasons, Betson was unable to provide reliable estimates on child-rearing expenditures for teen-aged children. Based on estimates provided by Espenshade, however, the relative cost associated with children aged 12 to 17 is 1.146 above the average.¹³

(8) 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. Taking such costs into account would be further complicated by the variability in actual visitation patterns and the duplicative nature of many costs incurred for visitation (e.g. housing, home furnishings).

¹³The derivation of this relative cost is presented in *Development of Guidelines*, p. II-137.

CHAPTER V

COMPARISON OF EXISTING AND PROPOSED SCHEDULES

This chapter discusses the differences between the existing and proposed Colorado Schedule of Basic Child Support Obligations. Some differences result from reliance on the new economic estimates of child-rearing costs. Others arise because of differences in the data used to develop the economic tables. The four most important sources of variation come from the following sources:

- Use of new estimates of child-rearing expenditures;
- Updating the self support reserve;
- Changes in table deductions for average child care and children's health costs; and
- Incorporating revisions in personal income tax rates (i.e. federal and state taxes and FICA).

As shown below, the overall differences between the existing and proposed Schedules are smaller than might be expected from the many changes in their various underlying components.

Estimates of Child-Rearing Expenditures

Use of Dr. Betson's new estimates of child-rearing expenditures introduces some differences in the starting point for the Schedules. Table 4, below, compares the average estimated proportion of consumption *spending* allocated to one, two, and three children. As indicated in the table, Betson's Rothbarth estimates are only slightly lower than Espenshade's estimates for one child (25 versus 26 percent), but

diverge considerably from the Espenshade estimates as additional children are added to the household. Thus, for two-child households the Rothbarth estimates show expenditures on children about 4 percentage points less than the Espenshade estimates (37 versus 41 percent); and about 7 percentage points less than the Espenshade estimates for households with three children (44 versus 51 percent).

	Table 4
	ESTIMATED EXPENDITURE ON CHILDREN
AS	AN AVERAGE PROPORTION OF HOUSEHOLD CONSUMPTION

	Nu	mber of Child	Iren
	1	2	3
Espenshade	26%	41%	51%
Betson (Rothbarth)	25%	37%	44%

Self Support Reserve

The existing and proposed support Schedules incorporate a self support reserve for low income obligors. The current Colorado Schedule includes a reserve of about \$430 net income per month. The proposed Schedule, on the other hand, includes a reserve of \$530 net income per month; equivalent to 85 percent of the 1995 federal poverty guideline for one person.

Obviously, the higher reserve amount, combined with the method used to phase in the support proportions results in differences between the existing and proposed Schedules in support obligations at low levels of gross income. Below, we compare support obligations for two-child households under the two Schedules for selected levels of monthly gross income.

Monthly Gross Income	Existing Colorado Support Schedule	Proposed Colorado Support Schedule
\$600	\$109	\$50
\$800	\$265	\$155
\$1,000	\$307	\$285
\$1,200	\$346	\$356

Table 5 COMPARISON OF EXISTING AND PROPOSED SCHEDULES FOR LOW INCOMES

As the table illustrates, the increase in the self support reserve has an impact on support obligations. For example, at the monthly gross income of \$800, the support obligation under the proposed Schedule is \$110 less than the amount that would be ordered under the existing Schedule. Above monthly gross incomes of \$1,200, however, the proposed Schedule yields somewhat higher support obligations for low and middle incomes relative to the existing Schedule.

Changes in Estimated Averages for Child Care and Children's Health Costs

Except at low income, Betson's estimates of average expenditures for child care and children's health costs based on 1980-86 data are somewhat higher than the estimates incorporated into the existing Schedule which are based on 1972-73 data. This is not surprising, since health care costs have increased at a much higher rate than other consumer expenditure categories.

Revisions in Personal Income Tax Rates

Except for FICA, the effective personal income tax rates are lower now (1995) than those in effect when much of the existing Schedule was developed (1991). Most of the decrease in federal taxes can be attributed to changes in the personal exemption and standard deductions. The table below displays changes in the federal and state tax burden between 1991 and 1995 for various levels of monthly gross income. In addition, the proposed Schedule incorporates withholding tables for Colorado personal income taxes.

Monthly Gross Income	1991				1995			
	Federal Tax ¹	FICA ²	Colorado Tax ³	Total	Federal Tax ¹	FICA ²	Colorado Tax ³	Total
\$1,000	\$81	\$76	\$36	\$193	\$55	\$77	\$25	\$157
\$2,000	\$231	\$153	\$86	\$ 470	\$205	\$153	\$78	\$436
\$3,000	\$490	\$229	\$136	\$855	\$423	\$229	\$135	\$787
\$4,000	\$770	\$306	\$186	\$1,262	\$702	\$306	\$193	\$1,201
\$6,000	\$1,373	\$363	\$286	\$2,022	\$1,300	\$403	\$308	\$2,011
\$8,000	\$1,993	\$392	\$384	\$2,768	\$1,920	\$432	\$423	\$2,775
\$10,000	\$2,613	\$421	\$489	\$3,523	\$2,540	\$ 461	\$538	\$3,539

Table 6 CHANGES IN FEDERAL AND STATE TAXES 1991 & 1995

¹ The assumptions used to compute federal taxes were (1) two withholding allowances; (2) all income earned by a single person.

² FICA rates in 1991: 7.65 percent of income up to a cap of \$4,427 per month.

FICA rates in 1995: 7.65 percent up to gross monthly income of \$5,100, \$316 plus 1.45 percent of gross monthly incomes above \$5,100. ³ One personal exemption and a standard deduction was used for both years. State taxes are based on the most recent Colorado withholding

³ One personal exemption and a standard deduction was used for both years. State taxes are based on the most recent Colorado wi tax tables.

Comparison of Existing and Alternative Support Schedules

This section compares Colorado's existing support Schedule against the updated proposed Schedule. This is done first by graphically comparing support obligations as a proportion of obligor net and gross income throughout a range of incomes and under different assumptions about the obligee's income. Second, support obligations are computed from the two Schedules for selected case scenarios: low income, middle income, and high income cases.

Graphical Comparison of Support Schedules

Figures 4, 5 and 6 display levels of support obligations as percentages of obligor monthly net income across a range of incomes from \$600 to \$6,000 per month. Net income rather than gross income is used to exclude effects caused by tax rate changes. Comparisons are presented for two children, with comparisons for one and three children displayed in Appendix III. For each comparison, three figures with accompanying tables are shown under the following assumptions about obligee income:

- The first figure for each comparison depicts support order levels under the assumption that the obligee has zero income.
- The second figure depicts order levels under the assumption that the obligee has half as much income as the obligor. That is, if the obligor has net income of \$2,000 per month, the obligee is assumed to have net income of \$1,000 per month; if the obligor has net income of \$3,000 per month, the obligee is assumed to have net income of \$1,500 per month. We would expect this to be the most typical income ratio.
- The third figure depicts order levels under the assumption that the obligee has the same amount of net income as the obligor across the entire income range.

It is useful to note that these comparisons assume there are no additional expenses, such as child care costs or children's extraordinary medical expenses. A further point to consider is that the existing Colorado support obligations displayed in the net income versions of the table and figures are net of <u>current</u> taxes. Thus, the curves compare directly what obligors are paying as a proportion of net income under the existing Schedule against what they would pay under the proposed Schedule.

Since the relationship between the support Schedules shifts across the income spectrum and with different ratios of obligor and obligee net income, this type of comparison provides a broad picture of the relative order levels resulting from application of the alternative Income Shares models. Although we have no empirical data from Colorado which defines the relative income ratios of obligors and obligees, use of the three ratios provides insight for a range of possible income combinations. As noted above, the most typical combination is likely to be the second (i.e. obligee income equal to half the income of the obligor), based on average national ratios of men's and women's earnings.

In reading the figures, one important consideration is that the x-axis is not an interval level scale. That is, although support is shown as a proportion of net income for each \$100 increase in income through \$2,500 per month, the scale changes to \$500 income increases through the remainder of the income range. As a result, the fairly rapid descent of the curves after \$2,000 per month is an artifact of the income scale used in the figures. The actual curves would decline much more slowly if \$100 income increments had been used throughout the income range.

Figure 4: Two Supported Children, Obligee Has No Income

For this combination of incomes, the existing Colorado Schedule results in significantly higher support obligations as a proportion of obligor net income for obligors with net incomes \$1,000 (\$1,217 gross) and below than the proposed Schedule. This result occurs because the self support reserve incorporated into the existing Colorado Schedule (equivalent to approximately \$430 net per month) is lower than the reserve used in the proposed Schedule (\$530 net per month).

The two curves converge near obligor net income of \$1,050 per month, which is where the low income adjustment for the proposed Schedule ends. After \$1,100 per month, the proposed Schedule is slightly above the existing Schedule until obligor net income of \$3,500 per month. This occurs because of increased ordinary medical care expenditures. After this point, the existing Schedule is below the proposed Schedule. This occurs because the Rothbarth estimates are slightly lower than the Espenshade estimates at higher incomes.



Figure 4

Figure 5: Two Supported Children, Obligee's Income Is Half the Obligor's

In this situation, the first observation to make is that generally the obligor's share of the support obligation as a proportion of his or her net income is almost always less than in the situation where the obligee has no income. For example, under the proposed Schedule if the obligee has no earnings, the maximum proportion an obligor earning \$1,100 per month net would pay as support is 36 percent. If the obligee's income is half of the obligor's (0.50 x \$1,000 = \$500), however, the maximum proportion would be 35 percent. This effect becomes more pronounced at the higher income levels. For example, under the proposed Schedule if the obligee has no earning \$3,000 per month net would pay as support is 31 percent. If the obligee's income is half of the 21,500, however the maximum proportion would be 27 percent.

Figure 6: Two Supported Children, Obligee's Income = Obligor's Income

The trends evidenced in the two previous figures are also evident in Figure 5. That is, (1) support as a proportion of obligor net income is less as the obligee's income increases relative to the obligor's; (2) at low to middle income levels the proposed Colorado Schedule yields higher obligations than the existing Schedule; and (3) at higher incomes the proposed Schedule yields obligations that are less than those under the existing Schedule. The differences reflect the change in child-rearing costs in the new economic estimates, as well as increases in ordinary medical care expenditures.



Figure 6



Specific Case Examples

Below are three case examples - a low, middle and high income case - to compare further the levels of support under the existing and proposed Colorado Schedules.

Case Example 1: Low Income Case

Father earns \$800 gross per month. The mother, an AFDC recipient and not working, has sole custody of the couple's two children. The support obligation would be based on the father's income alone since the mother has no income other than her AFDC grant. The basic support obligation as computed from the existing Colorado Schedule and the proposed Schedule using the Rothbarth parameters is shown in the following table:

Gross	Existing	Proposed
Monthiy Income	Schedule	Schedule
\$800	\$265	\$155

Since the father is the only parent with earned income, he, as the obligor, would be responsible for the full amount of the basic support obligation in the table above. The higher basic support obligation under the existing Colorado Schedule reflects the difference between the existing and proposed self support reserve.

Case Example 2: Middle Income Case

The father's monthly gross income is \$1,800. The mother's monthly gross income is \$1,200. She has custody of the couple's two children and has work-related child care expenses of \$150 per month. Both parents are single.

The parents' combined gross income is \$3,000 per month. The father's share of the combined gross income is 60 percent. The basic support obligation as

computed from the existing and proposed Colorado Schedules is shown in the table below. As the obligor, the father's share of the basic obligation would be 60 percent of the amounts in the table. To the basic support obligation would be added the father's share of child care costs: 90 per month (150 x .60).

Combined Gross Monthly Income = \$3,000					
Gross Monthly Income		Existing Schedule	Proposed Schedule		
(1)	Basic Obligation	\$672	\$755		
(2)	Child Care	\$150	\$150		
(3)	Basic Obligation and Child Care	\$822	\$905		
(4)	Father's Monthly Obligation (0.60 x row 3)	\$493	\$543		

Case Example 3: High Income Case

Before their divorce, the parents had one child who now lives with the mother. The mother is single and earns \$4,400 gross per month. Her child care expenses are \$200 per month. The father has remarried and earns \$3,600 per month gross.

The parents' combined gross income is \$8,000 per month. The father's share of the combined gross income is 45 percent. The basic support obligation as computed from the existing and proposed Colorado Schedules is shown in the table below.

As the obligor, the father's share of the basic obligation would be 45 percent of the amounts in the table. To the basic support obligation would be added the father's share of child care costs: 90 per month (200×45). The father's total monthly support obligation under the two Schedules would therefore be:

Combined Gross Monthly Income = \$8,000				
	Gross Monthly Income	Existing Schedule	Proposed Schedule	
(1)	Basic Obligation	\$950	\$956	
(2)	Child Care	\$200	\$200	
(3)	Basic Obligation and Child Care	\$1,050	\$1,056	
(4)	Father's Monthly Obligation (0.45 x row 3)	\$473	\$475	

CHAPTER VI

SUMMARY AND CONCLUSIONS

The Colorado Child Support Commission has completed its most recent review of the Colorado Child Support Guidelines. The existing Guidelines are based on a version of the Income Shares model dating from 1986 that was updated for inflation in 1991. The Schedule of Basic Child Support Obligations, in turn, is based on a study of child-rearing expenditures published in 1984 that used data from the 1972-73 Consumer Expenditure Survey. This report proposes an updating of the Child Support Schedule.

An objective of the Colorado Child Support Commission is to update the Schedule based on more current research. As mandated by the Family Support Act of 1988, the U.S. Department of Health and Human Services sponsored new research on child-rearing expenditures. This research was conducted by Dr. David Betson, of University of Notre Dame, through a grant administered by the University of Wisconsin's Institute for Research on Poverty. Dr. Betson's research applied a variety of econometric models to data from the 1980-86 Consumer Expenditure Survey (CEX). His findings include a range of estimates for child-rearing expenditures.

Of the methodologies used by Betson with the 1980-86 CEX, it appears that the Rothbarth estimator yields the most theoretically sound and plausible results and that these results currently represent the best available evidence on child-rearing expenditures. Consequently, we have based our revision of the Schedule on the Rothbarth parameters estimated by Betson. Applying a procedure similar to the one used to develop the existing Schedule, we have developed a new Schedule for the guidelines.

Betson's Rothbarth parameters are only a starting point for the preparation of the proposed Schedule. Also reflected in the Schedule are changes in the ratio of

household consumption to net income that have occurred between 1972-73 and 1980-86, the two periods in which data were collected for the older and more recent estimates of child-rearing expenditures, and changes in average consumption spending for child care and children's medical expenses between those two periods.

In addition to updating the underlying data on child-rearing expenditures, the proposed revisions to the economic tables include two other changes:

- (1) Adjusting the self support reserve for inflation; and
- (2) Recalculating the net-to-gross income conversion to account for changes in federal and Colorado personal income tax rates.

The self support reserve adjustment is based on changes in the U.S. poverty level for one adult since development of the existing Schedule. The revised Schedule also reflects current federal and state tax rates, rather than those in effect in 1991.

In summary, the proposed Schedule is based on more current economic research and more recent economic data on household expenditures than the existing Schedule. Since Dr. Betson's research was Congressionally mandated specifically for the purpose of updating child support guidelines, it is appropriate that the proposed Schedule uses this source of information. The proposed Schedule also incorporates changes in federal and state tax rates, and revisions of the self support reserve. Taken together, these changes are designed to make Colorado's child support orders more equitable and more consistent with economic changes that have occurred since the existing Schedule was developed. APPENDIX I: TECHNICAL CONSIDERATIONS IN DEVELOPING SCHEDULES OF SUPPORT OBLIGATIONS

APPENDIX I

TECHNICAL CONSIDERATIONS IN DEVELOPING SCHEDULES OF SUPPORT OBLIGATIONS

The development of a schedule of child support obligations is fairly complex in that it requires (1) the use of multiple data sources (e.g. Consumer Expenditure Surveys); (2) decisions about how to treat certain classes of expenditures (e.g. medical care); (3) intermediate calculations (e.g. how to translate expenditures on children to a proportion of net income); and (4) assumptions (e.g. how to estimate expenditures on children, computation of taxes in estimating net income). The purpose of this technical appendix is to explain the procedures used in developing the table of support proportions (i.e. expenditures on children as a proportion of household net income for various levels of income and numbers of children) and, therefore, the proposed Schedule of Basic Child Support Obligations.

Parental Expenditures on Children

The effort to build a schedule of support obligations begins with decisions about how to measure parental expenditures on children. Obviously, those expenditures cannot be observed directly, primarily because many expenditures (e.g. shelter, transportation) are shared among household members. For example, in a twoadult, two-child household, what proportion of a new car's cost should be attributed to the children? Since child expenditures cannot be measured directly, an indirect method must be defined to estimate those expenditures. The common element of all the estimation methods is that they attempt to allocate expenditures to the children based on a comparison of expenditure patterns in households with and without children and which are deemed to be equally well off. There are numerous estimation techniques available and they are described succinctly in a 1990 Lewin/ICF report to the U.S. Department of Health and Human Services.¹ The two techniques that appear to offer the most sound theoretical bases are the Engel and Rothbarth estimators. The Engel approach estimates child expenditures based on total household expenditures on food. Economists believe estimates of child expenditures using this approach represent an <u>upper bound</u> to those expenditures. The Rothbarth approach, on the other hand, estimates child expenditures based on the level of household expenditures on adult goods (e.g. adult clothing, alcohol, tobacco). Child expenditures using this approach are believed to represent a <u>lower bound</u> to expenditures. Again, the Lewin/ICF report cited above presents a clear description of the approaches and of their merits and limitations as estimators of child expenditures. The support schedule defined in this report is based on the Rothbarth approach.

Data on Household Expenditures

The ideal database for estimating child-rearing expenditures would be one that itemized household consumption expenses by cost category and by each individual in the household. There is no existing database that provides this level of detail. Moreover, since 90 percent of household expenditures are shared, it is unlikely that such a database will ever exist if only because it would be impossible to allocate expenditures with any level of precision to individual household members.

The database most commonly used to estimate child expenditures is the Consumer Expenditure Survey (CEX). As the aforementioned Lewin/ICF report says of the CEX, "It is by far the best available source of information for implementing the techniques for estimating expenditures on children...." (p. 3-1). The Espenshade

¹ Lewin/ICF, *Estimates of Expenditures on Children and Child Support Guidelines*. Report prepared for the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services. Table 2.3, p.2-33 (October 1990).

and Rothbarth models presented in this report are based on household expenditure data reported in the CEX.

Even though the CEX may be the best database to estimate child expenditures, it has some limitations that are important to the development of a schedule of child support obligations, especially a schedule based on an income shares concept. They include:

- Only a few items in the CEX (i.e. adult clothing, alcohol, tobacco) are solely "adult" expenditures;
- It is impossible to distinguish between "necessary" child care expenses (e.g. those incurred to allow someone to work) from "discretionary" expenses;
- Medical expenses on children cannot be distinguished from expenses on adult household members; and
- The CEX likely understates total household income.

The first issue is of concern because the Rothbarth technique estimates child expenditures by examining how adult expenditures are affected by the addition of a child to the household; that is, asking how much of total expenditures is displaced (i.e. transferred from the adults to the children) when a child is added to the household. The precision of the technique would be improved if there were more items that were clearly adult expenses.

The second and third issues are of concern because the support schedule developed for Colorado establishes a "basic" support obligation to which is added the parental share of expenditures for child care and unreimbursed medical expenses. The assumptions used to deal with these limitations are discussed later in this appendix.

The CEX is much like every survey that attempts to capture income information; that is, there is likely to be underreporting or nonreporting of income. Staff at the

Bureau of Labor Statistics, which administers the survey, suggest that income reported in the CEX is too low relative to expenditures. There are, however, no theoretically-based methods to adjust income for this problem and so no adjustment is applied.

Child Expenditures as a Proportion of Net Income

Using the Rothbarth estimation technique and CEX data from 1980-86, David Betson computed child expenditures for 1, 2 and 3-child households. These expenditures are related to total consumption spending in the expression EC/C, where EC = expenditures on children and C = total consumption expenditures. In order to estimate EC as a proportion of net income (NI), the relationship between NI and C must be computed. This can be done from the CEX because of the detailed itemization of expenditures.

Under the approach used to develop the income shares model, net income is computed independently using CEX data on gross income (GI) and on itemized deductions for (1) federal, state and local taxes, including personal property taxes; (2) social security (FICA) taxes; and (3) union dues, which are considered to be mandatory employment expenses. Thus,

NI = GI - taxes - FICA - union dues

In relation to consumption, net income is greater by the amount of spending that is not related to consumption. This includes, for example, spending on contributions, savings, personal insurance and pensions. Included in the category of savings are principal payments on a home mortgage (interest payments are counted as household consumption) and changes in net worth (i.e. net change in assets - net change in liabilities).

Appendix I-4
For low income households, consumption expenditures may exceed the net income figure derived by subtracting taxes and other items from gross income. Thus, consumption as a proportion of net income (C/NI) exceeds 100 percent. In these instances, the C/NI ratio is set at 1.0. For example, in Betson's calculations, consumption expenditures exceeded net income for the lowest five income ranges (i.e. all households with annual incomes below \$30,381 per year in February 1995 dollars). This outcome may be partially related to reported difficulties of measuring income in the CEX as discussed above. As shown in Table I-1 below, the measured ratio of consumption expenditures to net income ranged from 3.300 for households with annual net incomes less than \$10,127, to 0.648 for households with annual net incomes above \$101,275.

Total consumption expenditures are related to net income by the expression C/NI. Expenditures on children are related to consumption by the expression EC/C. Multiplying the two expressions provides a ratio of child expenditures to net income (EC/NI).

 $EC/C \ge C/NI = EC/NI$

Table I-1						
NET INCOME AND CONSUMPTION AT SELECTED						
NET INCOME INTERVALS						

Net Income Interval (1995\$)	Net Income (NI) (1983 \$)	Number of Observations	Consumption Spending (C) (1983 \$)	C/NI
Less than \$10,127	\$3,333	220	\$10,999	3.300
\$10,128 - \$15,190	\$8,333	337	\$12,549	1.506
\$15,191 - \$20,254	\$11,667	479	\$14,759	1.265
\$20,255 - \$25,318	\$15,000	667	\$16,275	1.085
\$25,319 - \$30,381	\$18,333	741	\$18,571	1.013
\$30,382 - \$35,445	\$21,667	809	\$20,475	0.945
\$35,446 - \$40,509	\$25,000	877	\$22,725	0.909
\$40,510 - \$45,573	\$28,333	791	\$24,026	0.848
\$45,574 - \$50,636	\$31,667	706	\$26,704	0.843
\$50,637 - \$60,764	\$35,000	1,103	\$28,105	0.803
\$60,765 - \$70,892	\$43,333	651	\$34,016	0.785
\$70,893 - \$81,019	\$50,000	419	\$37,800	0.756
\$81,020 - \$91,147	\$56,667	239	\$40,857	0.721
\$91,148 - \$101,274	\$63,333	151	\$44,966	0.710
\$101,275 +	\$84,833	329	\$54,972	0.648

Treatment of Selected Factors

Specific questions have been raised in other states that have incorporated the new Rothbarth/Betson estimates about the treatment of various types of expenditures. Specifically, there have been questions about adjustments for (1) teenage clothing; (2) child care; (3) medical expenses; (4) durable goods, particularly housing; and (5) savings.

Teenage Clothing

Clothing expenditures in the CEX for children beyond the age of 15 years are classified with other adult clothing expenditures. Therefore, it is necessary to estimate expenditures for 16-18 year old children based on clothing expenditure data for other children. The Rothbarth clothing cost estimates for teenagers get smaller as the child ages and actually are negative for 16-18 year old children. To correct for this anomaly, Betson assumed that the costs for children ages 13-18 years were the same as the costs for a 12 year old child.

Child Care

The current Colorado support schedule and the Rothbarth version of the model presented in this report exclude the costs of child care. Instead, in the child support calculation, the actual costs are prorated between the parents based on their relative proportions of net income and added to the basic support obligation. There are several reasons for this approach:

- They represent a large variable expenditure and are not incurred by all households; usually only in households with a working custodial parent and one or more young children.
- Where child care costs occur, they generally represent a large proportion of total child expenditures, particularly in households with children under 6 years of age.
- Treating child care costs separately maximizes the custodial parent's marginal benefits of working. If not treated separately, the economic benefits of working are reduced substantially. One of the principles incorporated into the Income Shares model is that the method of computing a child support obligation should not be a deterrent to participation in the work force.

Appendix I-7

Since the CEX itemizes child care expenditures, an adjustment can be made directly to EC/C. For example, Table I-3 at the end of this appendix shows that for two-child households in the 30,382 - 35,445 income range, EC/C = 36.73 percent. Child care (CC) as a proportion of consumption for that same income range is 1.72 percent (0.86 percent x 2 children). For this income range, a revised EC/C which excludes child care costs is:

Revised EC/C = 36.73 - 1.72 = 35.01 percent

Medical Expenses

Like expenses for child care, the current Colorado support schedule and the Rothbarth version of the model presented in this report exclude the child's share of costs for some medical expenses, specifically including the costs of health insurance premiums and extraordinary, or unreimbursed medical expenses. There are two principal reasons these costs are excluded from the model:

- Federal regulations (45 CFR §306.51) require that the obligor be requested to provide health insurance for the child if available at a reasonable cost through the obligor's employer.
- Unreimbursed medical expenses (i.e. those not covered by or that exceed insurance reimbursement) are highly variable across households and can constitute a large proportion of expenditures on a child. Orthodontia, psychiatric therapy, asthma treatments, and extended physical therapy may be among the expenses not covered.

Deciding what proportion of unreimbursed medical expenses might be considered extraordinary is difficult. We have elected to assume that some unreimbursed medical expenses (e.g. non-prescription medications, well visits to doctors) should be considered routine and not extraordinary. For the purposes of estimating support proportions, extraordinary medical expenses are defined as the amount of expenditures that exceed \$250 (1995 dollars) per family member annually. This amount, deflated to 1983 dollars, was subtracted from the reported costs of unreimbursed medical expenses in computing expenditures on extraordinary medical and health insurance premiums.

While the CEX itemizes unreimbursed medical expenses and health insurance premium costs, it does not allocate expenses to individual household members. Thus, a method must be developed for excluding those expenditures from EC/C. There are two steps in this process. First, the child's share of those medical expenses (M) must be determined. That calculation assumes that the child's share is the same as his/her share of all household expenditures (EC/C). Thus, for a two-child household in the 30,382 - 35,445 annual net income range, the child's share of these expenses would be 36.73 percent (i.e. EC/C for two children) of 2.31 percent (i.e. medical expenses as a proportion of consumption for a household in that income range). The child's share of medical expenses is therefore 0.85 percent of consumption expenditures. This proportion is subtracted from EC/C to arrive at an adjusted EC/C.

Revised EC/C = 36.73 - 0.85 = 35.88 percent

Durable Goods

The largest durable goods expenditures are for housing and transportation. Housing costs are treated in the following manner:

- For housing that is owned or being purchased: only taxes and interest payments are counted as expenditures. Payments of principal are counted as savings.
- For housing that is rented: all rental costs are counted as consumption expenditures.

The purchase price of an <u>automobile</u> is <u>not</u> counted as an expenditure, however the interest payments made on an automobile loan are counted. This approach may underestimate total expenditures, particularly in the situation where the automobile is purchased for cash. The ideal approach to counting such a purchase would be to include as consumption the rental value of the automobile, not the net purchase price. The rental value, however, cannot be defined by the data.

With regard to other durable goods (e.g. television, toaster oven), their purchase prices are counted as consumption expenditures. The interest payments on consumer debt associated with those purchases are also counted as expenditures, since there is no way to link interest payments to individual purchases. Therefore, there is some double counting of expenditures for these durable goods items.

Savings

Savings are not counted as consumption expenditures. Rather, they are counted as residual expenditures; that is, part of all non-consumption spending which is the difference between net income and consumption. Income specifically itemized as savings and retirement contributions fall into this residual category. Also, as noted above, the category includes principal payments on home mortgages and the purchase price of automobiles. Since savings are a residual and therefore not calculated independently, there is no implicit savings rate that is applied to the calculation of expenditures on children as a proportion of net income.

Effect of Adjustments on Proportional Expenditures

Table I-4 at the end of this appendix illustrates for two children how adjustments for child care expenditures and medical expenses (health insurance

and unreimbursed medical costs) are factored into the computation of a proportion that relates expenditures on children to net income. The table uses a two-child household as an example, but the same procedure was applied to one and three-child households using the information presented in Table I-3. Thus, for two-child households in the \$30,382 - \$35,445 income range, child expenditures were estimated at 36.73 percent of consumption expenditures (EC/C). Child care (CC/C = 1.72 percent of household consumption expenditures) and medical expenses attributable to the child (M/C = 0.85 percent of household consumption expenditures) were subtracted from EC/C. This new amount (34.16 percent) was multiplied by the ratio of household consumption to net income (C/NI = 0.945) for that net income range. The resulting figure — EC*/NI = 32.28 percent — relates child expenditures to net income for the \$30,382 - \$35,445 net income range.

Adjustments for the Number of Children

Betson's estimates of child expenditures for one, two, and three-child households are based on actual household income and expenditure data for 8,519 two-parent families with at least one child under 18 years of age. He did not compute proportions for households with greater numbers of children because of the small sample sizes in the database. Betson computed his proportions for one, two and three-child households in the following manner:

- Take the midpoint of the annual net income ranges expressed in February 1995 dollars and deflate the amount to 1983 dollars by the Consumer Price Index (1.509). The top interval uses the average net income (\$128,873 in 1995 dollars) of households in that interval rather than the midpoint.
- Multiply the net income midpoint by the average ratio of consumption expenditures to net income. For income ranges where the ratio exceeded 1.0, expenditures were assumed to equal net income.

Take the level of annual expenditures and determine what proportion is spent on one, two and three children. Using his Rothbarth estimates, Betson computed the average percentage spent over all the years the children were with their parents. That is, for one child he computed the average over 18 years. For two and three-child households, he assumed that the children differed in age by two years. Thus, for two-child households, he computed the average over a 16-year period when both children were in the household. Similarly, for three-child households, he computed the average over 14 years.

Adjustments to these data were necessary to extend the support proportions for one, two, and three children to four, five, and six-child households. However, there were no clear guides about how to accomplish this task. Based on a comparison of the Espenshade and Rothbarth parameters, however, we observed that on average the Rothbarth parameters produced estimates that were about 83 percent of those produced using the Espenshade parameters. For example, Espenshade's estimates showed a 55 percent increase in child expenditures as a second child was added to the household and a 25 percent increase for the addition of a third child. Betson's Rothbarth estimates showed an average 47 percent increase with the addition of a second child and a 20 percent increase with the addition of a third child. We assumed there would be an equivalent difference between the Espenshade and Rothbarth proportions as the number of children in the household increased. Based on this assumption, Betson's findings were extended to four, five and six-child households using the multipliers shown in Table I-2 below:

FOUR, FIVE AND SIX-CHILD HOUSEHOLDS								
Number of Children	Espenshade Increase (As % of 3-Child Proportion) ¹	Rothbarth Increase Computation	Rothbarth Multipliers					
4	12.74%	$12.74\% \text{ x } .827^2 = 10.5\%$	1.105 x 3 child proportion					
5	22.93%	$(22.93\%-12.74\%) \times .827 = 8.4\%$	1.084 x 4 child proportion					
6	31.42%	$(31.42\%-22.93\%) \times .827 = 7.0\%$	1.070 x 5 child proportion					

Table I-2						
EXTENDING THE ROTHBARTH SUPPORT PROPORTIONS TO						
FOUR, FIVE AND SIX-CHILD HOUSEHOLDS						

Development of Guidelines for Child Support Orders: Final Report, p.II-37.

For one to three children, the Rothbarth parameters yield increases in child-rearing expenditures as a proportion of net income that average about 82.7 percent of the increase in proportions yielded by the Espenshade parameters.

The multipliers were used as constants for all income ranges.

The decreasing size of the multiplier as the number of children increases reflects two phenomena: (1) economies of scale as more children are added to the household (e.g. sharing of household items); and (2) reallocation of expenditures. The reallocation occurs as adults reduce their share of expenditures to provide for more children and as each child's share of expenditures is reduced to accommodate the needs of additional children. That is, as there are more people to share the economic pie, the share for each family member must decrease.

Table of Support Proportions

The result of the computations and adjustments discussed above is a table of support proportions that relates child expenditures in one to six-child households to various levels of net income. These relationships are displayed in Table I-5 at the end of this appendix.

Adjusting Income Brackets

The data Betson used for his computations were from the time period 1980 through 1986. The database included both nominal and constant dollar amounts, with the base period being May 1983. In order to develop a table of support proportions aligned to 1995 income ranges, Betson used a Consumer Price Index (CPI-U) inflator and applied it to the 1983 incomes on the database.²

Computing Marginal Proportions

The table of support proportions shown in Table I-5 links the proportion of net income spent on one to six children to different annual net income ranges. The proportions, however, are meant to apply only at the midpoints of each income range. In order to obtain a smooth transition in support obligations between income ranges, marginal proportions were computed. This adjustment eliminates notches in support obligations that would otherwise be created as parents move from one income range to another.

For example, assume we have two, two-child households, one earning between \$25,319 and \$30,381 annually (\$2,110-\$2,532 per month) and the other earning between \$30,382 and \$35,445 (\$2,532-\$2,954 per month). The proportion of net income spent on the two children in the lower income household is estimated to be 33.88 percent. The comparable proportion in the higher income household is estimated to be 32.28 percent. If actual income in the first household were \$2,500, the total support obligation would be \$847 per month ($$2,500 \times .3388$). If actual income in the second household were \$2,550, the total monthly support obligation would be \$823 ($$2,550 \times .3228$); \$24 less per month than the support obligation in the lower income household. The use of marginal proportions between the midpoints of income ranges

² The value used to adjust the income ranges for inflation between June 1983 and February 1995 was 1.509.

eliminates this effect and creates a smooth increase in the total support obligation as household income increases.

The marginal proportions between income midpoints are established by computing the support obligation at the two midpoints and dividing the difference in the support obligation amounts by the income difference between the two midpoints. For example, the marginal proportion between the \$2,321 and \$2,743 net income for midpoints two-child households would be computed in the following manner:

	Monthly Net Income Ranges		
Income midpoints	\$2,321.22	\$2,742.53	
Midpoint difference	\$421.31		
Support proportion	33.881%	32.283%	
Support obligation	\$786.45	\$885.37	
Obligation difference	\$9	8.92	
Marginal proportion	23.	.49%	

Using the example above of one two-child household with \$2,500 and another with \$2,550 of monthly net income, support obligations using the marginal proportion approach results in a monthly support obligation for the lower income household of \$828, compared to \$840 for the higher income household.

Translating Gross to Net Income

Since the table of support proportions is defined in terms of net income, it can be applied regardless of how tax structures change. To use the table to develop a schedule of support obligations, however, requires that the tax structure be defined so that net income can be calculated. It would, of course, be possible to discard the support schedule and use the table of support proportions to compute a support obligation for each individual household. This approach would be able to accommodate the unique tax situation of each household. Yet, it would also involve complexities in terms of the time required to gather all the relevant information and the staff to administer the process.

The support schedule defined in this report represents a general approach to computing support obligations that can be applied quickly and easily. As with other general approaches, however, it has limitations, the greatest being that it requires assumptions about how to measure gross income and how to estimate net income from a given gross income.

Measuring Gross Income

The assumptions made about gross income is that it is all taxable and that it is taxable at the same rate. That is, all income is treated as if it is earned income subject to federal and state withholding and FICA taxes. Tax rates prevailing in 1995 were used to convert gross income to net.

Estimating Taxes

The following sources and assumptions were used to estimate taxes for a given gross income. The percentage tax schedule used by employers to withhold income tax and FICA was the basis for calculating withholding.

Federal Income Taxes and FICA

Using the employer schedule, taxes are computed assuming (1) all income is earned by the obligor (i.e. the tax rates for a single person are used); and (2)

two withholding allowances, based on instructions in the employer tax guide.³ (The use of two withholding allowances simulates the effect of one standard deduction and one exemption allowed when filing personal income tax returns). Income tax and FICA rates defined in the 1995 employer schedule were used to estimate total taxes on a given gross income.

The Earned Income Tax Credit (EITC) is computed from Section 13131 of the August 4, 1993 Congressional Record (H5823).

State Income Taxes

State income taxes are computed also using the employer schedule. Similar assumptions are made, the calculation of state taxes allows the amounts for the single exemption and a standard deduction as defined by the Colorado Department of Revenue. The most current Colorado tax schedule (effective January 1, 1995) was used to compute taxes on a given gross income.

Impact of Assumptions on Net Income

If anything, the generalized approach to computing net income from gross income <u>underestimates</u> total household net income. The reason is that accounting for the income of two parents and/or additional exemptions for children <u>reduces</u> total income taxes and thus <u>increases</u> net income. The result is that total support obligations using the table of support proportions are usually higher when an attempt is made to accommodate the actual tax situation of individual households.⁴

³ Internal Revenue Service, *Employer's Tax Guide* (Circular E): "For withholding purposes only, each single person with only one job and each married person with only one job whose spouse is not working can claim one additional withholding allowance."

⁴ This unexpected impact was evidenced in Vermont where the State Legislature required the Office of Child Support Services to develop separate tax schedules for custodial and noncustodial parents that would more closely simulate the tax situation based on income and exemptions. Separate gross to net income tables were prepared for noncustodial parents and for custodial

Self Support Reserve

In addition to the table of support proportions and the table converting gross to net income, a third factor affects obligations shown in the support schedule. That is, the schedule includes an adjustment for low income obligors to ensure that net income after payment of the support obligation does not fall below a minimum threshold. The threshold is a self support reserve so that the obligor is able to maintain a minimum standard of living. Although the amount of the reserve is arbitrary, the threshold incorporated into the proposed Colorado support Schedule using the Rothbarth parameters is 85 percent of the poverty standard for a single person, as established by the Department of Health and Human Services.⁵ That standard, which increases on an annual basis (released in February of each year), was set at \$530 monthly net income. That amount — considered a self support reserve for the obligor — was used in preparing the schedule of support obligations presented in this report.

The following procedure is used to incorporate a self support reserve into the support schedule:

<u>Step 1:</u> Compute a support obligation using net income and the appropriate proportions from the table.

<u>Step 2:</u> Compute a second obligation using the self support reserve.

Appendix I-18

parents with one to five children. Contrary to some expectations, the separate schedules resulted in increasing the net income available for support and therefore increased the average total support obligation.

⁵ Federal Register, Vol 60. No. 27, (February 9, 1995) pp. 7772-7774. Other standards that might be considered include such things as the net income equivalent to a minimum wage job or the AFDC payment standard.

- ▶ If, after subtracting the self support reserve from net income, remaining income is less than \$50 per month, set the support obligation at \$50.
- If the remaining income is greater than \$50, then compute the following: subtract from net income the amount of the self support reserve and multiply the difference by a proportion ranging from .90 for one child to .95 for six children (increasing by .01 for each additional child).

<u>Step 3:</u> Compare the amounts from the two computations and take the lower amount as the support obligation.

The multiplication in Step 2 is included to ensure that: (1) the marginal tax rate on increasing earnings is less than 100 percent (i.e. there is a continued incentive to work); and (2) the support obligation increases slightly as the number of children due support increases. This latter factor assumes that obligors with more children should incur a higher obligation than obligors with fewer children.

The effect of the adjustment for a self support reserve is that obligations computed using the table of support proportions are phased into the support schedule gradually. For example, in this report the table of support proportions is fully applied only above \$850 per month for one child, \$1,050 per month for two children, \$1,200 per month for three children, \$1,350 per month for four children, \$1,450 per month for five children, and \$1,550 per month for six children.

Net Income	Consumption	Child Care \$ as a % of	Medical \$ as a				
(1995 \$)	as a % of Net Income	One Child	Child Two Children Three C		Consumption (per child)	Consumption	
Less than \$10,127	330.0%	25.64%	37.82%	45.26%	.62%	1.66%	
\$10,128 - \$15,190	150.6%	25.44%	37.48%	44.82%	.69%	1.34%	
\$15,191 - \$20,254	126.5%	25.28%	37.20%	44.47%	.81%	2.11%	
\$20,255 - \$25,318	108.5%	25.15%	36.99%	44.20%	.89%	2.35%	
\$25,319 - \$30,381	101.3%	25.05%	36.83%	44.00%	1.06%	2.25%	
\$30,382 - \$35,445	94.5%	24.99%	36.73%	43.87%	.86%	2.31%	
\$35,446 - \$40,509	90.9%	24.94%	36.64%	43.76%	1.17%	2.04%	
\$40,510 - \$45,573	84.8%	24.91%	36.59%	43.70%	1.15%	2.00%	
\$45,574 - \$50,636	84.3%	24.85%	36.50%	43.58%	1.28%	2.07%	
\$50,637 - \$60,764	80.3%	24.80%	36.41%	43.46%	1.21%	1.87%	
\$60,765 - \$70,892	78.5%	24.72%	36.27%	43.30%	1.25%	2.11%	
\$70,893 - \$81,019	75.6%	24.66%	36.18%	43.17%	1.14%	2.21%	
\$81,020 - \$91,147	72.1%	24.62%	36.10%	43.07%	.99%	2.00%	
\$91,148 - \$101,274	71.0%	24.56%	36.01%	42.96%	.76%	2.38%	
\$101,275 +	64.8%	24.50%	35.90%	42.82%	.87%	1.90%	

Table I-3 PARENTAL EXPENDITURES ON CHILDREN

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Table I-4 CHILD EXPENDITURES AS A PROPORTION OF NET INCOME **Based on Betson/Rothbarth Estimates**

Net Income Range	EC/C (2 children)	CC/C	M/C	C/NI	EC*/NI
Less than \$10,127	37.82%	1.24%	0.63%	>1.0	35.95%
\$10,128 - \$15,190	37.48%	1.38%	0.50%	>1.0	35.60%
\$15,191 - \$20,254	37.20%	1.62%	0.78%	>1.0	34.80%
\$20,255 - \$25,318	36.99%	1.78%	0.87%	>1.0	34.34%
\$25,319 - \$30,381	36.83%	2.12%	0.83%	>1.0	33.88%
\$30,382 - \$35,445	36.73%	1.72%	0.85%	.945	32.28%
\$35,446 - \$40,509	36.64%	2.34%	0.75%	.909	30.50%
\$40,510 - \$45,573	36.59%	2.30%	0.73%	.848	28.46%
\$45,574 - \$50,636	36.50%	2.56%	0.76%	.843	27.97%
\$50,637 - \$60,764	36.41%	2.42%	0.68%	.803	26.75%
\$60,765 - \$70,892	36.27%	2.50%	0.77%	.785	25.91%
\$70,893 - \$81,019	36.18%	2.28%	0.80%	.756	25.02%
\$81,020 - \$91,147	36.10%	1.98%	0.72%	.721	24.08%
\$91,148 - \$101,274	36.01%	1.53%	0.86%	.710	23.88%
\$101,275 +	35.90%	1.74%	0.68%	.648	21.69%

EC/C = Expenditures on children as a proportion of consumption expenditures <math>CC/C = Child care expenditures as a proportion of consumption expenditures <math>M/C = Medical expenditures as a proportion of consumption expenditures <math>C/NI = Consumption expenditures as a function of net income EC*/NI = Adjusted expenditures on children as a proportion of net income EC*/NI = (EC/C - CC/C - M/C) x C/NI

Net Income	Number of Children							
Ranges	One	Two	Three	Four	Five	Six		
Less than \$10,127	0.2459	0.3595	0.4265	0.4713	0.5109	0.5466		
\$10,128 - \$15,190	0.2353	0.3560	0.4215	0.4658	0.5049	0.5402		
\$15,191 - \$20,254	0.2394	0.3480	0.4110	0.4542	0.4923	0.5268		
\$20,255 - \$25,318	0.2367	0.3434	0.4049	0.4474	0.4850	0.5190		
\$25,319 - \$30,381	0.2343	0.3388	0.3983	0.4401	0.4771	0.5105		
\$30,382 - \$35,445	0.2226	0.3228	0.3806	0.4206	0.4559	0.4878		
\$35,446 - \$40,509	0.2114	0.3050	0.3578	0.3953	0.4285	0.4585		
\$40,510 - \$45,573	0.1973	0.2846	0.3339	0.3690	0.4000	0.4280		
\$45,574 - \$50,636	0.1944	0.2797	0.3274	0.3618	0.3922	0.4196		
\$50,637 - \$60,764	0.1857	0.2675	0.3133	0.3462	0.3753	0.4016		
\$60,765 - \$70,892	0.1801	0.2591	0.3033	0.3351	0.3633	0.3887		
\$70,893 - \$81,019	0.1737	0.2502	0.2933	0.3241	0.3513	0.3759		
\$81,020 - \$91,147	0.1668	0.2408	0.2829	0.3126	0.3389	0.3626		
\$91,148 - \$101,274	0.1648	0.2388	0.2815	0.3111	0.3372	0.3608		
\$101,275 +	0.1501	0.2169	0.2553	0.2821	0.3058	0.3272		

Table I-5 TABLE OF SUPPORT PROPORTIONS Rothbarth Parameters

APPENDIX II: GROSS TO NET INCOME CONVERSION TABLE

10/09/95 Table II-1								
LULUKADU 1005 FEDERAL 2 STATE TAVES								
1995 FEDERAL & STATE TAXES								
Gr	(USS 10 F	NET LINC	.UME CU	INVERSI	UN IABI	ν Γ		
Gross Income	Federal	EITC	Colorado	FICA	Total	Net		
Range	Tax		StateTax		Taxes	Monthly		
8						Income		
525.00 - 574.99	0.00	15.25	5.75	42.08	32.58	517.42		
575.00 - 624.99	0.00	11.42	7.25	45.90	41.73	558.27		
625.00 - 674.99	2.45	7.60	8.75	49.73	53.33	596.67		
675.00 - 724.99	9.95	3.77	10.40	53.55	70.13	629.87		
725.00 - 774.99	17.45		12.90	57.38	87.73	662.27		
775.00 - 824.99	24.95		15.40	61.20	101.55	698.45		
825.00 - 874.99	32.45		17.90	65.03	115.38	734.62		
875.00 - 924.99	39.95		20.40	68.85	129.20	770.80		
925.00 - 974.99	47.45		22.90	72.68	143.03	806.97		
975.00 - 1024.99	54.95		25.40	76.50	156.85	843.15		
1025.00 - 1074.99	62.45		27.90	80.33	170.68	879.32		
1075.00 - 1124.99	69.95		30.40	84.15	184.50	915.50		
1125.00 - 1174.99	77.45		32.90	87.98	198.33	951.67		
1175.00 - 1224.99	87.50		36.25	93.10	216.85	1000.15		
1225.00 - 1274.99	92.45		37.90	95.63	225.98	1024.02		
1275.00 - 1324.99	99.95		40.40	99.45	239.80	1060.20		
1325.00 - 1374.99	107.45		42.90	103.28	253.63	1096.37		
1375.00 - 1424.99	114.95		45.40	107.10	267.45	1132.55		
1425.00 - 1474.99	122.45		47.90	110.93	281.28	1168.72		
1475.00 - 1524.99	129.95		50.40	114.75	295.10	1204.90		
1525.00 - 1574.99	137.45		52.90	118.58	308.93	1241.07		
1575.00 - 1624.99	144.95		55.40	122.40	322.75	1277.25		
1625.00 - 1674.99	152.45		57.90	126.23	336.58	1313.42		
1675.00 - 1724.99	159.95		60.46	130.05	350.46	1349.54		
1725.00 - 1774.99	167.45		63.34	133.88	364.66	1385.34		
1775.00 - 1824.99	174.95		66.21	137.70	378.86	1421.14		
1825.00 - 1874.99	182.45		69.09	141.53	393.06	1456.94		
1875.00 - 1924.99	189.95		71.96	145.35	407.26	1492.74		
1925.00 - 1974.99	197.45		74.84	149.18	421.46	1528.54		
1975.00 - 2024.99	204.95		77.71	153.00	435.66	1564.34		
2025.00 - 2074.99	212.45		80.59	156.83	449.86	1600.14		
2075.00 - 2124.99	219.95		83.46	160.65	464.06	1635.94		
2125.00 - 2174.99	227.45		86.34	164.48	478.26	1671.74		
2175.00 - 2224.99	234.95		89.21	168.30	492.46	1707.54		
2225.00 - 2274.99	242.45		92.09	172.13	506.66	1743.34		
2275.00 - 2324.99	249.95		94.96	175.95	520.86	1779.14		
2325.00 - 2374.99	257.45		97.84	179.78	535.06	1814.94		

10/09/95

COLORADO 1995 FEDERAL & STATE TAXES GROSS TO NET INCOME CONVERSION TABLE

Gross Income	Federal	EITC	Colorado	FICA	Total	Net
Range	Tax		StateTax		Taxes	Monthly
Ū						Income
2375.00 - 2424.99	264.95		100.71	183.60	549.26	1850.74
2425.00 - 2474.99	272.45		103.59	187.43	563.46	1886.54
2475.00 - 2524.99	282.60		106.46	191.25	580.31	1919.69
2525.00 - 2574.99	296.60		109.34	195.08	601.01	1948.99
2575.00 - 2624.99	310.60		112.21	198.90	621.71	1978.29
2625.00 - 2674.99	324.60		115.09	202.73	642.41	2007.59
2675.00 - 2724.99	338.60		117.96	206.55	663.11	2036.89
2725.00 - 2774.99	352.60		120.84	210.38	683.81	2066.19
2775.00 - 2824.99	366.60		123.71	214.20	704.51	2095.49
2825.00 - 2874.99	380.60		126.59	218.03	725.21	2124.79
2875.00 - 2924.99	394.60		129.46	221.85	745.91	2154.09
2925.00 - 2974.99	408.60		132.34	225.68	766.61	2183.39
2975.00 - 3024.99	422.60		135.21	229.50	787.31	2212.69
3025.00 - 3074.99	436.60		138.09	233.33	808.01	2241.99
3075.00 - 3124.99	450.60		140.96	237.15	828.71	2271.29
3125.00 - 3174.99	464.60		143.84	240.98	849.41	2300.59
3175.00 - 3224.99	478.60		146.71	244.80	870.11	2329.89
3225.00 - 3274.99	492.60		149.59	248.63	890.81	2359.19
3275.00 - 3324.99	506.60		152.46	252.45	911.51	2388.49
3325.00 - 3374.99	520.60		155.34	256.28	932.21	2417.79
3375.00 - 3424.99	534.60		158.21	260.10	952.91	2447.09
3425.00 - 3474.99	548.60		161.09	263.93	973.61	2476.39
3475.00 - 3524.99	562.60		163.96	267.75	994.31	2505.69
3525.00 - 3574.99	576.60		166.84	271.58	1015.01	2534.99
3575.00 - 3624.99	590.60		169.71	275.40	1035.71	2564.29
3625.00 - 3674.99	604.60		172.59	279.23	1056.41	2593.59
3675.00 - 3724.99	618.60	1	175.46	283.05	1077.11	2622.89
3725.00 - 3774.99	632.60		178.34	286.88	1097.81	2652.19
3775.00 - 3824.99	646.60		181.21	290.70	1118.51	2681.49
3825.00 - 3874.99	660.60		184.09	294.53	1139.21	2710.79
3875.00 - 3924.99	674.60		186.96	298.35	1159.91	2740.09
3925.00 - 3974.99	688.60		189.84	302.18	1180.61	2769.39
3975.00 - 4024.99	702.60		192.71	306.00	1201.31	2798.69
4025.00 - 4074.99	716.60		195.59	309.83	1222.01	2827.99
4075.00 - 4124.99	730.60		198.46	313.65	1242.71	2857.29
4125.00 - 4174.99	744.60		201.34	317.48	1263.41	2886.59
4175.00 - 4224.99	758.60		204.21	321.30	1284.11	2915.89

10/09/95 Table II-1 COLORADO 1995 FEDERAL & STATE TAXES GROSS TO NET INCOME CONVERSION TABLE								
Gross Income	Federal	EITC	Colorado	FICA	Total	Net		
Range	Tax		StateTax		Taxes	Monthly		
						Income		
4225.00 - 4274.99	772.60		207.09	325.13	1304.81	2945.19		
4275.00 - 4324.99	786.60		209.96	328.95	1325.51	2974.49		
4325.00 - 4374.99	800.60		212.84	332.78	1346.21	3003.79		
4375.00 - 4424.99	814.60	4	215.71	336.60	1366.91	3033.09		
4425.00 - 4474.99	828.60		218.59	340.43	1387.61	3062.39		
4475.00 - 4524.99	842.60		221.46	344.25	1408.31	3091.69		
4525.00 - 4574.99	856.60		224.34	348.08	1429.01	3120.99		
4575.00 - 4624.99	870.60		227.21	351.90	1449.71	3150.29		
4625.00 - 4674.99	884.60		230.09	355.73	1470.41	3179.59		
4675.00 - 4724.99	898.60		232.96	359.55	1491.11	3208.89		
4725.00 - 4774.99	912.73		235.84	363.38	1511.94	3238.06		
4775.00 - 4824.99	928.23		238.71	367.20	1534.14	3265.86		
4825.00 - 4874.99	943.73		241.59	371.03	1556.34	3293.66		
4875.00 - 4924.99	959.23		244.46	374.85	1578.54	3321.46		
4925.00 - 4974.99	974.73		247.34	378.68	1600.74	3349.26		
4975.00 - 5024.99	990.23		250.21	382.50	1622.94	3377.06		
5025.00 - 5074.99	1005.73	/2	253.09	386.33	1645.14	3404.86		
5075.00 - 5124.99	1021.23		255.96	390.15	1667.34	3432.66		
5125.00 - 5174.99	1036.73		258.84	390.88	1686.44	3463.56		
5175.00 - 5224.99	1052.23		261.71	391.60	1705.54	3494.46		
5225.00 - 5274.99	1067.73		264.59	392.33	1724.64	3525.36		
5275.00 - 5324.99	1083.23		267.46	393.05	1743.74	3556.26		
5325.00 - 5374.99	1098.73		270.34	393.78	1762.84	3587.16		
5375.00 - 5424.99	1114.23		273.21	394.50	1781.94	3618.06		
5425.00 - 5474.99	1129.73		276.09	395.23	1801.04	3648.96		
5475.00 - 5524.99	1145.23		278.96	395.95	1820.14	3679.86		
5525.00 - 5574.99	1160.73		281.84	396.68	1839.24	3710.76		
5575.00 - 5624.99	1176.23		284.71	397.40	1858.34	3741.66		
5625.00 - 5674.99	1191.73	1	287.59	398.13	1877.44	3772.56		
5675.00 - 5724.99	1207.23		290.46	398.85	1896.54	3803.46		
5725.00 - 5774.99	1222.73		293.34	399.58	1915.64	3834.36		
5775.00 - 5824.99	1238.23		296.21	400.30	1934.74	3865.26		
5825.00 - 5874.99	1253.73		299.09	401.03	1953.84	3896.16		
5875.00 - 5924.99	1269.23		301.96	401.75	1972.94	3927.06		
5925.00 - 5974.99	1284.73		304.84	402.48	1992.04	3957.96		
5975.00 - 6024.99	1300.23		307.71	403.20	2011.14	3988.86		
6025.00 - 6074.99	1315.73		310.59	403.93	2030.24	4019.76		

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COLORADO 1995 FEDERAL & STATE TAXES GROSS TO NET INCOME CONVERSION TABLE

Gross Income Range	Federal Tax	EITC	Colorado StateTax	FICA	Total Taxes	Net Monthly Income
6075.00 - 6124.99	1331.23	61.10	313.46	404.65	2049.34	4050.66
6125.00 - 6174.99	1346.73	1.46.89	316.34	405.38	2068.44	4081.56
6175.00 - 6224.99	1362.23	1.2 0	319.21	406.10	2087.54	4112.46
6225.00 - 6274.99	1377.73		322.09	406.83	2106.64	4143.36
6275.00 - 6324.99	1393.23	TRUM.	324.96	407.55	2125.74	4174.26
6325.00 - 6374.99	1408.73	1.06.14	327.84	408.28	2144.84	4205.16
6375.00 - 6424.99	1424.23	1.10.47	330.71	409.00	2163.94	4236.06
6425.00 - 6474.99	1439.73	18.14	333.59	409.73	2183.04	4266.96
6475.00 - 6524.99	1455.23	14 34	336.46	410.45	2202.14	4297.86
6525.00 - 6574.99	1470.73	1.81.340	339.34	411.18	2221.24	4328.76
6575.00 - 6624.99	1486.23	1 102 55	342.21	411.90	2240.34	4359.66
6625.00 - 6674.99	1501.73	1.1.1.14	345.09	412.63	2259.44	4390.56
6675.00 - 6724.99	1517.23	1110.14	347.96	413.35	2278.54	4421.46
6725.00 - 6774.99	1532.73		350.84	414.08	2297.64	4452.36
6775.00 - 6824.99	1548.23	NC 74	353.71	414.80	2316.74	4483.26
6825.00 - 6874.99	1563.73	1 1 2 43	356.59	415.53	2335.84	4514.16
6875.00 - 6924.99	1579.23	E HO ER	359.46	416.25	2354.94	4545.06
6925.00 - 6974.99	1594.73	1408.348	362.34	416.98	2374.04	4575.96
6975.00 - 7024.99	1610.23	96.63	365.21	417.70	2393.14	4606.86
7025.00 - 7074.99	1625.73		368.09	418.43	2412.24	4637.76
7075.00 - 7124.99	1641.23	1	370.96	419.15	2431.34	4668.66
7125.00 - 7174.99	1656.73	1.000 - 54	373.84	419.88	2450.44	4699.56
7175.00 - 7224.99	1672.23		376.71	420.60	2469.54	4730.46
7225.00 - 7274.99	1687.73	120	379.59	421.33	2488.64	4761.36
7275.00 - 7324.99	1703.23	日前。寻知	382.46	422.05	2507.74	4792.26
7325.00 - 7374.99	1718.73	TON 3V	385.34	422.78	2526.84	4823.16
7375.00 - 7424.99	1734.23		388.21	423.50	2545.94	4854.06
7425.00 - 7474.99	1749.73	, Ph	391.09	424.23	2565.04	4884.96
7475.00 - 7524.99	1765.23		393.96	424.95	2584.14	4915.86
7525.00 - 7574.99	1780.73	111, 118	396.84	425.68	2603.24	4946.76
7575.00 - 7624.99	1796.23	P P	399.71	426.40	2622.34	4977.66
7625.00 - 7674.99	1811.73	1.28	402.59	427.13	2641.44	5008.56
7675.00 - 7724.99	1827.23	1.40.84	405.46	427.85	2660.54	5039.46
7725.00 - 7774.99	1842.73	1.20% - 34	408.34	428.58	2679.64	5070.36
7775.00 - 7824.99	1858.23	1.44.45	411.21	429.30	2698.74	5101.26
7825.00 - 7874.99	1873.73	10	414.09	430.03	2717.84	5132.16
7875.00 - 7924.99	1889.23		416.96	430.75	2736.94	5163.06

10/09/95 Table II-1 COLORADO 1995 FEDERAL & STATE TAXES							
GROSS TO NET INCOME CONVERSION TABLE							
Gross Income	Federal	EITC	Colorado	FICA	Total	Net	
Range	Tax		StateTax		Taxes	Monthly Income	
7925.00 - 7974.99	1904.73		419.84	431.48	2756.04	5193.96	
7975.00 - 8024.99	1920.23		422.71	432.20	2775.14	5224.86	
8025.00 - 8074.99	1935.73		425.59	432.93	2794.24	# 5255.76	
8075.00 - 8124.99	1951.23		428.46	433.65	2813.34	5286.66	
8125.00 - 8174.99	1966.73		431.34	434.38	2832.44	5317.56	
8175.00 - 8224.99	1982.23		434.21	435.10	2851.54	5348.46	
8225.00 - 8274.99	1997.73		437.09	435.83	2870.64	5379.36	
8275.00 - 8324.99	2013.23		439.96	436.55	2889.74	5410.26	
8325.00 - 8374.99	2028.73	-	442.84	437.28	2908.84	5441.16	
8375.00 - 8424.99	2044.23		445.71	438.00	2927.94	5472.06	
8425.00 - 8474.99	2059.73		448.59	438.73	2947.04	5502.96	
8475.00 - 8524.99	2075.23		451.46	439.45	2966.14	5533.86	
8525.00 - 8574.99	2090.73		454.34	440.18	2985.24	5564.76	
8575.00 - 8624.99	2106.23		457.21	440.90	3004.34	5595.66	
8625.00 - 8674.99	2121.73		460.09	441.63	3023.44	5626.56	
8675.00 - 8724.99	2137.23		462.96	442.35	3042.54	5657.46	
8725.00 - 8774.99	2152.73		465.84	443.08	3061.64	5688.36	
8775.00 - 8824.99	2168.23		468.71	443.80	3080.74	5719.26	
8825.00 - 8874.99	2183.73		471.59	444.53	3099.84	5750.16	
8875.00 - 8924.99	2199.23		474.46	445.25	3118.94	5781.06	
8925.00 - 8974.99	2214.73		477.34	445.98	3138.04	5811.96	
8975.00 - 9024.99	2230.23		480.21	446.70	3157.14	5842.86	
9025.00 - 9074.99	2245.73		483.09	447.43	3176.24	5873.76	
9075.00 - 9124.99	2261.23		485.96	448.15	3195.34	5904.66	
9125.00 - 9174.99	2276.73		488.84	448.88	3214.44	5935.56	
9175.00 - 9224.99	2292.23		491.71	449.60	3233.54	5966.46	
9225.00 - 9274.99	2307.73		494.59	450.33	3252.64	5997.36	
9275.00 - 9324.99	2323.23		497.46	451.05	3271.74	6028.26	
9325.00 - 9374.99	2338.73		500.34	451.78	3290.84	6059.16	
9375.00 - 9424.99	2354.23		503.21	452.50	3309.94	6090.06	
9425.00 - 9474.99	2369.73	-	506.09	453.23	3329.04	6120.96	
94/5.00 - 9524.99	2385.23		508.96	453.95	3348.14	6151.86	
9525.00 - 9574.99	2400.73		511.84	454.68	3367.24	6182.76	
9575.00 - 9624.99	2416.23		514.71	455.40	3386.34	6213.66	
9625.00 - 9674.99	2431.73	-	517.59	456.13	3405.44	6244.56	
90/0.00 - 9/24.99	2447.23		520.46	456.85	3424.54	6275.46	
9/25.00 - 9//4.99	2462.73	and a second second	523.34	457.58	3443.64	6306.36	

10/09/95

COLORADO 1995 FEDERAL & STATE TAXES GROSS TO NET INCOME CONVERSION TABLE

Gross Income Range	Federal Tax	EITC	Colorado StateTax	FICA	Total Taxes	Net Monthly Income
9775.00 - 9824.99	2478.23	1.00 0	526.21	458.30	3462.74	6337.26
9825.00 - 9874.99	2493.73	10.0	529.09	459.03	3481.84	6368.16
9875.00 \$ 9924.99	2509.23		531.96	459.75	3500.94	6399.06
9925.00 - 9974.99	2524.73		534.84	460.48	3520.04	6429.96
9975.00 - 10024.99	2540.23	1400	537.71	461.20	3539.14	6460.86
10025.00 - 10074.99	2555.73	i 44	540.59	461.93	3558.24	6491.76
10075.00 - 10124.99	2571.23	1.10.75	543.46	462.65	3577.34	6522.66
10125.00 - 10174.99	2586.73	1.11.51	546.34	463.38	3596.44	6553.56
10175.00 - 10224.99	2602.23	Tur Ça	549.21	464.10	3615.54	6584.46
10225.00 - 10274.99	2617.73	F	552.09	464.83	3634.64	6615.36
10275.00 - 10324.99	2633.23	【 帮帮 郭	554.96	465.55	3653.74	6646.26
10325.00 - 10374.99	2648.73		557.84	466.28	3672.84	6677.16
10375.00 - 10424.99	2666.09	피로취	560.71	467.00	3693.80	6706.20
10425.00 - 10474.99	2684.09		563.59	467.73	3715.40	6734.60
10475.00 - 10524.99	2702.09	1 ES - 21	566.46	468.45	3737.00	6763.00
10525.00 - 10574.99	2720.09	1.1.1.1.2	569.34	469.18	3758.60	6791.40
10575.00 - 10624.99	2738.09	41 31	572.21	469.90	3780.20	6819.80
10625.00 - 10674.99	2756.09	1 11 31	575.09	470.63	3801.80	6848.20
10675.00 - 10724.99	2774.09	THE P	577.96	471.35	3823.40	6876.60
10725.00 - 10774.99	2792.09	1.21.1	580.84	472.08	3845.00	6905.00
10775.00 - 10824.99	2810.09	1.14	583.71	472.80	3866.60	6933.40
10825.00 - 10874.99	2828.09	1.12.13	586.59	473.53	3888.20	6961.80
10875.00 - 10924.99	2846.09		589.46	474.25	3909.80	6990.20
10925.00 - 10974.99	2864.09		592.34	474.98	3931.40	7018.60
10975.00 - 11024.99	2882.09	1.48.66	595.21	475.70	3953.00	7047.00
11025.00 - 11074.99	2900.09		598.09	476.43	3974.60	7075.40
11075.00 - 11124.99	2918.09	1.45	600.96	477.15	3996.20	7103.80
11125.00 - 11174.99	2936.09	July VI	603.84	477.88	4017.80	7132.20
11175.00 - 11224.99	2954.09	110	606.71	478.60	4039.40	7160.60
11225.00 - 11274.99	2972.09	1.110	609.59	479.33	4061.00	7189.00
11275.00 - 11324.99	2990.09	1.15.2	612.46	480.05	4082.60	7217.40
11325.00 - 11374.99	3008.09	- 4P (4	615.34	480.78	4104.20	7245.80
11375.00 - 11424.99	3026.09		618.21	481.50	4125.80	7274.20
11425.00 - 11474.99	3044.09		621.09	482.23	4147.40	7302.60
11475.00 - 11524.99	3062.09	1.5	623.96	482.95	4169.00	7331.00
11525.00 - 11574.99	3080.09	(itc)	626.84	483.68	4190.60	7359.40
11575.00 - 11624.99	3098.09		629.71	484.40	4212.20	7387.80

10/09/95 Table II-1 COLORADO 1995 FEDERAL & STATE TAXES GROSS TO NET INCOME CONVERSION TABLE							
Gross Income	Federal	EITC	Colorado	FICA	Total	Net	
Range	Tax		StateTax		Taxes	Monthly Income	
11625.00 - 11674.99	3116.09		632,59	485.13	4233.80	7416.20	
11675.00 - 11724.99	3134.09		635.46	485.85	4255.40	7444.60	
11725.00 - 11774.99	3152.09		638.34	486.58	4277.00	7473.00	
11775.00 - 11824.99	3170.09		641.21	487.30	4298.60	7501.40	
11825.00 - 11874.99	3188.09		644.09	488.03	4320.20	7529.80	
11875.00 - 11924.99	3206.09		646.96	488.75	4341.80	7558.20	
11925.00 - 11974.99	3224.09		649.84	489.48	4363.40	7586.60	
11975.00 - 12024.99	3242.09		652.71	490.20	4385.00	7615.00	
12025.00 - 12074.99	3260.09		655.59	490.93	4406.60	7643.40	
12075.00 - 12124.99	3278.09		658.46	491.65	4428.20	7671.80	
12125.00 - 12174.99	3296.09		661.34	492.38	4449.80	7700.20	
12175.00 - 12224.99	3314.09		664.21	493.10	4471.40	7728.60	
12225.00 - 12274.99	3332.09		667.09	493.83	4493.00	7757.00	
12275.00 - 12324.99	3350.09		669.96	494.55	4514.60	7785.40	
12325.00 - 12374.99	3368.09		672.84	495.28	4536.20	7813.80	
12375.00 - 12424.99	3386.09		675.71	496.00	4557.80	7842.20	
12425.00 - 12474.99	3404.09		678.59	496.73	4579.40	7870.60	
124/5.00 - 12524.99	3422.09		681.46	497.45	4601.00	7899.00	
12525.00 - 12574.99	3440.09		684.34	498.18	4622.60	7927.40	
12575.00 - 12624.99	3458.09		600.00	498.90	4644.20	7955.80	
12625.00 - 12674.99	3470.09		690.09	499.03	4687.40	9012.60	
12725 00 - 12724.99	3434.09		695.84	500.35	4007.40	8041.00	
12725.00 - 12824.99	3530.09		698 71	501.00	4730.60	8069.40	
12825.00 - 12874.99	3548.09		701.59	502.53	4752.20	8097.80	
12875.00 - 12924.99	3566.09		704.46	503.25	4773.80	8126.20	
12925.00 - 12974.99	3584.09		707.34	503.98	4795.40	8154.60	
12975.00 - 13024.99	3602.09		710.21	504.70	4817.00	8183.00	
13025.00 - 13074.99	3620.09		713.09	505.43	4838.60	8211.40	
13075.00 - 13124.99	3638.09		715.96	506.15	4860.20	8239.80	
13125.00 - 13174.99	3656.09		718.84	506.88	4881.80	8268.20	
13175.00 - 13224.99	3674.09		721.71	507.60	4903.40	8296.60	
13225.00 - 13274.99	3692.09		724.59	508.33	4925.00	8325.00	
13275.00 - 13324.99	3710.09		727.46	509.05	4946.60	8353.40	
13325.00 - 13374.99	3728.09		730.34	509.78	4968.20	8381.80	
13375.00 - 13424.99	3746.09		733.21	510.50	4989.80	8410.20	
13425.00 - 13474.99	3764.09		736.09	511.23	5011.40	8438.60	

10/09/95

COLORADO 1995 FEDERAL & STATE TAXES GROSS TO NET INCOME CONVERSION TABLE

Gross Income Range	Federal Tax	EITC	Colorado StateTax	FICA	Total Taxes	Net Monthly Income
13475.00 - 13524.99	3782.09		738.96	511.95	5033.00	8467.00
13525.00 - 13574.99	3800.09		741.84	512.68	5054.60	8495.40
13575.00 - 13624.99	3818.09	1 1 1 1 A	744.71	513.40	5076.20	8523.80
13625.00 - 13674.99	3836.09		747.59	514.13	5097.80	8552.20
13675.00 - 13724.99	3854.09		750.46	514.85	5119.40	8580.60
13725.00 - 13774.99	3872.09	1.63. 24	753.34	515.58	5141.00	8609.00
13775.00 - 13824.99	3890.09	1.1.7.1.1.	756.21	516.30	5162.60	8637.40
13825.00 - 13874.99	3908.09	1	759.09	517.03	5184.20	8665.80
13875.00 - 13924.99	3926.09	E Mar and	761.96	517.75	5205.80	8694.20
13925.00 - 13974.99	3944.09	1,1,2 1,1,1	764.84	518.48	5227.40	8722.60
13975.00 - 14024.99	3962.09	174	767.71	519.20	5249.00	8751.00
14025.00 - 14074.99	3980.09	100	770.59	519.93	5270.60	8779.40
14075.00 - 14124.99	3998.09	1142 50	773.46	520.65	5292.20	8807.80
14125.00 - 14174.99	4016.09	1. C. B.1	776.34	521.38	5313.80	8836.20
14175.00 - 14224.99	4034.09	S. S.L.P.	779.21	522.10	5335.40	8864.60
14225.00 - 14274.99	4052.09	7.85	782.09	522.83	5357.00	8893.00
14275.00 - 14324.99	4070.09		784.96	523.55	5378.60	8921.40
14325.00 - 14374.99	4088.09	A to a f	787.84	524.28	5400.20	8949.80
14375.00 - 14424.99	4106.09		790.71	525.00	5421.80	8978.20
14425.00 - 14474.99	4124.09	1.1.1	793.59	525.73	5443.40	9006.60
14475.00 - 14524.99	4142.09	A Contraction	796.46	526.45	5465.00	9035.00
14525.00 - 14574.99	4160.09	N. N	799.34	527.18	5486.60	9063.40
14575.00 - 14624.99	4178.09	1.11.30	802.21	527.90	5508.20	9091.80
14625.00 - 14674.99	4196.09		805.09	528.63	5529.80	9120.20
14675.00 - 14724.99	4214.09	L D	807.96	529.35	5551.40	9148.60
14725.00 - 14774.99	4232.09	AL.	810.84	530.08	5573.00	9177.00
14775.00 - 14824.99	4250.09		813.71	530.80	5594.60	9205.40
14825.00 - 14874.99	4268.09		816.59	531.53	5616.20	9233.80
14875.00 - 14924.99	4286.09		819.46	532.25	5637.80	9262.20
14925.00 - 14974.99	4304.09		822.34	532.98	5659.40	9290.60
14975.00 - 15024.99	4322.09		825.21	533.70	5681.00	9319.00

APPENDIX III: COMPARISONS FOR ONE AND THREE CHILDREN













- Andrews Martine Areas -

And a statistical second