Economic Review of the Massachusetts Child Support Guidelines, 2016-2017

PREPARED FOR

Commonwealth of Massachusetts

Executive Office of the Trial Court

2016-2017 Child Support Guidelines Task Force

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June 23, 2017

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This report was prepared for the Commonwealth of Massachusetts Executive Office of the Trial Court and the 2016-2017 Child Support Guidelines Task Force. All results and any errors are the responsibility of the authors and do not represent the opinion of The Brattle Group or its clients.

Acknowledgement: We acknowledge the valuable contributions of many individuals to this report and to the underlying analysis, including members of The Brattle Group for peer review.

Table of Contents

Executive Summary v

I. Introduction 1

II. Current Massachusetts Guidelines 3

A. Child Support as a Percentage of Income 3

B. Adjustment for the Number of Children 5

III. Revised Massachusetts Guidelines 9

A. Deviations from the Guidelines 9

B. Child Support as a Percentage of Income 12

C. Adjustment for the Number of Children 14

D. Adjustment for the Ages of Children 18

E. College Costs 22

F. Child Care and Health Care Costs 25

1. Child Care Costs 25

2. Health Care Costs 29

a. Per-Capita Health Care Costs 29

b. Health Insurance Costs 32

3. Child Care and Health Care Cost Credits 34

G. Impact of Recommended Revisions 36

IV. Economic Estimates of Child Costs 40

A. Caveats 40

B. Economic Approaches 42

1. Income Shares 43

2. Percent of Payor Income 45

3. Melson Formula 45

C. Current Studies 47

1. Betson (2010) 48

2. USDA (2017) 49

3. Comanor, Sarro, and Rogers (2015) 51

(continued...)

Table of Contents (continued)

D. Current Child Cost Estimates 52
1. Betson-Rothbarth Estimates 53
2. USDA Estimates 57
a. USDA National Estimates 59
b. USDA Northeast Estimates 61
3. Guidelines in Neighboring States 64
a. Income-Only Comparisons 65
b. Including Child Care and Health Care Costs 68
c. Increases for Additional Children 69

V. Other Economic Considerations 72
A. Cost of Living 72
B. Tax Impacts 75

VI. Conclusion 78

Index of Tables and Figures

Table / Figure	Page	Title
Figure 1	4	Current Guidelines Marginal Income Percentages (1 child)
Figure 2	6	Adjustment Factors for Additional Children
Figure 3	6	Current Guidelines as a Percent of Combined Income
Figure 4	7	Current Guidelines as a Percent of Payor Income
Figure 5	8	Current Guidelines Amounts
Figure 6	11	Deviations from Current Guidelines
Figure 7	14	Revised Guidelines Marginal Income Percentages (1 child)
Figure 8	17	Benchmark Adjustment Factors for Additional Children
Figure 9	23	College Cost Benchmark in the Revised Guidelines
Figure 10	24	Massachusetts College Costs (Indexed to $1 in 2013)
Figure 11	27	Estimated Child Care Costs by Age
Figure 12	28	Estimated Child Care Costs, Ages 0-4
Figure 13	31	Per-Capita Health Care Costs (Indexed to $1 in 2010)
Figure 14	32	Out-of-Pocket Health Care Costs by Income Group
Figure 15	33	Family Premiums and Employee Contributions, by Wage Quartile
Figure 16	56	Betson (2010) Child Costs as a Percent of Gross Income
Figure 17	57	Massachusetts Guidelines v. Betson (2010) (1 Child)
Figure 18	61	Revised Guidelines v. USDA Estimates (Overall U.S.)
Figure 19	63	Revised Guidelines v. USDA Estimates (Northeast)
Figure 20	68	Revised Guidelines v. Neighboring States (1 Child)
Figure 21	71	Revised Guidelines v. Neighboring States (2 Children)
Figure 22	71	Revised Guidelines v. Neighboring States (3 Children)
Figure 23	73	Estimated Child Cost Shares by Component
Figure 24	75	Income and Housing Costs, Massachusetts v. U.S.

(continued…)

Index of Tables and Figures (continued)

Table / Figure	Page	Title
Table 1	10	Deviations from Current Guidelines
Table 2	14	Revised Guidelines Marginal Income Percentages (1 child)
Table 3	16	Benchmark Increases for Additional Children
Table 4	19	Maximum Age for Child Support by State
Table 5	21	Revised Guidelines Adjustments for Number and Ages of Children
Table 6	24	Massachusetts College Cost Trends, 2013-2017
Table 7	26	Estimated Child Care Costs by Age
Table 8	28	Estimated Child Care Costs, Ages 0-4
Table 9	30	Per-Capita Health Care Costs
Table 10	32	Cost of Health Care Coverage
Table 11	37	Impact of 25 Percent Reduction for Children Age 18+
Table 12	39	Summary of Impacts of Proposed Revisions to the Current Guidelines
Table 13	42	Guidelines Approaches by State
Table 14	53	Betson (2010) Child Costs as a Share of Spending
Table 15	54	Betson (2010) Child Costs as a Share of Net Income
Table 16	55	Betson (2010) Child Costs for Massachusetts
Table 17	59	USDA (2017) Child Costs (Overall U.S.)
Table 18	60	Revised Guidelines Amounts by USDA Income Group (Overall U.S.)
Table 19	62	USDA (2017) Child Costs (Northeast)
Table 20	63	Revised Guidelines Amounts by USDA Income Group (Northeast)
Table 21	64	Revised Guidelines Amounts for Neighboring State Comparisons
Table 22	67	Guidelines Amounts Relative to Payor Income
Table 23	74	Income and Housing Costs, Massachusetts v. U.S.

Executive Summary

The Commonwealth of Massachusetts Executive Office of the Trial Court asked us to provide analysis and professional advice to the 2016-2017 Massachusetts Child Support Task Force on: current economic data and information on child costs, economic concepts and principles as they relate to Massachusetts child support guidelines, potential revisions to the guidelines the Task Force may propose, any other economic information the Task Force may request, and questions from the Task Force.

Child support amounts in Massachusetts under the guidelines are presumptive in the absence of specific findings to the contrary. So it is important to regularly re-evaluate both the guidelines structure and resulting dollar amounts relative to basic economic principles, current economic estimates of child costs, and other relevant economic information.

Most states base their child support guidelines, to some extent, on specific economic studies. Massachusetts guidelines are based, in part, on an understanding of the estimates reported in economic studies, but the guidelines are not based on a single set of estimates from a specific source. Rather, the task force committees in the two prior guidelines reviews (in 2008-2009) and in (2012-2013) considered current child cost estimates but acknowledged that the most widely used studies do not actually measure direct spending on children and are based on national data. Most child costs are not directly observable because they are costs shared by adults and children in a household, such as housing and food. Therefore, economic estimates of child costs are just that – estimates, not actual data on spending. Those estimates have theoretical and practical limitations. They are informative and important to consider, but they are not determinative.

The Massachusetts guidelines are based, in part, on "income shares" estimates of child costs. The income shares approach uses a child's share of a household's combined income to measure child costs. The term "income shares" refers to the share of household income required to cover child-related costs in a household (not the sharing of those costs between parents). This report summarizes the income shares approach in theory and the empirical methodology used to implement it in practice. We also summarize other economic approaches to estimating child costs, as well as other child cost benchmarks, such as guidelines amounts in other states.

Specifically, we discussed with the Task Force how the structure of the Massachusetts guidelines and the resulting dollar amounts compare to current data from three benchmark indicators of child costs: (1) the latest income shares study, (2) current estimates of child costs published by the U.S. Department of Agriculture ("USDA"), and (3) guidelines amounts in the five states neighboring Massachusetts (Connecticut, New Hampshire, New York, Rhode Island and Vermont). We discussed each source and presented the results of many comparisons.

This report summarizes the results of comparing child support amounts under the Massachusetts guidelines, as revised based on recommendations by the Task Force, to each of the benchmarks for cases with one, two and three children. Overall, the revised guidelines amounts for one child are lower than all of the benchmarks in cases with very low income and are higher than the benchmarks, to varying degrees, as income increases. The guidelines amounts for two or more children also are higher than the economic estimates of child cost at middle and high income levels, but by less than the higher differentials for one child. They also are roughly consistent with, or even lower than, the guidelines amounts in neighboring states in some cases.

Over the full range of incomes covered by the 2017 Child Support Guidelines Chart reflecting the revisions proposed by the Task Force, the revised guidelines amount for one child under age 18 ranges from $25 per week to $772 per week, and is $291 per week at the median income level. By comparison, the estimate for one child from the latest income shares study ranges from $27 per week at the lowest income levels to $365 at the highest income levels, and is $196 per week for one child at the current Massachusetts median income level. So the Massachusetts revised guidelines amounts are just lower at very low incomes (below $139 per week) and are increasingly higher at higher incomes. For two and three children, the same is true at income levels above $526 per week and $1,048 per week, respectively.

The Massachusetts revised guidelines amounts compare similarly to the current USDA estimates of child costs for one, two and three children. For example, the USDA estimates for one child (based on nation-wide data) range by income from $188 to $347 per week for married households, and from $178 to $300 per week for single-headed households, averaging $250 per week. For the same income groups as in the USDA report, the Massachusetts revised guidelines amounts are lower at very low incomes and increasingly higher otherwise. The USDA estimates based on data for the Northeast Census Region (consisting of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont) are slightly

higher than the estimates based on nation-wide data, but still lower than the Massachusetts revised guidelines except at very low income levels.

The Massachusetts guidelines amounts for one child also are higher at most income levels than the guidelines amounts in each of the five neighboring states. Only in cases of very low-income payors (less than $20,000 per year) paired with middle- to high-income recipients are the Massachusetts amounts sometimes less than in a neighboring state. Otherwise, the Massachusetts revised guidelines amounts for one child under age 18 are higher on a state-by-state basis by as little as 6 percent, and by 47 percent on average. Because the increases for additional children are lower under the Massachusetts guidelines, the resulting guidelines amounts for more than one child are more similar to the amounts in neighboring states – lower in some cases, but still higher in most cases.

The higher child support amounts we observe in these comparisons may partly reflect the relatively high cost of living in Massachusetts. If overall costs are above average, child costs are likely above average as well. Costs in Massachusetts are certainly higher for many important components of household spending. The average cost of home ownership in Massachusetts is over $2,000 per month, or 37 percent higher than in the U.S. overall. Average rent is nearly $1,200 per month, or 20 percent higher than the national average. Child care costs in Massachusetts are the highest in the nation, at $213 per week (for all age groups), or 41 percent above the national average and 16 percent above the average cost in neighboring states. Health care costs in Massachusetts are among the nation's highest as well, with annual total health care spending at almost $11,000 per resident, or 31 percent above the national average and 8 percent above the average of the neighboring states.

Median household income in Massachusetts also is higher ($70,628 per year, or 27 percent higher than in the U.S. overall), but with a wide disparity in income levels. So the high cost living is disproportionately high relative to income for some households. Whether the above-average income and cost of living in Massachusetts means the guidelines amounts also should be higher is a complex, open question requiring further research and discussed further below.

As a result of its review, the Task Force recommended four revisions to the Massachusetts guidelines formula:

1. An increase in the minimum order for one child under the guidelines from $18 per week to $25 per week;
2. A 25 percent reduction in child support amounts for children over 18;
3. A cap on a parent's Court-ordered contribution to college costs at 50 percent of the undergraduate, in-state resident cost of UMass Amherst; and
4. A credit to either parent to offset net child care and health care costs, capped at 15 percent of the child support amount before the credit.

The impact of these revisions on the presumptive child support amounts under the guidelines is material but predictable, both individually and collectively. They can increase or decrease the guidelines amount in a given case relative to the current (2013) guidelines, but both the direction and magnitude of a change in a given case is predictable given the facts of the case. All four revisions to the guidelines formula recommended by the Task Force are subject to deviation by the Court as it finds appropriate. These revisions are economically sound and should improve the appropriateness and effectiveness of the guidelines.

I. Introduction

In June 2016, the Executive Office of the Trial Court retained us to assist the 2016-2017 Child Support Guidelines Task Force ("Task Force") in its quadrennial review of the Massachusetts Child Support Guidelines ("guidelines"). Our role was to advise the Task Force on economic issues relating to the guidelines and to present to the Task Force current economic data on the cost of raising a child in Massachusetts. This report summarizes the information and analysis we presented to the Task Force in the course of our economic review of the guidelines formula, the impacts of changes to the formula proposed by the Task Force, and the resulting child support amounts relative to economic estimates of child costs and child support amounts in other states.

In addition to the economic principles and data discussed in this report, we considered the comments the Task Force receieved at a series of public forums at the start of its review. Dr. Sarro participated in each of the Task Force meetings in a consulting capacity to present the data and information summarized in this report, answer questions from the Task Force relating to economics and economic policy, propose formulaic adjustments to the guidelines requested by the Task Force, and compute child support amounts resulting from alternative formulations of the guidelines. Mr. Rogers also participated in some Task Force meetings by phone. As part of the Task Force's year-long review, we calculated child support amounts for thousands of hypothetical fact patters under the current guidelines, alternative formulas and percentage tables, and the final guidelines as proposed.

In order to receive federal funds for child support enforcement, federal law requires each state to review its child support guidelines at least every four years to assure their application results in appropriate child support amounts.[1] Massachusetts' current child support guidelines resulted from a similar review in 2012-2013, and became effective on August 1, 2013.[2] So the 2016-2017 Task Force review is being done within this federally mandated four-year window. As a matter of economics, regularly reviewing the guidelines is an important feature of getting both the process and the numbers "right". This is difficult because the guidelines establish a "one-size-fits-all" formula for calculating child support in all cases. However, it is especially important

[1] 42 U.S.C. sec. 667; accord 45 CFR 302.56 (e).

[2] See Child Support Guidelines effective August 1, 2013 at http://www.mass.gov/courts/selfhelp/family/child-support-guidelines.html.

because the resulting child support amounts are "presumptive" in the absence of specific findings explaining why the guidelines amount would be inappropriate in a particular case.[3] In other words, the guidelines amounts are assumed to be the right amounts in a given case unless the Court finds otherwise. Of course, there is no objectively "right" amount of child support for a given case. Spending on children varies widely even in different households with similar economic characteristics. The guidelines formula is designed to be flexible enough to yield appropriate amounts in most cases by taking into account the relevant economic factors which lead to different levels of spending on children, and to allow the Court to deviate from the formulaic amount of child support by exception.

As a matter of economics, the guidelines should yield an appropriate level of financial support for a child from both parents in an economically efficient and equitable proportion. A primary purpose of the quadrennial review process is to evaluate how well the guidelines do that. This requires an analysis of both the guidelines structure and resulting amounts relative to the best available indicators of current child costs in Massachusetts. Since the amounts under the guidelines are presumed to be appropriate, there should be a clear relationship between the guidelines amounts and the information underlying them, including economic studies and specific policy principles. An economic presumption should have a sound theoretical and empirical basis that can be evaluated and applied in practice. This is why federal law requires the guidelines to be reviewed every four years and requires the Task Force to consider the resulting child support amounts relative to economic data on child costs:

> "As part of the review of a State's guidelines required under paragraph (e) of this section, a State must consider economic data on the cost of raising children and analyze case data, gathered through sampling or other methods, on the application of, and deviations from the guidelines."[4]

The Task Force asked us to help analyze and interpret Court data on deviations from the current guidelines and available economic data on child costs. That analysis is the focus of this report. Specifically, we provided the Task Force with data, calculations, and information regarding:

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[3] 45 CFR 302.56 (f).

[4] 45 CFR 302.56 (h).

- Data on deviations collected by the Court;
- Economic approaches used to estimate child costs;
- Current child cost estimates from economic studies and data sources;
- Structure and results of the guidelines relative to guidelines in all other states and relative to guidelines amounts in the five states neighboring Massachusetts; and
- Alternative child support amounts under different formulas and percentage tables for various hypothetical fact patterns, to understand the potential impact of proposed changes to the guidelines.

This report summarizes the data, calculations, and information presented to the Task Force on each of these topics during its year-long review of the guidelines. Rather than only reporting on analyses of the current guidelines, this report summarizes the economic aspects of the specific changes to the guidelines the Task Force has proposed. For clarity, this report uses the term "current guidelines" to refer to the guidelines currently in place as of August 1, 2013, and it uses the term "revised guidelines" to refer to the guidelines after incorporating the changes proposed by Task Force as a result of the 2016-2017 review.

II. Current Massachusetts Guidelines

The current guidelines took effect in August 2013 after a review by a prior task force. The recommendations resulting from that review did not change the structure of the guidelines formula, which had just changed significantly in the prior (2009) review. The 2012-2013 review did change the guidelines amounts, revising child support orders downward for most levels of available income and resulting in the numbers listed in Table A and Table B on the current guidelines worksheet.

A. Child Support as a Percentage of Income

Table A on the worksheet lists the marginal percentages of available income used to determine the amount of child support for one child as the combined income of a payor and recipient increases up to the maximum income level under the guidelines of $250,000 per year ($4,808 per week). Each marginal percentage represents the share of incremental combined available income used to calculate the total child support amount. So the resulting child support amount reflects the income-weighted average of the series of marginal percentages up to the level of combined available income in a particular case. The marginal percentages in the current guidelines for one child start at 22 percent of the lowest combined income levels (from $151 per

week up to $750 per week) and steadily decline to 11 percent at the highest combined income levels (above $4,000 per week). The resulting current child support amounts above minimum orders range from effective percentages of 16 to 22 percent of a given level of combined income, based on moving through the income tranches in Table A.

Figure 1 depicts the marginal percentages in Table A of the current guidelines for one child. The downward-sloping curve reflects the economic reality of covering child costs subject to a budget constraint combined with a declining propensity to spend as income rises. Child costs account for a higher percentage of available income at relatively low income levels and an increasingly smaller share of income at higher income levels. At the lowest income levels, most household spending covers fixed costs shared by children and adults such as housing and utilities. As higher income levels, more money is available to cover the cost of child-specific items such as clothing and sports equipment. But as income continues to increase, spending on child-specific items represents a smaller and smaller share of overall income.[5]

Figure 1:
Current Guidelines Marginal Income Percentages (1 child)

Source: Table A of current guidelines

The percentages in Table A and Figure 1 start at combined available income of $151 per week, or just $7,852 per year. This is well below the 2017 poverty income level for even one person per

[5] Virtually all economic estimates of child costs show the proportion of income spent on children decreasing as income increases. This relationship reflects the economic principle of the decreasing marginal propensity to consume out of additional income at middle and high income levels.

year ($12,060 per year), nonetheless for a family of two ($16,240) or three people ($20,420).[6] So the guidelines yield relatively low child support payments in dollars at that income level. For combined available incomes of $150 per week or less, the current guidelines specify a minimum order of $80 per month, or $18 per week, for one child regardless of the percentage of combined available income that represents. Realistically at such low income levels, there simply is not enough income to cover all costs. So the minimum order at least establishes a presumptive lower bound on the amount of financial support designated specifically to cover child costs.

B. Adjustment for the Number of Children

Table B on the guidelines worksheet takes the child support amounts from Table A for one child and adjusts them upward in cases with two or more children. The current Table B lists five adjustment factors to be applied to the Table A amounts for one, two, three, four or five children covered by an order, respectively. The appropriate adjustment factor is applied by multiplying it by the amount from Table A based on the level of combined available income in a case. Since the child support amounts in Table A are already for one child, the adjustment factor in Table B for one child is simply one, leaving the amount from Table A unchanged. But the adjustment factors for more than one child are greater than one, so multiplying them by the one-child amount from Table A yields a higher child support amount for more children.

The adjustment factors in Table B of the current guidelines are 1.25 for two children, 1.38 for three children, 1.45 for four children and 1.48 for five children. The adjustment factor for two children represents a 25 percent increase in child support to cover the cost of a second child (that is, 1.25 is 25 percent higher than 1.00). The adjustment factors for more than two children represent increases of 10 percent for a third child (1.38 relative to 1.25), five percent for a fourth child (1.45 relative to 1.38) and two percent for a fifth child (1.48 relative to 1.45).

Figure 2 shows the shape of the adjustment factors for one to five children under the current guidelines.

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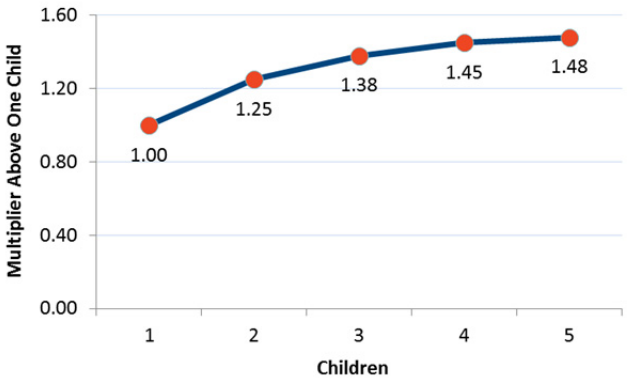
[6] U.S. Department of Health and Human Services, "2017 Poverty Guidelines for the 48 Contiguous States and the District of Columbia," effective January 26, 2017, as published in the Federal Register 82(19), January 31, 2017, at pp. 8831-8832. https://www.gpo.gov/fdsys/pkg/FR-2017-01-31/pdf/2017-02076.pdf

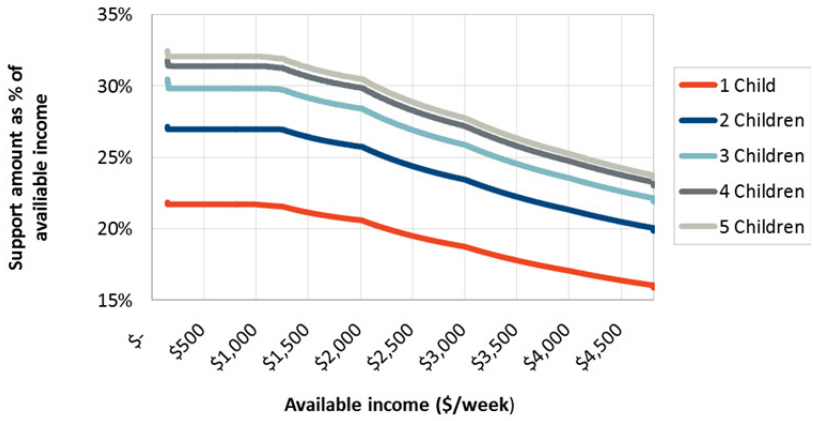
Figure 2:
Adjustment Factors for Additional Children



Source: Table B of current guidelines

Combining the one-child income percentages listed in Table A of the guidelines worksheet and the adjustment factors for more than one child listed in Table B results in a range of effective percentages of child support relative to combined income, based on moving through the income tranches in Table A. Figure 3 shows the effective percentages under the current guidelines.

Figure 3:
Current Guidelines as a Percent of Combined Income



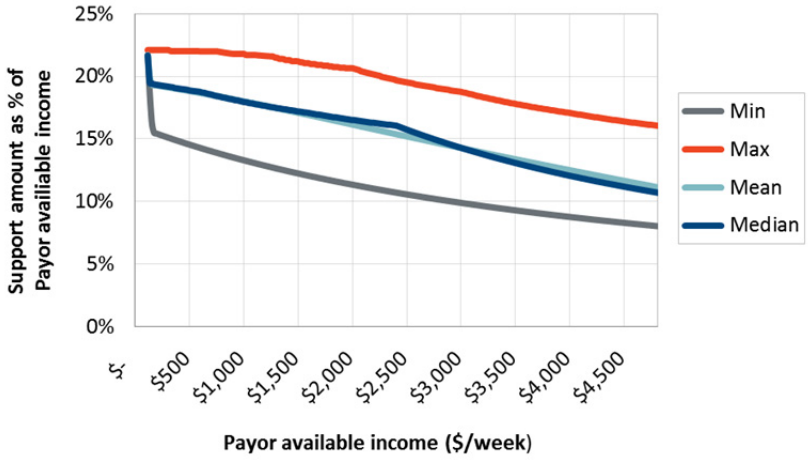
Source: Tables A and B of current guidelines

As noted above, current child support amounts above minimum orders range from effective percentages of 16 to 22 percent of combined income for one child, with child support representing a higher share of income at lower income levels. (This is the red line in Figure 3.) The effective percentage curves for more than one child take the same shape since they reflect the same marginal percentages in Table A for the first child. But the effective percentages in the curves for each additional child are successively higher due to the higher adjustment factors in Table B for more children. Child support under the current guidelines ranges from 20 to 27

percent of combined available income for two children; 22 to 27 percent of income for three children; 23 percent of 28 percent for four children; and 24 to 29 percent for five children.

The effective percentages shown in Figure 3 are relative to the combined available income of both the payor and recipient. Another way to visualize child support orders under the current guidelines is to show the range of effective percentages relative to the payor's income only. Because the amount of child support under the guidelines is based on combined available income, the percentage of a payor's income it accounts for depends on the income levels of both the payor and recipient. So there is a range of percentages for a given level of payor income, depending on the relative income of the recipient. To see these percentages, we ran the current guidelines over and over for a given level of payor income and allowing recipient income to vary over the range of combined income under the guidelines. **Figure 4** shows the resulting range of child support amounts for one child stated as percentage of each level of payor income.

Figure 4:
Current Guidelines as a Percent of Payor Income
(Over the full range of recipient income; 1 child)



Source: Tables A and B of current guidelines

The current guidelines amounts for one child account for 11 to 22 percent of a payor's available income, on average. (This is the blue line on Table 4.) This simply reflects the marginal percentages in Table A of the guidelines worksheet. The average percentages decrease for a given level of payor income as payor income increases, also simply reflecting the declining percentages in Table A. But there is a considerable range around this average, depending on the recipient's income for a given level of payor income. For example, payors with available income of $2,500 per week (in the middle of the income range on Figure 4) pay 16 percent of their income in child support on average. However, a payor at that income level can pay as little as 11

percent if the recipient has a high income, or as much as 20 percent if the recipient has a low income. The size of the band around the average for a given level of payor income (the difference between the minimum and maximum amounts of child support) increases with payor income. The range is narrower at lower levels of payor income than at higher income levels.

The percentages shown in Figure 4 are for one child. The curves in the analogous figures for more than one child would take the same shape, but at higher effective percentages due to the multipliers in Table B for more children.

Figure 5 shows the same one-child weekly support amounts in dollars, rather than in percentages, over the range of a payor's available income.

Figure 5:
Current Guidelines Amounts
(Over the full range of recipient income; 1 child)

Source: Tables A and B of current guidelines

In dollars, the percentages in Figure 4 correspond to child support amounts (other than $25 per week minimum orders) ranging from $27 per week to $535 per week, on average. Again, the range around this average for a given level of payor income depends on the recipient's income. For example, payors with available income of $2,500 per week pay an average of $380 per week in child support under the guidelines. (The blue line in the middle of Figure 5.) However, the guidelines amount for a payor at that income level can vary from $264 per week if the recipient has a high income, to as much as $488 per week if the recipient has a low income. This range is narrower at lower levels of payor income than at higher levels of income.

III. Revised Massachusetts Guidelines

As part of the 2016-2017 guidelines review, we discussed with the Task Force the structure and results of the current guidelines relative to economic principles, current estimates of child costs, and guidelines practices and amounts in other states. We also discussed with the Task Force data on deviations from the current guidelines. This section of the report summarizes the data on deviations and discusses the nature and impact of changes the Task Force ultimately decided to make to the current guidelines based on its review. Subsequent sections of this report summarize the underlying economic concepts and comparisons to child costs estimates and guidelines amounts in other states.

A. Deviations from the Guidelines

Federal regulations[7] require each state to "review, and revise, if appropriate," its guidelines "at least once every four years to ensure that their application results in the determination of appropriate child support award amounts." As part of that review, states are required to consider economic data, as noted above and discussed in more detail below. States also are required to consider data on "the application of, and deviations from, the guidelines" to be sure the guidelines yield child support amounts the Court finds appropriate in most cases and "deviations from the guidelines are limited."

Deviations may occur as a result of a variety of circumstances. For example, a payor and recipient may voluntarily agree to a child support amount different from the guidelines amount. In such a case, the Court is not bound to approve an alternative amount of support just because the parties request it, but the Court may deviate from the guidelines in consideration of such a request. The Court also may deviate in cases where the parties have not agreed on a child support amount but where the judge finds an alternative amount is in the best interest of the child. That said, frequent deviations from the presumptive orders under the guidelines may indicate a need to revise the guidelines so they yield appropriate child support amounts more broadly. Courts should deviate from the guidelines in exceptional circumstances. But if the guidelines are well-constructed, deviations will be exceptions and the guidelines will be the rule.

[7] 45 CFR 302.56, *op. cit.*

We analyzed the frequency of deviations from the current guidelines using data collected by the Massachusetts Probate and Family Court for all domestic relations and paternity cases in each of the Court's 14 divisions in 2015 and 2016. The raw data the Court collected show the total number of such cases in each division and the number cases with deviations. Table 1 shows the total number of domestic relations and paternity cases sorted by the percent of those cases with deviations from the guidelines in 2016 and shaded to highlight variation in the data.

Table 1:
Deviations from Current Guidelines

		2015		2016	
	County	Cases	Deviation %	Cases	Deviation %
1	Hampden	3,712	37.7%	3,416	39.9%
2	Berkshire	755	41.6%	757	39.4%
3	Hampshire	658	31.6%	702	39.0%
4	Franklin	486	0.0%	501	18.8%
5	Plymouth	3,493	7.4%	3,364	8.6%
6	Bristol	4,347	9.4%	4,688	7.7%
7	Suffolk	4,182	4.3%	4,530	7.3%
8	Worcester	5,381	2.4%	4,981	5.2%
9	Norfolk	2,562	10.1%	2,545	4.4%
10	Middlesex	5,642	4.7%	6,092	4.3%
11	Essex	4,665	0.9%	4,890	3.3%
12	Dukes	61	9.8%	104	1.0%
13	Barnstable	1,538	0.3%	1,505	0.2%
14	Nantucket	104	1.0%	96	0.0%
	Overall	**37,586**	**9.2%**	**38,171**	**10.0%**
	Median		**6.1%**		**6.2%**

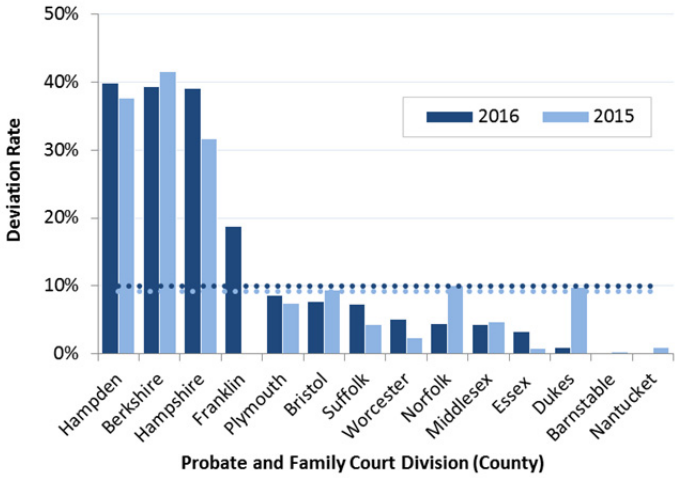
Source: Data from the Massachusetts Probate and Family Court

The data for 2015 and 2016 show similar patterns for the overall number of cases and frequency of deviations. There were roughly the same number of cases in each year across all 14 counties: 37,586 cases in 2015 and 38,171 cases in 2016. In both years, the most cases were in the most populous counties (Middlesex, Worcester and Essex) but the highest deviation rates were in counties with smaller caseloads. In both years, the three counties with the highest proportion of deviations by far were three counties in western Massachusetts (Berkshire, Hampden and Hampshire), with deviation rates of between 30 and 40 percent. These deviation rates are significantly higher than the rates in other counties, all but one of which were less than 10

percent in each year.[8] On average, Massachusetts Courts deviated from the current guidelines in only 9 percent of cases in 2015 and 10 percent of cases in 2016. The median deviation rate (the middle rate, eliminating the effect of high and low outliers) was just 6 percent in each year.

Figure 6 illustrates the 2015-2016 deviation rates by county, sorted in descending order for 2016.

Figure 6:
Deviations from Current Guidelines



Source: Table 1

The 2015-2016 deviations data did not include information on the direction or dollar amount of deviations. However, that information was part of the deviation data collected for the last quadrennial review in 2012-2013. It showed mostly downward deviations (reducing the amount of child support from the presumptive guidelines amounts) by only small dollar amounts. Approximately two-thirds of deviations reported in 2012-2013 were downward deviations from the guidelines amounts by less than $10 per week.[9] The same pattern is likely true for current deviations as well, since the most 2015-2016 deviations are in western Massachusetts counties with below-average median household incomes (see Table 23 and Figure 24).

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[8] The higher deviation rates in western Massachusetts counties likely reflect the local case mix and relatively small caseloads. For example, the only other county in western Massachusetts (Franklin) had the next-highest deviation rate in 2016 (18.8 percent). But this was over only 501 cases, whereas Franklin had no deviations over roughly the same number of cases (486) in 2015.

[9] Massachusetts Child Support Guidelines Quadrennial Review (2013), "Final Report of the 2012 Task Force", June 2013, p. 57.

The relatively low deviation rates observed on average and in most of the 14 counties, coupled with the likely low dollar value of the underlying deviations, means judges in Massachusetts think the presumptive amounts under the current guidelines are sufficiently appropriate in most cases to not require alternative findings and amounts. Thus, the deviation data in isolation did not indicate a need to significantly revise the current guidelines. Importantly, the Court not deviating is not the same as a deviation not being economically appropriate or being overlooked. Looking forward, more specific deviation data will be required for the next quadrennial review. Revisions to federal regulations give special attention to evaluating guidelines' impact on low-income situations.[10]

B. Child Support as a Percentage of Income

As part of the 2016-2017 guidelines review, the Task Force considered changes to the marginal percentages of combined available income listed in Table A of the guidelines worksheet and used to determine the amount of child support for one child. We discussed with Task Force the current guidelines amounts relative to available benchmarks, including estimates of child costs from economic studies and child support amounts in the five states neighboring Massachusetts. Those data and comparisons are discussed later in this report. To summarize our findings, the Massachusetts current guidelines amounts for one child are lower than the benchmark amounts at the lowest levels of combined income and are higher than the benchmarks, to varying degrees, as income increases through the tranches on Table A.

We ran the guidelines and presented the resulting child support amounts for numerous scenarios over the full range of payor and recipient income combinations under the guidelines, and for specific scenarios requested by Task Force members. Ultimately, the Task Force decided not to change any of the income tranches or incremental percentages in the current Table A at income levels above the minimum order. The only change the Task Force made to Table A was to increase the amount of minimum orders for one child from $18 per week to $25 per week. This change was in consideration of the fact that current guidelines amounts for one child are lower than the benchmark amounts for the same levels of income, and the current minimum order was originally set 15 years ago, in the March 1, 2002 guidelines. While the minimum order has stayed the same throughout that time, the cost of living – including child costs – have increased

[10] See 45 CFR 302.56(h).

significantly. The Consumer Price Index ("CPI") for the Massachusetts area reflects the overall change over time in the cost of purchasing a representative basket of items. Between March 1, 2002 and May 1, 2017, the relevant CPI increased by 36.8 percent.[11] That means the minimum order of $18 per week set back in 2002 is equivalent to $18 multiplied by 1.368, or $25 per week in today's dollars.

An increase in the minimum order for one child from $18 per week under the current guidelines to $25 per week under the revised guidelines represents a 39 percent increase in child support under the revised guidelines at incomes below $116 per week. This additional $7 per week is a steep increase, but still yields too few dollars to truly cover child costs. Again, at such a low level of combined available income to cover child costs, there simply is not enough money to go around. From an economic perspective, it is appropriate to increase the minimum order in Table A of the guidelines worksheet to $25 per week to account for current child costs. Importantly, the Court can deviate from this amount under the guidelines based on findings that a different amount would be more appropriate as an exception.

The Task Force recommended changing only the minimum order amount in Table A on the guidelines worksheet. So the pattern of marginal percentages of combined available income under the revised guidelines is exactly the same downward-sloping curve as depicted in Figure 1 above. The only difference is that the income level at which the curve starts is now lower to reflect the higher minimum order amount. The income tranches in the revised Table A start at the income level at which the first marginal percentage in the table (22 percent) multiplied by the lowest income level in the first tranche results in a child support amount just above the new $25 per week minimum order. That happens at a combined income level of $116 per week. So the first tranche in the revised Table A starts at $116 per week (rather than $150 per week in the current guidelines) and ends at the same level as in the current guidelines ($750 per week).

Figure 7 shows this curve, and **Table 2** shows the revised Table A on which it is based, as recommended by the Task Force.

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[11] U.S. Federal Reserve Bank of St. Louis, Federal Reserve Economic Data, Consumer Price Index for All Urban Consumers: All items in the MA-NH-ME-CT consolidated metropolitan statistical area (CMSA), Series CUURA103SA0. https://fred.stlouisfed.org/

Figure 7:
Revised Guidelines Marginal Income Percentages (1 child)

Source: Table A of revised guidelines

Table 2:
Revised Guidelines Marginal Income Percentages (1 child)

TABLE A: CHILD SUPPORT OBLIGATION SCHEDULE
All dollar amounts are weekly and rounded to the nearest dollar.

INCOME FROM LINE 2(g)			
Minimum		Maximum	CHILD SUPPORT AMOUNT (1 CHILD)
$ -	-	$ 115	$25 per week, unless the Court deviates
$ 116	-	$ 750	22%
$ 751	-	$ 1,250	$165 + 21% above $750
$ 1,251	-	$ 2,000	$270 + 19% above $1250
$ 2,001	-	$ 3,000	$413 + 15% above $2000
$ 3,001	-	$ 4,000	$563 + 12% above $3000
$ 4,001	-	$ 4,808	$683 + 11% above $4000

Source: Table A of revised guidelines

C. Adjustment for the Number of Children

The Task Force also considered changes to the adjustment factors listed in Table B of the guidelines worksheet used to adjust upward the child support amounts for one child from Table A in cases with more than one child. Again, these adjustment factors are applied by multiplying the relevant factor based on the number of children in a particular case by the child support amount from Table A based on the level of combined available income in the case. We discussed with Task Force the adjustment factors in the current guidelines relative to available benchmarks from economic studies and from the guidelines of the five states neighboring Massachusetts.

The adjustment factor in the current guidelines is 1.00 for one child (that is, no upward adjustment), since the child support amount from Table A already is the one-child amount. The adjustments for each additional child up to five children are 1.25, 1.38, 1.45, and 1.48. This series

of adjustment factors represents incremental increases to cover the costs of each additional child. The incremental increase for the second child is 25 percent (1.25 relative to 1.00). For additional children, the guidelines increase the child support amounts by 10 percent for a third child (1.38 relative to 1.25) by 5 percent for a fourth child (1.45 relative to 1.38) and by 2 percent for a fifth child (1.48 relative to 1.45). Conceptually, each of these increases reflects the incremental cost of adding one more child to a household. However, they seem lower than expected and indeed are lower than benchmark estimates of how costs increase with the number of children. But the dollar levels overall are relatively high relative to the benchmarks, since the one-child amounts are notably higher than benchmarks except at very modest income levels.

Estimates of the incremental cost of additional children are available from two economic studies widely cited as a basis for child support guidelines: child cost estimates published by Notre Dame professor David Betson in 2010[12] and estimates of expenditures on children published by the U.S. Department of Agriculture ("USDA") in January 2017 and revised in March 2017.[13] These studies are discussed in more detail in Section IV(C) of this report. Here, we focus only on the reported adjustments for additional children.[14] The guidelines in other states also provide a benchmark for adjusting child support amounts for additional children. We compiled the changes for different numbers of children in the guidelines cost tables for the five states neighboring Massachusetts: Connecticut, New Hampshire, New York, Rhode Island and Vermont.

Table 3 summarizes the marginal increases to account for the number of children based on each benchmark.

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[12] Betson, David M. (2010). "Appendix A: Parental Expenditures on Children: Rothbarth Estimates," in Judicial Council of California, *Review of Statewide Uniform Child Support Guidelines* (June 28, 2011). http://www.courts.ca.gov/documents/review-sucsg-0611.pdf, pp. 134-205. This is the most current study published by Dr. Betson to date.

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

[14] In Section IV(C), we also discuss a third study which we co-authored with UCLA professor Bill Comanor. William S. Comanor, Mark Sarro, R. Mark Rogers (2015), "The Monetary Cost of Raising Children," *Research in Law and Economics*, Vol. 27, pp. 209-251. That study also reports estimates of incremental costs for additional children, but we do not include those estimates here because they are based on a distinctly different definition of child cost (monetary cost as opposed to opportunity cost).

Table 3:
Benchmark Increases for Additional Children

Benchmark	Number of Children 2	3	4	5	6
Child Cost Estimates					
Betson (2010)	55%	23%			
USDA (2017)	56%	17%	12%	10%	
Neighboring States					
Connecticut (2015)	45%	17%	11%	10%	8%
New Hampshire (2016)	37%	20%	8%	8%	8%
New York (2015)	47%	16%	7%	13%	13%
Rhode Island (2012)	50%	19%	11%	9%	8%
Vermont (2016)	51%	20%	12%	10%	9%
Average	46%	18%	10%	10%	9%
Summary of Benchmarks					
Min	37%	11%	7%	9%	8%
Max	56%	23%	21%	21%	21%
Median	50%	19%	11%	10%	9%
Average	**49%**	**19%**	**10%**	**10%**	**9%**
MA guidelines	**25%**	**10%**	**5%**	**2%**	

Source: Betson (2010), USDA (2017), and state guidelines

The Betson study estimates spending on children as a percent of total spending by intact households with one, two or three children. According to Betson's estimates, child costs account for 23 percent of overall spending for the first child, 36 percent for two children and 45 percent for three children.[15] These estimates imply incremental increases in child costs of 55 percent for a second child (37 percent relative to 24 percent) and 23 percent for a third child (45 percent relative to 37 percent). (Betson does not report estimates for more than three children. For states relying on his studies for child cost tables, the relative cost of four or more children is derived from a separate, but commonly relied-upon study.)[16] This means child costs increase with each additional child, but at a decreasing rate.

The USDA estimates are slightly higher than Betson's estimates but exhibit the same pattern. The USDA directly estimates child costs for the younger child in a two-child household but provides adjustment factors to estimate costs for one or more children. According to the USDA

[15] See Table 14 below.

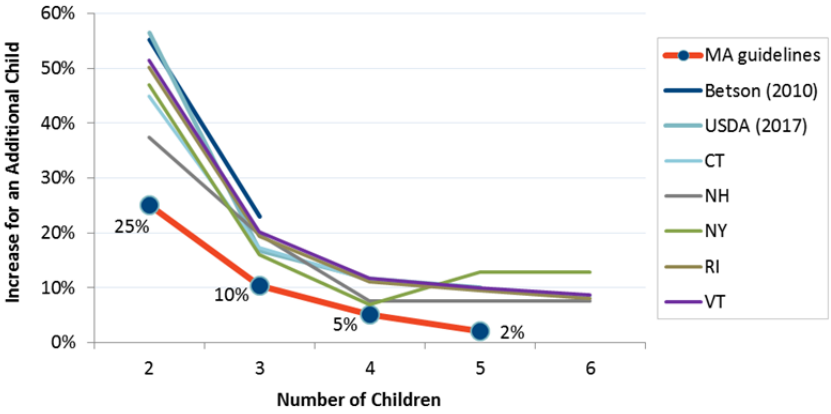
[16] See Constance F. Citro and Robert T. Michael, Editors. *Measuring Poverty: A New Approach*, National Academy Press, Washington, D.C. (1995).

estimates, child costs as a percentage of overall household spending are 28 percent for the first child, 44 percent for two children, 51 percent for three children, 57 percent for four children and 63 percent for five children.[17] These estimates imply incremental increases in costs for each additional child of 56 percent, 17 percent, 12 percent and 10 percent, respectively.

The incremental increases for additional children in the guidelines of the five neighboring states are consistent with the estimates in the Betson and USDA studies.[18] The increases are lower than the studies for the second child, ranging from 37 percent in New Hampshire to 50 percent or more in Rhode Island and Vermont. On average, the guidelines amounts in those states increase by 46 percent for a second child, 18 percent for a third child and 10 percent for a fourth or fifth child.

Figure 8 shows the adjustment factors for additional children in the Massachusetts guidelines relative to the benchmarks. The shapes of all of the curves reflect child costs increasing with an additional child, but at a decreasing rate and leveling-off substantially by the addition of a fourth or fifth child. The benchmark curves overlap significantly, with the Massachusetts guidelines adjustment factors taking the same basic shape but at lower percentage increases.

Figure 8:
Benchmark Adjustment Factors for Additional Children



Source: Table 3

[17] See Table 17 below.

[18] This is not surprising and reflects some circularity, since the guidelines in most states are explicitly, or at least loosely, based on the Betson and USDA estimates.

The adjustment factors for additional children in Table B of the guidelines (25 percent, 10 percent, 5 percent and 2 percent) are lower than all of the benchmark estimates. The increases for each additional child under the guidelines are only roughly half of each increase observed in the benchmark data for a second, third and fourth child: 49 percent, 19 percent, and 10 percent, respectively. The average benchmark increase for a fifth child (also 10 percent) is five times higher than the (2 percent) increase under the guidelines. However, this result is not new. The guidelines amounts in Massachusetts for one child have been higher than all of the benchmarks in at least the last two quadrennial reviews in 2008-2009 and 2012-2013. As a result, both the percentages in Table A of the worksheet and the incremental increases in Table B were entirely overhauled in the 2009 guidelines. In 2013, the percentages in Table A were further reduced at each income tranche while the adjustment factors in Table B were increased for a second, third and fourth child. Those changes resulted in lower child support amounts for one child across all income levels, but higher incremental increases for additional children.

In the end, while the adjustment factors in Table B of the guidelines worksheet are lower than observed adjustments for additional children, they are being applied to guidelines amounts for one child from Table A of the worksheet which are higher than observed benchmarks (as discussed in more detail in Section IV(D)). We advised the Task Force to bear in mind the interaction of the amounts in Tables A and B of the worksheet in considering changes to either table. For example, increasing the adjustment factors in Table B to bring them closer to the benchmarks, without also decreasing the guidelines amounts for one child in Table A, would simply extend to cases with multiple children the current disparity between the guidelines and the benchmarks in cases with one child. Ultimately, consistent with its decision not to recommend any change to the income tranches or incremental percentages in Table A of the current guidelines at income levels above the minimum order, the Task Force also decided not to recommend any change to the adjustment factors for the number of children in Table B of the current guidelines. Those factors in the revised guidelines remain 1.00, 1.25, 1.38, 1.45 and 1.48, as depicted in Figure 2 above.

D. Adjustment for the Ages of Children

While the Task Force did not revise the adjustment factors for additional children in Table B of the guidelines worksheet, it did recommend fundamentally changing Table B in order to also adjust the guidelines amounts when an order covers a child between the ages of 18 and 23. As a result, the revised Table B, as recommended, provides adjustment factors for both the number and ages of children, distinguishing between children under age 18 and children age 18 or older.

To allow for adjustments along both dimensions, Table B was expanded from a single column of adjustment factors for one to five children to a matrix of adjustment factors for all possible combinations of one to five children under 18 years old or 18-22 years of age.

The Task Force decided to recommend expanding Table B of the worksheet to include an adjustment factor for children over age 18 to clarify that the guidelines apply when any child support order is established or modified, not only in cases with children under age 18.[19] This is similar to the practices in most other states. Only five states (Hawaii, Pennsylvania, Tennessee, Texas and Utah) limit child support to children under age 18. Child support elsewhere may be awarded for a child over 18 subject to certain conditions, typically relating to the child still attending school. **Table 4** summarizes the maximum age under the guidelines in all 50 states and the District of Columbia, with shading to highlight variations in the data.

Table 4:
Maximum Age for Child Support by State

Standard Child Age	Maximum Child Age (Conditional)						Total
	18	19	20	21	22	23	
18	5	23	7	4	1	3	**43**
19	0	3	0	1	0	1	**5**
20	0	0	0	0	0	0	**0**
21	0	0	0	3	0	0	**3**
Total	**5** *10%*	**26** *51%*	**7** *14%*	**8** *16%*	**1** *2%*	**4** *8%*	**51** *100%*

Source: Child Support Guidelines

The child support guidelines in a majority of states (26 states) may be conditionally applied up to age 19.[20] Guidelines in seven other states (Georgia, Michigan, Minnesota, North Carolina,

[19] Under Massachusetts law, child support can be ordered for children over age 18 at the discretion of the Court. The Court can order child support for a child who is 18 through 20 years old and still living with, and principally dependent on, a parent. It also can order child support for a 21 or 22 year-old child who is enrolled in an educational program and who lives with, and is principally dependent on, a parent. Section II(F) of the guidelines lists factors the Court must consider in determining whether or not to order child support for a child over age 18. The same section requires a child who is 18 but still in high school to be treated as under age 18 for purposes of the guidelines, absent deviation.

[20] These 26 states are Alabama, Alaska, Arizona, Arkansas, California, Delaware, Florida, Idaho, Illinois, Indiana , Iowa, Kansas, Kentucky, Maine, Maryland, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Rhode Island, South Carolina, South Dakota, Virginia and Wisconsin.

Oklahoma, West Virginia and Wyoming) can apply up to age 20. Eight guidelines can apply up to age 21 (Colorado, Mississippi, Missouri, New Hampshire, New York, Oregon, Vermont and Washington D.C.). Louisiana's guidelines can apply to age 22. Guidelines in three states other than Massachusetts (Connecticut, New Jersey and Washington) can apply up to age 23.

We discussed with the Task Force the application of the guidelines for "children" over age 18 and graduated from high school, but nevertheless eligible for child support under Massachusetts law. The economic data on how child costs vary by age is both limited and mixed. The Betson study discussed above does not estimate child costs by age group. The USDA study does estimate different costs for different ages, but only up to age 17 and the estimates do not uniformly increase or decrease with age. Our study with Bill Comanor also was limited to children under 18 and found child age to be a significant determinant of child costs sometimes and sometimes not. Anecdotally, many children who are over 18 and out of high school are living away at college for as many as nine months (75 percent) of the year, reducing their share of costs such as food and utilities in the parent's household. Children over 18 and living with a parent who are not enrolled in school could be working to earn income to cover part or all of their costs.

The Task Force discussed a range of possible adjustments to the guidelines to account for such factors. It utlimately decided to recommend a 25 percent reduction for a child over age 18 to what would otherwise be the amount of child support under the guidelines. To implement this recommendation, we computed adjustment factors for each combination of the number and ages of children under the guidelines. Each revised adjustment factor started with the factors in the current Table B to account for the number of children. In cases with all children under 18 years old, those factors are unchanged in the revised Table B. They appear in the first column of the revised table. The subsequent columns of the revised table list the adjustment factors for cases with one or more children over age 18. Each of the new adjustment factors reflects the current factors discounted by 25 percent on a prorated basis based on the proportion of children over age 18 relative to the total number of children in a case. That is, the age-adjusted adjustment factor is:

$$Adjustment_{age,number} = Adjustment_{age} \times \left(1 - \left(0.25 \times \frac{Children_{\geq 18}}{Children_{total}}\right)\right)$$

Table 5 shows the resulting adjustment factors in the revised Table B.

Table 5:
Revised Guidelines Adjustments for Number and Ages of Children

TABLE B:
ADJUSTMENT FOR NUMBER AND AGES OF CHILDREN

Children under 18	Children 18 or older: 0	1	2	3	4	5
0		0.75	0.94	1.04	1.09	1.11
1	1.00	1.09	1.15	1.18	1.18	
2	1.25	1.27	1.27	1.26		
3	1.38	1.36	1.33			
4	1.45	1.41				
5	1.48					

Source: Table B of revised guidelines

For example, in a case with one child under age 18 and one child age 18 or older, the adjustment factor in the revised Table B is computed as the current adjustment factor for two children (1.25) multiplied by one minus the ratio of children age 18 or older relative to all children (1/2 in this example) multiplied by the 25 percent discount for a child over age 18. Mathematically, this is 1.25 x (1 - (.25 x (1/2)) = 1.09. This is the adjustment factor in the second row and second column of the revised Table B. Conceptually, it reduces the increase for a second child by 12.5 percent (one-half of the 25 discount decided by the Task Force) because one of the two children is 18 or older. In a case with three children, one of whom is age 18 or older, the adjustment factor in the revised Table B is 1.38 x (1 - (.25 x (1/3)) = 1.27. This is the adjustment factor in the third row and second column of the table. In this example, the current increase for a third child is reduced by 8.3 percent (one-third of the 25 percent discount for a child age 18 or older).

Of course, the revised guidelines do not require these calculations to be done manually. We stepped through them here to explain how we derived the adjustment factors listed in the revised Table B for every possible combination of number and ages of children under the guidelines. Finding the appropriate adjustment factor in a given case involves looking it up in Table B. The online worksheet on the Trial Court website does this automatically.[21] To inform the appropriate adjustment factor, the revised guidelines worksheet includes a new section (Section 1) indicating the number of children under age 18 and the number 18 or older covered by an order.

[21] The online worksheet is available at http://www.mass.gov/courts.

E. College Costs

As part of the discussion of child costs for children over age 18, the Task Force also discussed economic considerations and data relating to college costs. The current guidelines include the cost of post-secondary education as a factor the Court must consider in deciding whether to order child support for a child over age 18.[22] The Task Force recognized that the cost of post-secondary education frequently is the most significant cost for such a child. While there are fewer costs in the parent's household associated with a child who is living at college, the overall cost of college typically overwhelms any such cost savings.

Under Massachusetts law, the Court can require parents to cover college costs as part of a child support order. This is an exception to how college costs are handled in most states. Two states (Alaska and Pennsylvania) explicitly disallow child support for college costs. Most states seem to have no statute or case law on the issue and thus do not allow child support for college costs except by agreement. Approximately 16 states explicitly allow child support for college costs up to the age of majority. A few other states allow child support for college costs beyond the age of majority, with conditions. Those states typically establish guidance for when such support may be ordered, but specific numeric standards, such as a specific percentage of college costs to be covered, are rare. Two of the five states neighboring Massachusetts allow child support for college costs: Connecticut (up to age 23) and New York (up to age 21). New Hampshire, Rhode Island and Vermont do not allow child support for college costs, except by agreement.

We discussed with the Task Force the economic reality that many parents do not have sufficient income to cover college costs plus other costs. As we discuss in detail in Section IV(B) below, the presumptive child support guidelines amounts in most states are based on intact family data and spending patterns. One theoretical approach to child support guidelines (the "continuity of expenditure" approach) assumes a child is entitled to a standard of living of an intact family. But realistically, a parent's ability to pay child support is based on two separate sets of household expenses. As a matter of simple economics, parents with a given level of combined income living in separate households do not have the same ability to pay for college costs as they would if they shared one household. For the same amount of combined income, "adult overhead" expenses, such as mortgage or rent and utilities, simply are higher in two households than in one.

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[22] Current guidelines, Section F, "Age of the Children."

When the Task Force decided to recommend the 25 percent prorated discount to the adjustment factors in Table B for children over age 18, it also decided to create a new section of the guidelines (Section G) to specify factors the Court must consider in deciding whether to order college. This section caps the amount a parent can be ordered to pay at 50 percent of an appropriate cost benchmark, unless the Court finds the ability to pay more. We presented the Task Force with data on the range of college costs in Massachusetts. For example, the cost of in-state tuition, fees and on-campus room/board at the University of Massachusetts at Amherst ("UMass Amherst") for the 2016-2017 academic year was over $29,000, or almost half of the $52,000 average cost of a non-profit four-year college in Massachusetts.[23]

Ultimately, the Task Force decided to recommend the in-state resident cost at UMass Amherst as the college cost benchmark in the revised guidelines. Specifically, it recommended as the benchmark the overall cost of mandatory fees, tuition, and room and board for UMass Amherst, as published each year by the College Board as the "Annual College Costs Before Financial Aid" based on its annual survey of colleges.[24] Figure 9 is a screenshot of the current (Fall 2016) figure for UMass Amherst published on the College Board website. Based on this figure, the amount of college cost the Court could order today under the revised guidelines would be capped at 50 percent of $29,997, or approximately $15,000 per year.

Figure 9:
College Cost Benchmark in the Revised Guidelines

In-State Costs | Out-Of-State Costs

	On Campus	Off Campus	At Home
Tuition and fees	$15,156	$15,156	$15,156
Room and board	$12,441	$11,897	$1,800
Books and supplies	$1,000	$1,000	$1,000
Estimated personal expenses	$1,000	$1,000	$1,000
Transportation expenses	$400	$400	$600
Estimated Total	**$29,997**	**$29,453**	**$19,556**

Source: College Board website, accessed on June 23, 2017

[23] Based on data reported by http://www.collegetuitioncompare.com accessed on June 23, 2017. This is the gross cost, not necessarily the actual cost paid net of reductions from scholarships and financial aid.

[24] The College Board is a non-profit organization that provides college information and administers financial aid applications and standardized tests, such as the SAT.

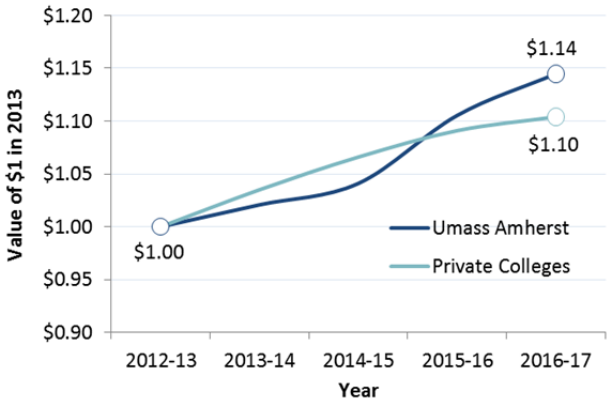
To inform the Task Force on how the UMass Amherst cost benchmark has changed over time, we presented data on the in-state tuition, fees and on-campus room/board at UMass Amherst compared with the analogous average cost for a non-profit four-year college in Massachusetts since the time of the last quadrennial review in 2012-2013. Table 6 summarizes each set of costs and Figure 10 illustrates their relative upward trends.

Table 6:
Massachusetts College Cost Trends, 2013-2017

		% Increase			% Increase	
Year	Cost	Annual	Overall	Cost	Annual	Overall
	U Mass Amherst			MA Private (Non-Profit) 4-Year Colleges		
2012-13	$25,567			$47,438		
2013-14	$26,097	2.1%	2.1%	$49,099	3.5%	3.5%
2014-15	$26,615	2.0%	4.1%	$50,566	3.0%	6.6%
2015-16	$28,259	6.2%	10.5%	$51,753	2.3%	9.1%
2016-17	**$29,268**	3.6%	**14.5%**	**$52,372**	1.2%	**10.4%**

Source: CollegeTuitionCompare.com, accessed on June 23, 2017

Figure 10:
Massachusetts College Costs (Indexed to $1 in 2013)



Source: Table 6

In the last four years, the cost of UMass Amherst has increased by 14.5 percent, from approximately $26,000 per year in 2013 to $29,000 per year in 2017. The UMass Amherst cost increased by 3.5 percent per year on average over this period. This increase has outpaced the growth in the cost of private colleges in Massachusetts, which increased by 10.4 percent overall in the same period, from approximately $47,000 per year to $52,000 per year. Private college costs increased by 2.5 percent per year on average. While future changes in college costs may

differ from the recent past, the trend suggests that the college cost benchmark in the revised guidelines can be expected to increase by approximately 3 percent per year between now and the next quadrennial review. If so, the benchmark cost under the guidelines will be approximately $33,000 per year by the time of the next guidelines review in 2021.

F. Child Care and Health Care Costs

We discussed with the Task Force current economic data on the costs of child care and health care in Massachusetts, how the current guidelines handle these costs and whether the nature and magnitude of these costs suggest a change to the guidelines. Under the current guidelines, reasonable child care and health care costs incurred by either parent are deducted from gross income at the top of the worksheet as part of the calculation of income available for child support. The child care cost deduction is limited to cost for children covered by the order. The health care deduction includes the cost of individual or family health insurance coverage, with Court discretion to adjust the deduction if coverage for someone other than a child covered by the order unreasonably reduces the resulting child support amount. These deductions reflect the economic reality of covering child costs subject to a budget constraint: a parent with a given level of gross income who is covering child care or health care costs has less income available to spend on other things, including other child costs.

As in our prior review of the guidelines, we noted the outsized cost of child care and health care in Massachusetts relative to other costs and recommended adjusting the current guidelines amounts when either parent is paying these costs. This section of this report summarizes current economic data on child care and health care costs and describes the change to the current guidelines the Task Force ultimately proposed to account for them.

1. Child Care Costs

Child care costs in Massachusetts are significantly higher than in the U.S. overall and in any of the five neighboring states. According to current data from multiple sources, child care costs for infants and toddlers in Massachusetts are already higher than in any other state and are increasing more quickly. (Only Washington, D.C. has higher estimated child care costs.) A recent study by Child Care Aware estimates the average cost per year in Massachusetts in 2016

was $17,082 for an infant and $12,796 per year for a toddler.[25] Both amounts exceed the 2017 poverty income level for an individual ($12,060 per year), and infant care exceeds the current poverty guideline for a family of two ($16,240).[26] The same study shows increases in Massachusetts child care costs outpacing other states. In the four years from 2011-2015, Massachusetts child care costs increased by 8.2 percent for infants (second only to Maryland at 8.5 percent) and by 4.1 percent for toddlers.[27]

Table 7 and Figure 11 show the estimated child care costs from the CCA 2016 Report stated in dollars per week for the U.S. overall, Massachusetts and each of the five neighboring states. The Massachusetts estimated weekly cost is $329 per week for an infant and $246 per week for a toddler. These costs are 63 percent higher than the U.S. average cost for an infant ($201 per week) and 51 percent higher than the national average toddler cost ($163 per week).

Table 7:
Estimated Child Care Costs by Age

State	Child Care Cost (1 Child; $/week)							
	Infant		Toddler		School Age		Average	
Massachusetts	**$ 329**		**$ 246**		**$ 66**		**$ 213**	
United States	**$ 201**	*163%*	**$ 163**	*151%*	**$ 90**	*73%*	**$ 151**	*141%*
Connecticut	$ 271		$ 224		$ 53		$ 183	
New Hampshire	$ 238		$ 197		$ 63		$ 166	
New York	$ 272		$ 225		$ 161		$ 219	
Rhode Island	$ 248		$ 193		$ 103		$ 182	
Vermont	$ 221		$ 201		$ 78		$ 167	
Neighboring States	**$ 250**	*131%*	**$ 208**	*118%*	**$ 92**	*72%*	**$ 183**	*116%*

Source: CCA 2016 Report, Appendix 1

Child care costs in each of the five states neighboring Massachusetts also are higher than the national averages, but are lower than the Massachusetts costs. The cost of infant care in the neighboring states ranges from a low of $221 per week (in Vermont) to a high of $272 per week in New York, averaging $250 per week or 31 percent lower than in Massachusetts. Child care

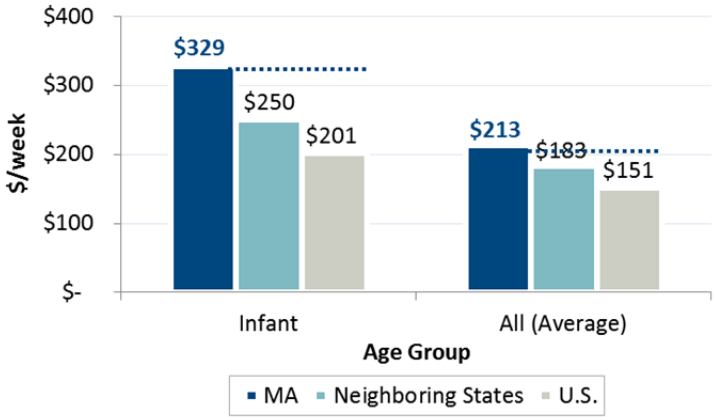
[25] Child Care Aware of America, "Parents and the High Cost of Child Care: 2016 Report," January 2017 ("CCA 2016 Report"), Table 2, p. 21, and Appendix 1. http://www.usa.childcareaware.org/advocacy-public-policy/resources/research/costofcare/

[26] U.S. Department of Health and Human Services, 2017 Poverty Guidelines, *op. cit.*

[27] CCA 2016 Report, Table 3, p. 30.

costs for a toddler in the neighboring states range from a low of $193 per week (in Rhode Island) to a high of $224 per week in Connecticut, averaging $208 per week or 18 percent lower than in Massachusetts. According to the CCA 2016 Report, only child care costs for a school-age child in Massachusetts are lower than the average costs in the U.S. (by 27 percent) and in neighboring states (by 28 percent). But averaged over all three age categories, Massachusetts child care costs ($213 per week) are still 41 percent higher than the national average ($151 per week) and 16 percent higher than the average cost in the five neighboring states ($183 per week).

Figure 11:
Estimated Child Care Costs by Age



Source: Table 7

A separate study of child care costs also published in 2016 by New America reports similar cost estimates and ranks Massachusetts as the highest child cost state at $13,208 per year for full-time child care for a child 0-4 years old.[28] Like the Massachusetts estimated child care costs in the CCA 2016 report, this amount exceeds the $12,060 current poverty income level for an individual. The comparable estimate from the CCA 2016 Report, calculated by averaging the child care costs for an infant and a toddler ($17,082 and $12,796, respectively) is $14,939.

Table 8 and Figure 12 show the estimated child care costs for children 0-4 years old (infants and toddlers) from the New America and CCA reports, stated in dollars per week for the U.S. overall, Massachusetts and each of the five neighboring states.

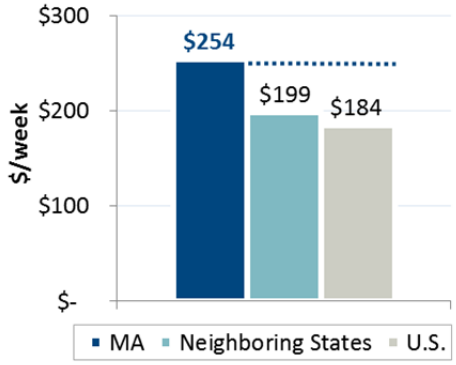
[28] New America, "The New America Care Report," September 2016 ("2016 Care Report"). https://www.newamerica.org/in-depth/care-report/explore-care-index/

Table 8:
Estimated Child Care Costs, Ages 0-4

($/week) State	Infant/Toddler Cost (Ages 0-4) New America (2016)		CCA (2016)	
Massachusetts	**$ 254**		**$ 287**	*13%*
United States	**$ 184**	*178%*	**$ 182**	*-1%*
Connecticut	$ 220		$ 248	
New Hampshire	$ 196		$ 218	
New York	$ 202		$ 249	
Rhode Island	$ 175		$ 221	
Vermont	$ 199		$ 211	
Neighboring States	**$ 199**	*165%*	**$ 229**	*15%*

Source: New America (2016) and CCA (2016)

Figure 12:
Estimated Child Care Costs, Ages 0-4



Source: Table 8

The estimated weekly cost of child care in Massachusetts in the New America report is $254 per week. This is 13 percent lower than the equivalent estimate of $287 per week in the CCA report. New America reports the national average child care cost is $184 per week, or roughly the same as the CCA estimate. The estimated Massachusetts cost is 78 percent higher than this national average. New America's estimates of child care costs in each of the five states neighboring Massachusetts also are higher than the national averages, but are lower than the Massachusetts costs. Estimated costs for infant/toddler care in neighboring states range from a low of $175 per week (in Rhode Island) to a high of $220 per week in Connecticut, averaging $199 per week or 65 percent lower than in Massachusetts. This average is 15 percent lower than the equivalent CCA estimate. CCA's estimated costs for infant/toddler care range from $211 per week (in Vermont) to $249 per week (in New York), averaging $229 per week.

While the New America report finds Massachusetts has the highest child costs in the U.S., it also ranks Massachusetts and four of the five neighboring states (Connecticut, New Hampshire, Rhode Island and Vermont) as the states where child care is most available, based on the ratio of child care employees to the number of children under age 5.

2. Health Care Costs

Federal regulations require state child support guidelines to address how a child's health care needs will be met through health insurance coverage and/or cash medical support.[29] Courts and child support agencies in administrative hearings must address health insurance coverage in both private cases and child support agency cases. Most states directly account for health insurance premiums in their guidelines formulas, typically as a deduction from available income or as a proportional credit against the guidelines amount. The current guidelines in Massachusetts, as well as four of the five neighboring states (all but New York), deduct health insurance costs from income.[30] Under the Massachusetts guidelines, the Court also is required to determine whether medical insurance coverage for children is available, and, if so, must order the payor to obtain and maintain such insurance.[31]

A key point in ordering medical support is the affordability of health insurance coverage. Federal regulations require establishing a definition of affordability, and offer guidance at 5 percent of the gross income of the parent paying for coverage.[32] Each state may create its own definition of affordability. But federal regulations require the definition of affordability to be numeric and based on income. The definition of affordability in the current guidelines reflects current Massachusetts law, but is neither income-based nor numeric.[33]

a. Per-Capita Health Care Costs

Available data show that health care costs in Massachusetts are relatively high. Table 9 shows per capita health care spending in the U.S. overall, in Massachusetts and in each of the five neighboring states from 2010-2014, the last five years for which data are available. Per capita spending in Massachusetts is consistently higher than both the U.S. average and spending in each

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[29] CFR § 302.56(c)(3).

[30] Instead, New York credits payors for reasonable health care costs not covered by insurance in proportion to the payor's share of the guidelines amount.

[31] Current guidelines Section G(1), p. 5.

[32] CFR § 303.31(a).

[33] Under current guidelines, Section G(1), p. 5, "Health care coverage shall be deemed available to the Payor at reasonable cost if it is available through an employer."

of the neighboring states. Spending in the neighboring states also is consistently above the U.S. average but is below the spending levels in Massachusetts.

Massachusetts spends more per capita (per resident) on health care than all states other than Alaska and Washington, D.C. In 2014, per capita health care spending in Massachusetts was $10,559, or 31 percent more than the national average of $8,045.[34] Massachusetts also spends more per capita than any of the five neighboring states. On average, they spent $9,793 per capita on health care in 2014. This is 22 percent higher than the national average but 7 percent lower than in Massachusetts.

Table 9:
Per-Capita Health Care Costs

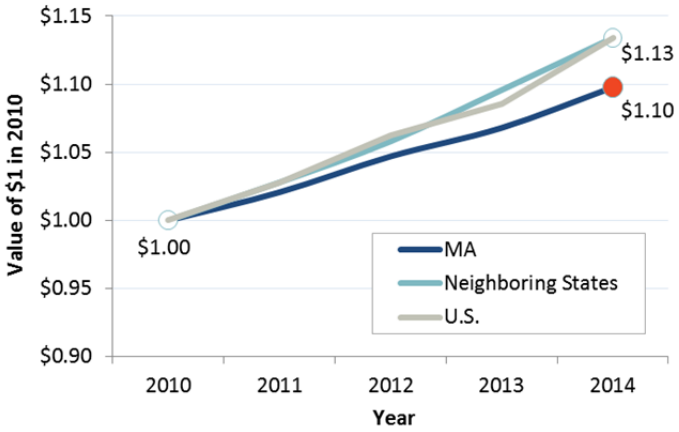
Location	2010	2011	2012	2013	2014		5-Year Change
Massachusetts	**$ 9,619**	**$ 9,818**	**$ 10,071**	**$ 10,273**	**$ 10,559**		*9.8%*
U.S.	**$ 7,094**	**$ 7,292**	**$ 7,535**	**$ 7,703**	**$ 8,045**	*131%*	*13.4%*
Connecticut	$ 8,863	$ 8,950	$ 9,300	$ 9,517	$ 9,859		
New Hampshire	$ 8,466	$ 8,766	$ 9,048	$ 9,369	$ 9,589		
New York	$ 8,795	$ 9,016	$ 9,076	$ 9,351	$ 9,778		
Rhode Island	$ 8,569	$ 8,782	$ 8,961	$ 9,160	$ 9,551		
Vermont	$ 8,488	$ 8,874	$ 9,302	$ 9,919	$ 10,190		
Neighboring States	**$ 8,636**	**$ 8,878**	**$ 9,137**	**$ 9,463**	**$ 9,793**	*108%*	*13.4%*

Source: CMS, "Health Expenditures by State of Residence," The Henry J. Kaiser Family Foundation

While per capita health care spending is higher in Massachusetts, it is increasing more slowly here than in the U.S. overall and in the neighboring states. Over the five years listed in Table 9, Massachusetts spending increased by 9.8 percent. Average spending growth in both the U.S. overall and in the neighboring states was 13.4 percent over the same period. Figure 13 illustrates these relative trends, showing a widening gap between the rate of growth in per capita health care spending in Massachusetts and the higher rates of growth elsewhere.

[34] The Centers for Medicare and Medicaid Services (CMS), "Health Expenditures by State of Residence" accessed on June 23, 2017 at http://www.kff.org/state-category/health-costs-budgets/health-expenditures-by-state-of-residence/.

Figure 13:
Per-Capita Health Care Costs (Indexed to $1 in 2010)



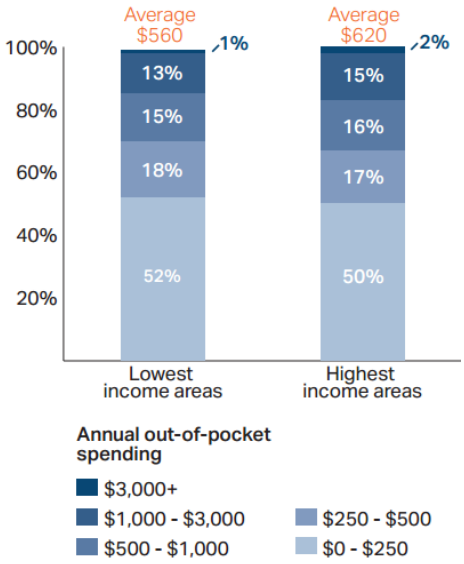
Source: Table 9

Even with health care costs growing more slowly than other states, the high cost of health care is increasingly unaffordable for some Massachusetts residents. The latest report of the Massachusetts Health Policy Commission highlights the fact that health care costs affect low-income and high-income residents alike.[35] It shows out-of-pocket health care spending by Massachusetts residents with health insurance (such as spending for copays, deductibles and items not covered by insurance) was nearly identical for residents in the lowest-income zip codes of the state as in the highest-income areas.

Figure 14, reproduced from the 2016 Cost Trends Report, illustrates the relative breakdown of annual out-of-pocket spending for each group in 2014. Regardless of income level, roughly the same percentages of Massachusetts residents spend the same out-of-pocket amounts on health care each year. Half of residents spend $250 per year or less. But approximately one-third of individuals spend $500 per year or more.

[35] Massachusetts Health Policy Commission, "Annual Health Care Cost Trends Report 2016" ("2016 Cost Trends Report"), February 2017, at pp. 19-20. http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/publications/2016-cost-trends-report.pdf

Figure 14:
Out-of-Pocket Health Care Costs by Income Group



Source: 2016 Cost Trends Report, Exhibit 2.8, p. 19

b. Health Insurance Costs

Insurance premiums for health care coverage in Massachusetts are higher than health insurance premiums elsewhere for single coverage but are comparable for family coverage. Table 10 shows the 2015 average single and family premiums for employer-based health insurance in the U.S. overall, in Massachusetts and in each of the five neighboring states.

Table 10:
Cost of Health Care Coverage

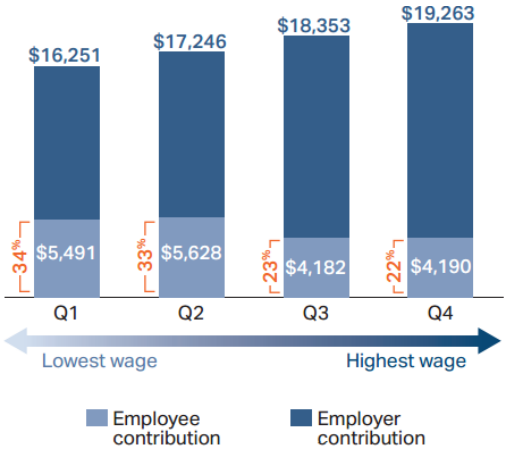
Location	Single Premium			Family Premium		
	Employee Contribution	Employer Contribution	Total	Employee Contribution	Employer Contribution	Total
Massachusetts	**$1,590**	$4,929	$6,519	**$4,487**	$13,967	$18,454
$/week	***$31***	*$95*	*$125*	***$86***	*$269*	*$355*
United States	**$1,255** ***127%***	$4,708	$5,963	**$4,710** ***95%***	$12,612	$17,322
Connecticut	$1,652	$4,826	$6,478	$5,484	$12,785	$18,269
New Hampshire	$1,575	$4,998	$6,573	$4,878	$14,330	$19,208
New York	$1,503	$5,298	$6,801	$5,190	$14,440	$19,630
Rhode Island	$1,499	$5,010	$6,509	$4,495	$13,095	$17,590
Vermont	$1,361	$4,500	$5,861	$4,900	$12,935	$17,835
Neighboring States	**$1,518** ***105%***	$4,926	$6,444	**$4,989** ***90%***	$13,517	$18,506

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey (MEPS), Insurance Component, as published by the Henry J. Kaiser Family Foundation

In 2015, the average annual health insurance premium in Massachusetts was $6,519 for single coverage and $18,454 for family coverage.[36] Employers cover approximately 75 percent of these costs, leaving Massachusetts employees to pay $1,590 per year ($31 per week) for single coverage and $4,487 per year ($86 per month) for family coverage. The employee's share of healthcare premiums in Massachusetts is higher for single coverage by 27 percent relative to the U.S. average and by 5 percent over the average of the five neighboring states. However, the employee share of premiums for family coverage in Massachusetts is 5 percent lower than the national average and 10 percent lower than the average in neighboring states.

As with out-of-pocket costs, the 2016 Cost Trends Report points out that the cost of health care coverage is just as high – actually higher – for low-income Massachusetts residents. **Figure 15**, reproduced from the 2016 Cost Trends Report, illustrates the average annual family premiums and employee contributions by wage quartile of employers in Massachusetts.

Figure 15:
Family Premiums and Employee Contributions, by Wage Quartile



Source: 2016 Cost Trends Report, Exhibit 2.7, p. 19

Average total premiums for employer-based family coverage in Massachusetts were only slightly lower for employees in firms with the lowest average wages in the state than for employees in firms with the highest wages: $16,251 per year compared to $19,263 per year. However, the average required employee contributions to premiums were actually higher for employees in the

[36] Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey (MEPS), Insurance Component, as published by the Henry J. Kaiser Family Foundation and accessed on June 23, 2017.

lowest-wage firms ($5,491 per year, or 34 percent of the total premium, compared to $4,190 for employees in high-wage firms, or 22 percent of the premium).[37]

The fact that low-wage earners in Massachusetts seem to be paying more in absolute dollars for a lower-cost plan implies they are paying even more on a quality-adjusted basis. Paying more in absolute dollars for health insurance also means they are spending a significantly higher share of their income for health care coverage, crowding out spending on other household costs, including child costs. Again, the economic reality is that a certain level of household income can be allocated to only so many costs. As spending on one cost category increases, spending in other cost categories generally must decrease.

3. Child Care and Health Care Cost Credits

Collectively, child care and health care costs represent a significant share of a typical household budget in Massachusetts. The median household income in Massachusetts was $70,628 per year in 2015, the latest figure available.[38] Based on the numbers listed above, the average child care cost is approximately $15,000 per year for a child 0-4 years old. The average health care cost is approximately $5,000 per year for family coverage plus at least $250 per person per year in out-of-pocket costs. So child care and health care costs in an average Massachusetts household with one child are over $20,000 per year, or roughly 30 percent of median household income. As a matter of economics, child support guidelines should account for the magnitude of these costs, the significant share of overall household spending they represent, their impact on the ability of parents to cover other child costs, and their importance to a parent's earnings capacity and to the overall well-being of parents and children.

After considering all of these factors, the Task Force ultimately decided to recommend revising the current guidelines to include a credit of a portion of the reasonable child care and health care costs accepted by the Court as listed at the top of the guidelines worksheet in the calculation of combined available income (Section 2 of the revised worksheet). The proposed adjustment cross-credits each parent for a share of the child care and health care costs they pay. Effectively, each

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[37] This range of overall costs for a family premium is roughly the same as the costs reported above in Table 10. Employee contributions of $4,190- $5,491 per year are equivalent to a range of $81-$106 per week. This range includes the $86 per week reported in Table 10.

[38] U.S. Census Bureau, 2015 American Community Survey.

parent reimburses the other in proportion to their share of combined available income, up to a cap. If two parents each have 50 percent of combined available income and the same (or no) child care and health care costs, the adjustment is zero and the amount of child support is unchanged. But if costs or incomes are different, the child support amount is adjusted up or down, in proportion to the parents' shares of income, to credit the parent paying more of the costs. For example, a payor with 60 percent of combined available income and no child care or health care costs will cover 60 percent of the recipient's child care and health care costs by paying more child support, up to a cap. Conversely, a recipient with 40 percent of combined available income and no costs will cover 40 percent of the payor's child care and health care costs by receiving less child support, again up to a cap. The cost credit is entirely symmetric for both parents in either direction.

The Task Force considered alternative approaches and amounts for capping this credit. For example, the credit could be specified as a percent of costs paid, or of income, or of the child support amount before the adjustment. The Task Force ultimately proposed a cap of 15 percent of the child support amount before applying the credit. Specifying the cap as a percent of the child support amount is the most direct way to assure it has a predictably limited impact on the resulting child support order, because it means the amount of child support can only change, at most, by the amount of the credit. For example, a $100 per week order with a 15 percent cap can increase or decrease by only $15 or less, regardless of the actual (likely much higher) dollar value of the child care and health care costs being credited to the recipient or the payor.

Mechanically, the credit is applied in three steps in a new section (Section 4) of the revised guidelines worksheet. The first step is to calculate the total amount of child care and health care costs actually paid by each parent. This is done by adding the relevant three lines from the income section (lines 2(b), 2(c), and 2(d)). The second step is to calculate the amount of the net cross-credit before applying the cap, by multiplying each parent's share of combined income by the other parent's child care and health care costs, and then subtracting the recipient's share from the payor's share. If the payor's share of the recipient's costs exceeds the recipient's share of the payor's costs, the difference is a net credit to the recipient, and the child support amount will increase. If the recipient's share of the payor's costs exceeds the payor's share of the recipient's costs, the difference is a net credit to the payor, and the child support amount will decrease. The third step is to determine the amount of the increase or decrease by applying the cap. The adjustment is either the full dollar value of the difference calculated in step two, or 15 percent of the child support amount from Section 3 of the worksheet (line 3(f)), whichever is less.

The resulting credit will either increase or decrease the child support order by up to 15 percent in cases with child care and/or health care costs. In economic terms, a credit of up to 15 percent of a child support order will not cover child care and health care costs in most cases. But it is an economically sound, material adjustment to child support orders in recognition of these considerable and important costs actually being incurred by one or both parents. The revised guidelines give the Court the discretion to adjust the amount of the credit to ensure it is appropriate in each case.

G. Impact of Recommended Revisions

In the end, the Task Force has recommended four changes to the current guidelines formula:

1. An increase in the minimum order for one child under the guidelines from $18 per week to $25 per week, as reflected in revisions to Table A of the worksheet;
2. A 25 percent reduction in child support amounts for children over 18, resulting in a new set of adjustment factors in Table B of the worksheet;
3. A cap on a parent's Court-ordered contribution to college costs at 50 percent of the undergraduate, in-state resident cost of UMass Amherst; and
4. A credit to either parent to offset net child care and health care costs, capped at 15 percent of the child support amount before applying the credit.

The impact of these revisions on the presumptive child support amounts under the guidelines is material but predictable, both individually and collectively.

The increase in the minimum order will change current child support amounts only in cases with combined available income below the $150 per week threshold ($7,800 per year) in the first tranche of Table A in the current guidelines. For incomes above $150 per week, both the current guidelines and the proposed revised guidelines set child support amounts at the same incremental percentages of combined available income listed in Table A. The Task Force did not propose any changes to those percentages so, all else equal, the resulting child support amounts are unchanged. But at combined incomes below $150 per week, the revised guidelines amounts will be higher. The revised guidelines apply a $25 per week minimum order for one child at incomes of $115 per week or less. This is $7 per week, or 39 percent, more than the current minimum order of $18 per week for one child. For combined incomes between $116 and $150 per week, 22 percent of income under the revised guidelines amounts results in child support amounts ranging from $26 to $33 per week. This represents gradual increases of 42 percent at the low end

of this range (an increase of $18 to $26 per week for $116 of income) to 83 percent at the upper end (an increase from $18 to $33 per week for $150 of income). While this increase is modest in dollars, it is a significant increase as a percentage of the relatively low income in such cases, but the Court may deviate as it finds appropriate.

The 25 percent reduction in child support amounts for children over 18 will not have any effect on cases in which all children are under age 18. Child support amounts in those cases will be unchanged as a result of this revision to the guidelines. In cases with one or more children over 18, the amount of child support will decrease by up to 25 percent, all else equal.[39] The size of the decrease in any particular case depends on the number of children age 18 or older relative to the total number of children covered by the order. In cases with only one child over 18, current orders will decrease by the full 25 percent reduction. Current orders in cases with two, three, four and five children, in which one child is over 18, will decrease by 12.5 percent (1/2 of 25 percent), 8.3 percent (1/3 of 25 percent), 6.25 percent (1/4 of 25 percent), and 5 percent (1/5 of 25 percent), respectively. Table 11 lists the analogous percentage changes from current orders implied by the adjustment percentages in Table B of the revised worksheet for all other combinations of children below and above age 18.

Table 11:
Impact of 25 Percent Reduction for Children Age 18+
(Percentage change from current guidelines amounts)

Children under 18	Children 18 or older				
	1	2	3	4	5
0	-25.0%	-25.0%	-25.0%	-25.0%	-25.0%
1	-12.5%	-16.7%	-18.8%	-20.0%	
2	-8.3%	-12.5%	-15.0%		
3	-6.3%	-10.0%			
4	-5.0%				
5					

Source: Table B of the revised worksheet

[39] This decrease assumes the presumptive guidelines formula is widely applied to children age 18 or older. However, the Court relies heavily on discretion in such cases, so the right benchmark against which to measure the impact of this change is uncertain. It is possible that a 25 percent decrease from the guidelines amount for children under 18 may increase some orders for children 18 or older.

Capping a parent's Court-ordered contribution to college costs at 50 percent of the undergraduate, in-state resident cost of UMass Amherst will only impact cases with children in college. Child support amounts in cases with no college costs will be unchanged as a result of this revision to the guidelines. The impact in cases with college costs, in cases where the parents cannot agree on a reasonable split, depends on whether the Court would have ordered a parent to pay any college costs and, if so, what amount. This revision simply caps the amount of college costs the Court can order; it does not require the Court to order college costs at all or in a particular amount. Therefore, this change does not necessarily change the amount of college costs the Court would order in a given case. Orders will increase if the Court now orders college costs it would not have otherwise ordered under the current guidelines. Alternatively, current orders above the new cap (approximately $15,000 per year) may decrease to an amount at or below the cap. Then again, in some cases the Court may decide a parent has the ability to pay an amount of college costs above the cap. Given the magnitude of college costs, even with the cap, the Court will continue to determine the appropriate amount of college costs based on its findings in each case. The college expense ceiling is just that. College expense support awards can be lower if based on a lower-cost institution, as may be appropriate. And if ability to pay has been proven, college costs may be higher, most likely in high-income cases.

The impact of the new 15 percent credit in the revised guidelines to offset child care and health care costs depends on the relative incomes and costs of the parents in each case. The credit will have no impact on current child support amounts in cases with no child care or health care costs (since 15 percent of zero is zero). In cases with such costs, the 15 percent cap is likely to be binding, since the amount a parent actually spends on child care and health care usually exceeds 15 percent of a child support order. Therefore, in cases with child care or health care costs, we expect this credit to either increase or decrease the current child support amounts by 15 percent. Whether there is an increase or a decrease depends on which parent pays more child care or health care cost relative to their share of combined available income.

If two parents each have equal shares of combined available income and the same total child care and health care costs, the adjustment is zero and the amount of child support will be unchanged. But if the parents' costs or incomes are different, the child support amount will be adjusted up or down. If the credit ends up reimbursing the recipient for child care or health care costs, the child support amount will increase. If the credit ends up reimbursing the payor for costs, the child support amount will decrease. The change in either direction typically will be 15 percent.

The combined impact of these four changes to the guidelines formula may be additive or offsetting on a case-by-case basis. But both their direction and magnitude are predictable. Table 12 summarizes the range of combined impacts on the guidelines amounts for one child.

Table 12:
Summary of Impacts of Proposed Revisions to the Current Guidelines

		Credit for Child Care and Health Care Costs	Child is age 18 or older	Impact on Current Guidelines Amount for 1 Child	Description
Minimum Orders	1	None	NA[1]	↑ to $25/week	39% increase = ($25 / $18) - 1
	2	Payor	NA	↑ to $25/week	39% increase = ($25 / $18) - 1 The payor's cost credit cannot reduce an order already at the $25/week minimum
	3	Recipient	NA	↑ to $29/week	61% increase = ($29 / $18) - 1 $29 = $25 + $4 $25/week minimum order $ 4/week maximum net credit to the recipient (15% of $25)
All Other Orders	4	None	No	↔ No change	No change relative to current guidelines
	5	Offsetting	No	↔ No change	No change relative to current guidelines
	6	Payor	No	↓ up to 15%	15% cap on the payor's credit
	7	Recipient	No	↑ up to 15%	15% cap on the recipient's credit
	8	None	Yes	↓ by 25% before college costs	25% decrease for one child age 18+
	9	Payor	Yes	↓ up to 36% before college costs	36% = 25% + 11% 25% decrease to base amount for child's age, plus 11% cost credit to payor = 15% x (1-25%) of base amount
	10	Recipient	Yes	↓ up to 14% before college costs	36% = 25% - 11% 25% decrease to base amount for child's age 11% cost credit to recipient = 15% x (1-25%) of base amount

[1] 25% age adjustment cannot reduce orders already at the $25/week minimum under the revised guidelines

Source: Range of scenarios under current guidelines and revised guidelines

In cases with minimum orders, any of the changes that would decrease an order will have no impact because the minimum order is the lower bound under the revised guidelines.[40] So even in

[40] Any of the expected impacts we discuss may be affected by deviations from the presumptive guidelines amounts.

cases with one child over age 18 or in which the payor has net child care or health care costs to be credited, the $25 weekly minimum order stands. A minimum order for one child could increase to $29 per week under the revised guidelines if the recipient's child care or health care costs generate a net credit. At higher income levels, the current guidelines amounts will not change if the children are under 18 and there are no child care or health care costs or if the combination of the parent's respective costs and shares of income exactly offset such that the net credit for child care and health care costs is zero.[41] Otherwise, the current guidelines amounts will increase by up to 15 percent (if all children are under 18 and the recipient receives the maximum credit for child care and health care costs) or will decrease by up to 36 percent (if the only child is over 18 and the payor receives the maximum cost credit). The impact of any change in Court-ordered college costs would be in addition to these changes.

IV. Economic Estimates of Child Costs

Since federal law requires the guidelines to be reviewed every four years and requires that review to consider economic data on child costs, the resulting guidelines in most states are based, to varying degrees, on specific economic studies. This section of our report summarizes the economic principles, approaches, and current estimates we discussed with the Task Force in the course of its review.

A. Caveats

It is important to acknowledge that no economic study precisely measures actual child costs, and none is state-specific. (The studies use national data.) None of the economic data currently available reflect actual spending on children. They are estimates of child costs with estimation error and certain theoretical and practical limitations. Some limitations are methodological while others are data driven. Two significant practical limitations are that most child costs are not directly observable, nor are they uniform across households – even households with otherwise similar economic and demographic characteristics.

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[41] For example, consider a case with a payor at 60 percent of combined available income and $120 per week in child care and health care costs, and a recipient at 40 percent of income and $80 per week in costs. In this case, there is no net credit because the relative costs and income shares exactly offset. The payor's share of the recipient's cost is 0.6 x $80 = $48, and the recipient's share of the payor's costs is 0.4 x $120 = $48. So, the net credit would be $48 - $48 = $0.

Costs such as housing and food are "indirect costs" shared by both adults and children in a household. These costs cannot be directly attributed to a particular adult or child in a household because specific data are not available on each person's actual share of the overall cost. Economists deal with this practical limitation by making certain assumptions to estimate child costs. This section of our report discusses the most common assumptions underlying the economic models most states use to benchmark child costs.

There is wide variation, both across and within income groups, in what households typically spend on children. This reality notwithstanding, the economic research is based on average expenditures on children across households for a given level of household income and number of children. That means child cost estimates resulting from economic research, even if they are right on average, may or may not reflect an appropriate level of spending on children in any particular case. However, child support guidelines are presumptively correct in every case absent specific findings otherwise. So, the guidelines amounts are presumed to reasonably reflect typical child costs over the full range of relevant income (from $0 to $250,000 per year under the Massachusetts guidelines) using a uniform, administratively simple formula. But in reality, actual child costs over the range of cases subject to the guidelines are not uniform or simple; they are quite complex. Without clearly identifying the economic data and estimation approaches on which guidelines amounts are based, it is difficult to rebut the presumption that they are appropriate when the facts of a given case differ from the facts and assumptions in the economic estimates underlying them.

The practical reality is that no simple child support guidelines formula, while presumptively correct as a policy matter, can be economically correct in all cases. A uniform formula based on credible but imperfect estimates of actual child costs simply cannot generate the precisely or objectively correct child support amount in every case. While the Task Force in this review and in prior reviews considered many factors and sources of economic data on child costs, there simply is not a definitive body of economic evidence to know with certainty whether the guidelines amounts will be appropriate in a given case. This is why presumptive awards are rebuttable based on case-specific facts that diverge from presumptive facts. The rest of this report summarizes the economic principles, approaches, and most current data we presented to the Task Force in its review of the current guidelines.

B. ECONOMIC APPROACHES

Since guidelines are presumptive they should reflect economically sound principles and economically relevant child costs while still allowing the resulting amounts to be rebutted in a given case. Federal law does not specify the nature or structure of a state's child support guidelines, so child support guidelines differ across states to varying degrees. Currently, all state guidelines use one of three approaches: (1) Income Shares, (2) Percent of Payor Income, or (3) the Melson formula. Table 13 lists the guidelines approach current used in each state.

Table 13:
Guidelines Approaches by State

Income Shares				Percent of Payor Income	Melson Formula
Alabama	Kansas	New Hampshire*	South Dakota	Alaska	Delaware
Arizona	Kentucky	New Jersey	Tennessee	Arkansas	Hawaii
California	Louisiana	New Mexico	Utah	Illinois	Montana
Colorado	Maine	North Carolina	Vermont*	Mississippi	
Connecticut*	Maryland	Ohio	Virginia	Nevada	
Florida	Massachusetts	Oklahoma	Washington	New York *	
Georgia	Michigan	Oregon	Washington D.C.	North Dakota	
Idaho	Minnesota	Pennsylvania	West Virginia	Texas	
Indiana	Missouri	Rhode Island*	Wyoming	Wisconsin	
Iowa	Nebraska	South Carolina			
All States		**39** *76%*		**9** *18%*	**3** *6%*
***Neighboring States**		**4**		**1**	**0**

Source: Review of current guidelines by state

The guidelines in Massachusetts and in most other states at least nominally use an "income shares" approach.[42] Guidelines in 38 states and Washington D.C. (76 percent) rely, at least in part, on the income shares estimates of child costs discussed below. Nine states (18 percent) use the percent of payor income approach,[43] and the remaining three states use the Melson formula.

[42] Massachusetts guidelines originally were based on an economic study by Thomas Espenshade discussed below. The October 1985 committee report states, "The Committee decided that Espenshade's work was the most comprehensive, up-to-date, reliable and in a form most usable for the Committee's purposes." But the guidelines amounts were not strictly consistent with Espenshade's estimates.

[43] Prior to the 2009 guidelines, Massachusetts used a hybrid approach, starting as a percent of payor income model until the recipient's income reached a disregard of $20,000 per year net of child care costs, and then applying combined income to the cost table, in part, based on income shares estimates.

Like Massachusetts, four of five neighboring states have income shares guidelines, while New York uses percent of payor income.

1. Income Shares

Income shares guidelines are based on indirect estimates of a child's share of parents' combined income. The term "income shares" refers to the share of household income required to cover child-related costs in a household (not how parents share those costs). However, since most household spending is for goods shared in some proportion by all members of the household (which economists refer to as "public goods"), a child's actual income share is not directly observable. This is important because, to be clear, it means the income shares approach is not based on actual child costs that are directly observed or measured. Instead, the approach yields estimates of child costs by applying a specific model to what economic data are available.

Since most actual child costs are not directly observed, the crux of the income shares approach is to compare equivalent households with and without children, in order to back-into the amount of household income spent on children. Specifically, the approach is to estimate the marginal cost of an additional child by comparing households with the same standard of living but different numbers of children. This comparison requires a measure to proxy for a household's standard of living. Initially, the income shares approach was applied to two different measures, only one of which is still used today. Both measures pre-date child support guidelines calculations and were originally developed for other reasons. The income shares approach simply applies these methodologies with the goal of estimating child costs.

The income shares approach was initially introduced in a child support context by public policy expert Dr. Robert Williams coincident with the federal requirement to establish presumptive guidelines in order to retain certain federal funding.[44] The initial income shares cost table Williams developed was based on prior research by Princeton sociologist Thomas Espenshade,[45] which in turn was based on a standard of living proxy developed by economist Ernst Engel in the

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[44] Robert G. Williams, *Development of Guidelines for Child Support Orders: Advisory Panel Recommendations and Final Report*, Parts II and III, Policy Studies, Inc., Denver, Colorado, under a grant to the National Center for State Courts, Williamsburg, Virginia, submitted to U.S. Department of Health and Human Services, Washington, D.C., September 1987.

[45] *Ibid.,* pp. II-19 through II-20. See, Thomas J. Espenshade, *Investing in Children: New Estimates of Parental Expenditures*, The Urban Institute Press, Washington, D.C. (1984).

late nineteenth century.[46] The Engel approach defines a household's standard of living by the proportion of its spending on food. Since food is a necessity, this approach assumes a household that spends proportionately less on food is better off (because it is spending proportionately more money on other things) than a household for which food is a larger component of spending. The Engel approach assumes households with the same proportional expenditure on food are equally well off, regardless of family size. Using this proxy, the income shares approach estimates child costs based on the difference in total spending between households with the same food shares (as a proportion of income) but different numbers of children.

Income shares states originally implemented variations of the original Engel-based cost table, but economists now agree that the Engel-based cost tables were unreasonably high.[47] In response, University of Notre Dame professor David Betson applied the income shares approach to a different proxy for a household's standard of living. The new proxy was based on research done in the 1940s by statistician Erwin Rothbarth.[48] The Rothbarth approach defines a household's standard of living by its spending on adult clothing. It assumes a household that spends more on adult clothing is better off than a household that spends less, so households with the same amount of spending on adult clothing are equally well off, regardless of family size. Under this approach, child costs are estimated by the difference in total spending between households that spend the same amount on adult clothing but have different numbers of children. Betson last updated his Rothbarth estimates in 2010.[49] Below, we discuss Betson's estimates updated to 2017 and adapted to Massachusetts, as well as estimates published by the USDA this year using a slightly different income shares methodology.[50]

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[46] Ernst Engel, "Consumption and Production in the Kingdom of Saxony," *Journal of the Statistical Bureau of the Ministry of the Interior* (1857).

[47] *See, e.g.,* David M. Betson, "Alternative Estimates of the Cost of Children from the 1980-86 Consumer Expenditure Survey," September 1990, pp. 55-56, stating, "…given the high estimates that result from this methodology, even when compared to the per capita method, the estimates from the Engel method should be discounted."

[48] Erwin Rothbarth, "Notes on a method of determining equivalent income for families of different composition," in C. Madge (Ed.), *War-Time Pattern of Spending and Saving*, Cambridge University Press, Cambridge MA (1943).

[49] Betson (2010), *op. cit.*

[50] Lino, *et al.* (2017), *op. cit.*

2. Percent of Payor Income

Currently, of child support guidelines in the five neighboring states, only New York uses a percent of payor income approach. This approach was developed initially by economist Jacques van der Gaag at the University of Wisconsin at Madison.[51] As the name suggests, child support guidelines using this approach consider only the payor's income, not the relative incomes or combined income of both the payor and the recipient. Typically, percent of payor income guidelines establish child support as a fixed percentage of a payor's income at all income levels. That is, the child support as a percentage of income does not vary by income level. In most states, the resulting guideline amounts are simply a flat percentage of the payor's income. But some states' guidelines, such as Arkansas and Wisconsin, use tiered percentages of payor income. Initially, the percent of payor income approach was intended to be used only in extremely low-income cases, and the percentage reflected child costs only at low income levels. The initial study assumed the recipient had no income but full parenting responsibility.

While the percent of payor income approach is relatively simple to implement, current payor-only guidelines violate essentially every assumption of the original van der Gaag study. In addition, flat child support percentages regardless of the payor's income level contradict economic principles and data showing the proportion of income spent on children decreases as income increases.

3. Melson Formula

The Melson formula was developed by Delaware Family Court judge, Elwood Melson.[52] It incorporates several public policy assumptions designed to provide a self-support reserve for each parent in addition to providing for their children. Beyond self-support, the formula establishes a standard of living adjustment (as a percentage of income), which automatically enables a child to share in any increases in household income. The formula adds to a baseline support amount (called "primary support") both child care costs and extraordinary medical expenses. It calculates an ultimate child support amount based on each parent's relative share of total net income, while

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[51] Jacques van der Gaag, "On Measuring the Cost of Children," Child Support: Technical Papers, Vol. III, SR32C, Institute for Research on Poverty, Special Report Series, University of Wisconsin, 1982.

[52] See *Dalton v. Clanton*, 559 A.2d 1197 (Del. 1989).

also accounting for the standard of living adjustment. This is an income sharing approach which, by design, does not reflect any child cost studies for incomes above the poverty level.

The income shares approach is the most common of these three basic economic approaches and is most consistent with economic principles in estimating child costs. But the income shares approach has many known limitations. As noted above, income shares cost tables reflect indirect estimates of child costs, not actual spending on children. Income shares estimates may be the best available indicator of child costs, but they do not reflect specific itemized spending on children. They rely on indirect and narrow proxies for a household's standard of living (such as adult clothing) to compare spending across households with different numbers of children.

Income shares estimates, such as the Betson-Rothbarth amounts, also rely on data from intact (husband-wife) households but are used to inform policy decisions for households which are not intact. This implicitly assumes economic decisions are made in the same way for separate households as for married households, when, in fact, the economic tradeoffs typically are very different. One obvious difference is the additional overhead cost required by two separate households relative to the cost of a single household. By failing to account for this additional cost, economic models likely overestimate the standard of living of a non-intact household at a given income level. Maintaining a standard of living estimated based on intact household data likely requires more income than is actually available to a non-intact household.

Finally, as a practical matter, income shares estimates are only as good as the data on which they are based. The Betson (2010) and USDA (2017) studies use data from the Consumer Expenditure Survey ("CE") conducted by the U.S. Census Bureau on characteristics, income, and expenditures for individual households.[53] The Betson study uses only data from intact families, while the USDA study uses data for both intact families and single-parent households. However, the single-parent data are not considered to be statistically reliable for a full range of incomes for child cost schedules. Overall, the USDA report says of the CE data:

> "CE data are the most comprehensive source of information on household expenditures available at the national level, containing expenditure data for

[53] For more information on the Consumer Expenditure Survey, see *www.bls.gov/cex*.

housing, food, transportation, clothing, health care, child care and education, and miscellaneous goods and services."[54]

We agree: the CE is the best available data source for detailed household-level expenditures. However, the CE data are not without their known limitations.[55] The CE data show expenditures in excess of reported income for about half of respondents, typically in the lower half of reported income ranges. This means income may be systematically underreported in the CE data. However, there is no theoretical basis for making an economically reasoned adjustment in economic models using the data. Betson adjusts his estimates, for example, by simply capping the ratio of expenses to income at one for low-income groups, which has the effect of increasing the corresponding child cost estimates relative to the more likely circumstance in which the ratio of expenses to income is something less than one. That is, actual income for low-income groups likely is higher than reported income. At higher incomes, the CE data exhibit the opposite problem. Savings reported for high-income households seems unreasonably high, suggesting that expenditures may be underreported. Again, however, there is no basis for making an economically sound adjustment in using the data to estimate child costs.

With these limitations in mind, the available economic data on child costs are informative and, along with other economic data and principles, provided a credible basis for the Task Force to evaluate the appropriateness of the current guidelines amounts and to consider possible revisions to the guidelines.

C. CURRENT STUDIES

In determining whether to update the current guidelines, the 2016-2017 Task Force considered current economic estimates of child costs, most notably from Betson's last income shares study in 2010 (applying the Rothbarth methodology to CE data for 2004-2009) and the 2017 USDA report on expenditures on children (based on data from 2015). In the prior review, the 2012-2013 task force heavily relied on the Betson-Rothbarth estimates in its recommendation to lower the guidelines amounts at most income levels. As in the prior review, this Task Force noted that the Betson-Rothbarth estimates: (1) consistently place the marginal expenditure for one child at

[54] Lino, et al. (2017), *op. cit.,* p. 2.

[55] *See, e.g.,* Ira Mark Ellman, "Fudging Failure: The Economic Analysis Used to Construct Child Support Guidelines", The University of Chicago Legal Forum (2004), p. 23.

approximately 25 percent of total household spending (not income); (2) consistent with general economic theory, show expenditures on children accounting for a decreasing percentage of household spending as income increases; and (3) show no significant differences in expenditures by age for children under 18.

Between the prior review and the 2016-2017 review, Betson has not published new estimates. So, as we did for the 2012-2013 review, we adjusted his 2010 estimates to update them to the present and to make them directly comparable to the Massachusetts guidelines amounts. We discuss those adjustments below. In addition to the adjusted Betson estimates, two new studies have estimated child costs since the prior guidelines review: the 2015 study we co-authored with UCLA professor Bill Comanor and the 2017 USDA report.[56] This section of our report briefly describes each of these three sources of current child cost estimates.

1. Betson (2010)

Betson last updated his Rothbarth estimates of child costs as part of a review of the California guidelines in 2010. Betson's estimates measure child costs as a percentage of total family expenditures across a range of income levels, but the California report does not include the detailed estimates. They are reported, however, in a subsequent report for the state of Illinois,[57] and are listed in the data and comparisons we report below. The current Massachusetts guidelines are based, in part, on a review of the 2010 Betson-Rothbarth estimates adjusted to 2012 and for comparison to the then-current guidelines amounts.[58]

We presented the 2010 Betson-Rothbarth estimates adjusted to 2017 to the Task Force in this year's review. Numerous other states have already considered the Betson estimates as part of their guidelines reviews including, since the last Massachusetts review, four of the five neighboring states (all but Rhode Island, whose guidelines are from June 2012). At least six states currently have child cost schedules based on the 2010 Betson-Rothbarth estimates: Colorado,

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[56] Comanor, Sarro and Rogers (2015), *op. cit.* Lino, et al. (2017), *op. cit.*

[57] "Proposal to Adopt the Income Shares Model for the Illinois Child Support Guidelines," May 16, 2012 ("Illinois 2012 Report"), Exhibit 2, p. 53.

[58] "Final Report of the 2012 Task Force", June 2013, *op. cit.*

North Carolina, Rhode Island, Vermont, Virginia, and Wyoming,[59] and 24 other states rely on income shares estimates from Betson's prior studies.

Betson's 2010 study reflects two changes in the CE data he used to derive his child cost estimates. First, he uses an income series created by the Bureau of Labor Statistics to correct for the problem of income non-reporting in the CE discussed above, particularly at low incomes. All else equal, this likely decreases estimated child costs at low incomes but generates more realistic estimates. Second, Betson switched from using CE data on household "expenditures" to using "outlays," which include finance changes and mortgage principal payments rather than treating them as changes in net liabilities. The Betson (2010) estimates are similar to the estimates from his prior study from 2006, which estimated average child costs (in intact households) at 24 percent of total household spending (not income) for one child, 37 percent for two children, and 45 percent for three children. Betson's 2010 estimates are somewhat lower at low income levels and are somewhat higher for higher incomes. We discuss these estimates in more detail below.

2. USDA (2017)

Every year since 1960, the USDA has estimated expenditures on children through age 17 for both married and single parent households. The latest USDA report was initially released in January 2017 for 2015 data and a revised version of the report was released in March 2017. The 2017 USDA study is based on CE data from 2011-2015 with all years updated to 2015 dollars using the overall CPI. The report provides child cost estimates for each of seven expenditure categories (housing, food, transportation, clothing, child care and education, health care, and miscellaneous expenses) by child age, household income, and region. For example, the 2017 USDA report estimates child costs of between $12,680 and $13,900 per year for a child in a two-child, married household in the middle-income group. The report also provides estimated adjustment factors for the number of children.

Like the Betson studies, the USDA uses the CE data to derive its child cost estimates. But the USDA applies a different analytic approach to the data. Betson indirectly estimates child costs using what economists call an income equivalence approach, basically analyzing how much

[59] "Economic Basis of Updated Child Support Tables for Vermont," Prepared for: Office of Child Support Department for Children and Families Vermont Agency of Human Services, Jane Venohr, Center for Policy Research Denver, CO, February 27, 2015, p. 10.

income is needed to restore the parents' standard of living to pre-child status. This restoration amount of income is defined as overall child costs, with no separate estimates of its individual components. The USDA instead separately estimates child costs by major components. This approach has its own drawbacks. The CE contains overall household expenditure data for some budget components (housing, food, transportation, health care, and miscellaneous goods and services) and child-specific expenditure data for other components (children's clothing, child care, and education). So to estimate costs specific to a child, the household-level expenditures (in which adult and child expenditures are co-mingled) must be allocated among family members. The allocation formulas often are per capita estimates rather than marginal costs.[60] But per capita allocation violates the economic principle that allocation decisions depend on marginal rather than average costs. Optimal spending decisions require balancing the incremental benefits and incremental costs of a given choice. Per capita estimates simply reflect average costs. In the case of child costs, per capita allocation likely overstates actual child costs, attributing to children some amounts actually spent on adults.

As a result, the USDA discarded that approach for housing expenditures in its most recent reports. It now estimates housing expenditures on children based on the average cost of an additional bedroom. Implicit in this approach is the assumption that the same household without children would live in a similar dwelling but with fewer bedrooms. That assumption may be correct in some cases, but not always. Also, the marginal cost approach does not apply only to just housing; it applies to other expenditure categories as well. But the USDA continues to simply prorate other expenses, such as food, transportation, and miscellaneous costs, by a pre-determined factor related to the number of people in the household. For example, the USDA essentially assumes a child's haircut costs the same as an adult's. Also, the cost of transportation (such as automobile note payment and gasoline) are equally prorated between adults and children even though adults would incur nearly all of these expenses even without children. Finally, the USDA recently added mortgage principal payments as part of its cost calculations. Other methodologies exclude principal payments, considering them to be an investment rather than a cost. These factors lead most economists to view the USDA methodology as likely overstating child costs.

[60] Per capita estimates simply divide a total expenditure by the number of people in the household, thus allocating the same share of cost to each person.

3. Comanor, Sarro, and Rogers (2015)

The study we co-authored with UCLA professor Bill Comanor sought to see if lessons could be learned from analyzing household spending from a different perspective than either Betson's income equivalence approach or the USDA's largely per capita approach to estimating child costs. The alternative focus of our study was "monetary costs," in contrast to opportunity costs included in income equivalence and the improper allocation of some adult costs as child costs in the per capita approach.

Monetary costs measure how much spending on a household expense category changes with the addition of one or more children to the household. For example, how much does a household spend on food with no children and after adding one child to the household? The difference is defined as the monetary cost for food spent on one child. This method looks solely at the change in dollar spending by category for the household.[61] The focus of our study was on the change in the overall budget by category, not on how the choice of items within a category likely shifted with an additional child. And the same methodology was applied to other broad spending categories such as housing, transportation, etc.

The bottom line is that the monetary cost approach implicitly focused on the constraining factor of the household budget. Household spending did not change dramatically with the addition of children, as the cost of children was heavily met by shifting the composition of items in a spending category. According to household spending behavior, opportunity cost was seen as a method of financing the cost of children. This methodology resulted in sharply lower estimates of child costs than those from Betson type income equivalence or USDA per capita estimates. Importantly, the definition was sharply different. Our study focused on changes in dollar spending and not opportunity costs. However, economists frequently invoke opportunity costs as a very real cost, only in the form of something given up rather than dollars spent.

Whether the use of monetary costs is an appropriate basis for estimating child costs is an open question. Our study is relatively new, but opinions already differ notably on whether the

[61] When comparing food, there was no attempt to keep the items constant in the food "basket." That is, before children, adults likely spend more on dining out and upscale meals at home. With children, the family eats out less often and at lower-cost restaurants, and food at home is less upscale.

estimates are appropriate for child support guideline cost tables.[62] The argument in favor of monetary costs is that households are constrained by budgets and presumptive cost tables should focus on actual changes in dollar spending, not on opportunity costs which are not directly observable or measurable in dollars. The counterargument is that opportunity costs are real costs and mere changes in dollar terms do not fully represent the total costs of raising children. If so, measuring only monetary costs understates true child costs. If not, income equivalence approaches overstate child costs. There remains reasoned disagreement over which view is most appropriate to inform child support guidelines.

But a key takeaway from our study that is not controversial is that the household budget constraint is alive and well in economic analysis. Child support guidelines should reflect the limitations imposed by the household budget constraint in spending decisions. The Task Force's decision to reduce the guidelines amounts as a credit for a portion of reasonable child care and health care costs paid by either parent under the revised guidelines is consistent with the economic reality that spending on children is subject to a binding budget constraint in most households.

D. Current Child Cost Estimates

As part of this guidelines review, we presented the Task Force with comparisons of the current guidelines amounts to economic estimates of child costs from three primary sources: Betson's 2010 study, the USDA 2017 study, and current guidelines amounts in neighboring states. Comparing the Betson-Rothbarth and USDA estimates of child costs to the Massachusetts child support amounts under the revised guidelines first requires various calculations to put the published estimates and guidelines amounts on the same basis. We first compare the amounts for one child. We then compare the amounts for more than one child.

[62] For example, earlier this year Professor Comanor and Jane Venohr of the Center for Policy Research presented opposing views on this issue as part of Minnesota's guidelines review. Professor Comanor's reports are at https://mn.gov/dhs/assets/2017-02-22-Dr-Comanor-Report-to-the-Minnesota-Child-Support-Task-Force_tcm1053-280776.pdf and https://mn.gov/dhs/assets/2017-04-07-Comanor-response-to-Venohr_tcm1053-293396.pdf. Dr. Venohr's report is at https://mn.gov/dhs/assets/2017-03-31-Revised-Dr-Venohr-Report-to-MN-Child-Support-Task-Force_tcm1053-286690.pdf.

1. Betson-Rothbarth Estimates

Betson's Rothbarth estimates reflect spending on children as a percent of total expenditures and current consumption as a percent of a household's net income (not gross income) at various income levels and numbers of children, based on a national sample of intact households from the CE data. The resulting estimates reflect child costs excluding child care costs and out-of-pocket health care costs (but including the children's share of health insurance premiums), since these expenses either do not always occur (such as child care) or are treated separately (such as health insurance premiums and out-of-pocket health care costs). Table 14 shows the standard Betson-Rothbarth table as reported in Betson's 2010 report. On average, Betson estimates households spend 81 percent of their income, with child costs accounting for 23 percent of total spending in households with one child, 36 percent for two children, and 45 percent for three children.

Table 14:
Betson (2010) Child Costs as a Share of Spending

Net Income (Jan. 2017 $/year)		Spending as a % of Net Income	Child Cost as % Spending		
			1 Child	2 Children	3 Children
Less than	$ 16,070	100%	21.7%	33.8%	41.7%
	$ 21,427	100%	22.5%	35.0%	43.1%
	$ 26,784	100%	22.7%	35.3%	43.5%
	$ 32,141	100%	22.9%	35.6%	43.8%
	$ 42,854	100%	23.1%	35.9%	44.2%
	$ 48,211	99%	23.2%	36.1%	44.4%
	$ 53,568	96%	23.3%	36.2%	44.5%
	$ 64,281	89%	23.3%	36.3%	44.6%
	$ 69,638	85%	23.4%	36.4%	44.7%
	$ 74,995	83%	23.4%	36.4%	44.8%
	$ 80,352	78%	23.5%	36.4%	44.8%
	$ 85,709	76%	23.5%	36.5%	44.9%
	$ 96,422	76%	23.5%	36.6%	45.0%
	$101,779	73%	23.6%	36.6%	45.0%
	$107,136	72%	23.6%	36.7%	45.1%
	$117,849	70%	23.7%	36.7%	45.1%
	$128,563	66%	23.7%	36.7%	45.2%
	$139,276	66%	23.7%	36.8%	45.3%
	$160,703	61%	23.8%	36.9%	45.3%
	$187,487	59%	23.8%	37.0%	45.5%
More than	$187,487	51%	23.9%	37.1%	45.6%
Maximum		100%	23.9%	37.1%	45.6%
Minimum		51%	21.7%	33.8%	41.7%
Average (Mean)		**81%**	**23.3%**	**36.2%**	**44.6%**

Source: Betson (2010)

Importantly, again, Betson estimates child costs as a share of total spending, not total income. Therefore, we transformed his estimates into income shares. Table 14 above reports child costs as a percent of household spending and spending as a percent of household net income. Multiplying those percentages together yields child costs as a percent of net income.

Table 15 shows the corresponding child cost percentages: 19 percent, on average, in households with one child, 29 percent for two children, and 36 percent for three children.

Table 15:
Betson (2010) Child Costs as a Share of Net Income

Net Income (Jan. 2012 $/year)		Child Cost as % Net Income		
		1 Child	2 Children	3 Children
Less than	$ 16,070	21.7%	33.8%	41.7%
	$ 21,427	22.5%	35.0%	43.1%
	$ 26,784	22.7%	35.3%	43.5%
	$ 32,141	22.9%	35.6%	43.8%
	$ 42,854	23.1%	35.9%	44.2%
	$ 48,211	22.9%	35.6%	43.9%
	$ 53,568	22.3%	34.6%	42.6%
	$ 64,281	20.8%	32.3%	39.8%
	$ 69,638	19.9%	31.0%	38.1%
	$ 74,995	19.4%	30.1%	37.0%
	$ 80,352	18.3%	28.5%	35.0%
	$ 85,709	17.8%	27.6%	34.0%
	$ 96,422	17.8%	27.6%	34.0%
	$101,779	17.2%	26.8%	32.9%
	$107,136	17.1%	26.5%	32.6%
	$117,849	16.6%	25.7%	31.6%
	$128,563	15.7%	24.4%	30.0%
	$139,276	15.7%	24.4%	30.0%
	$160,703	14.6%	22.6%	27.8%
	$187,487	14.0%	21.7%	26.7%
More than	$187,487	12.1%	18.8%	23.1%
Maximum		23.1%	35.9%	44.2%
Minimum		12.1%	18.8%	23.1%
Average (Mean)		**18.8%**	**29.2%**	**36.0%**

Source: Table 14

To compare these child cost percentages and implied dollar amounts to the revised guidelines requires two adjustments. First, we converted the annual income figures to weekly amounts, since the guidelines chart is based on weekly income. Second, we calculated the net income equivalents of gross weekly income amounts for Massachusetts, since the guidelines use gross income and the Betson study uses net income. We made this adjustment using state-specific income withholding tables for Massachusetts and standard withholding for Social Security and Medicare.[63] This effectively restates the gross income amounts in the guidelines chart as net income, specifically for Massachusetts, for comparison to the Betson-Rothbarth estimates.[64]

[63] For Massachusetts income withholding tables, see Massachusetts Circular M, effective January 1, 2016. The standard Social Security withholding is 6.2 percent up to $127,200 of income. The standard

Continued on next page

At that point, we used Betson's estimates of spending as a percent of net income to estimate total spending at each income level in the guidelines chart, and his percentages of child spending as a percent of total spending to calculate child costs for one to three children. Since the guidelines apply up to five children, we used the same approach to estimate child costs for four and five children by applying published estimates of scaling ratios for four and five children to Betson's cost estimates for three children. The ultimate result of these calculations is a set of estimated child costs based on the current Betson-Rothbarth estimates, but specific to Massachusetts and for the full range of incomes and number of children covered by the Guidelines.

Table 16 summarizes the resulting child cost estimates (excluding child care and extraordinary health care costs) over the full range of incomes covered by the 2017 Child Support Guidelines Chart (up to $250,000 per year), both in dollars per week and as a percent of gross income. The values show the minimum and maximum Betson-Rothbarth child estimates for a given number of children over the full range of combined available income covered in the revised guidelines chart, and at the current median household income level in Massachusetts ($70,628 per year).

Table 16:
Betson (2010) Child Costs for Massachusetts

Combined Available Income Level	Number of Children 1	2	3	4	5
	$/week				
Guidelines minimum	$ 27	$ 44	$ 56	$ 63	$ 69
Guidelines maximum	$ 365	$ 529	$ 606	$ 676	$ 744
MA household median	**$ 196**	**$ 297**	**$ 355**	**$ 397**	**$ 437**
	% Gross Income				
Guidelines minimum	8%	11%	13%	14%	15%
Guidelines maximum	23%	38%	48%	54%	60%
MA household median	**14%**	**22%**	**26%**	**29%**	**32%**

Source: Betson (2010) adjusted for Massachusetts

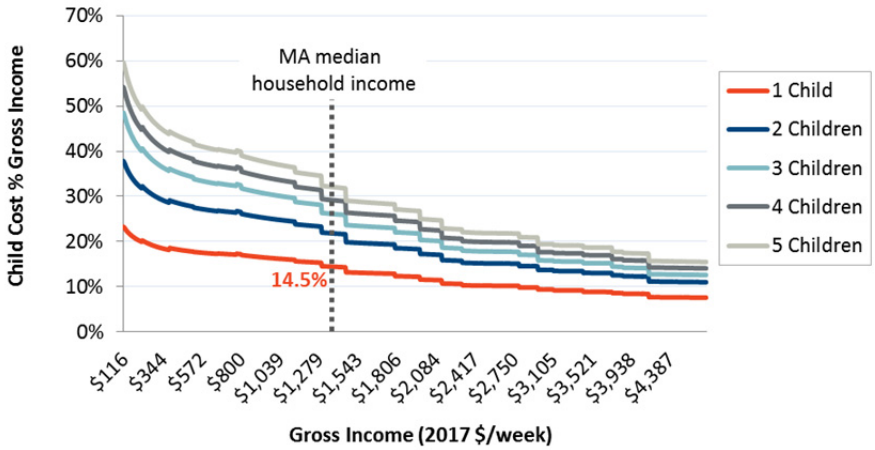
Continued from previous page

withholding rate for Medicare is 1.45 percent of income with no income ceiling. Under the Affordable Healthcare Act, there also is an additional Medicare tax of 0.9 percent starting at $200,000 per year.

[64] Applying the Massachusetts income withholding tables to the Betson-Rothbarth estimates results in estimates specific to Massachusetts. So, these estimates are different from, but are consistent with, Betson-Rothbarth estimates developed for other states for purposes of guidelines review.

Figure 16 shows the child cost estimates underlying Table 16 as a percent of gross income over the full income range. For one child, the percentages range from 8 percent of gross income at the highest income levels to 23 percent at the lowest incomes. Child costs range from 11 percent to 38 percent of gross income for two children, and higher percentages for more children. At the current median level of household income in Massachusetts ($70,628 per year, or $1,358 per week),[65] child costs account for 14 percent to 32 percent of gross income, depending on the number of children.

Figure 16:
Betson (2010) Child Costs as a Percent of Gross Income



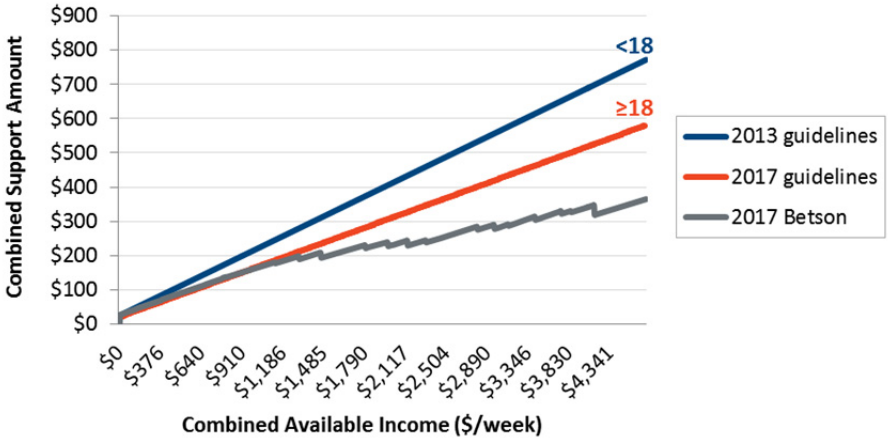
Source: Betson (2010) adjusted for Massachusetts

In dollars, the Betson-Rothbarth estimate for one child ranges from $27 per week at the lowest income levels to $365 at the highest income levels, and is $196 per week for one child at the current Massachusetts median income level. By comparison, the revised guidelines amount in the 2017 Child Support Guidelines Chart for one child under age 18 ranges from $25 per week to $772 per week, and is $291 per week at the median income level. These guidelines amounts are similar to the Betson-Rothbarth estimates at the lowest income range (from zero to $139 per week) but are higher otherwise. For one child age 18 or older, the revised guidelines amounts are 25 percent lower, so they are comparable to the Betson-Rothbarth estimates up to $962 per week and are higher otherwise.

[65] U.S. Census Bureau, 2015 American Community Survey, *op. cit.*

Figure 17 illustrates the differences between the Betson-Rothbarth estimates and the Massachusetts guidelines amounts for one child over the full range of incomes covered by the guidelines.[66] For a child under 18, the current and revised guidelines amounts are the same. For a child age 18 or older, the revised guidelines amounts are lower than the current amounts but still diverge upward from the Betson-Rothbarth estimates as income increases. This divergence grows wider at higher income levels since the Massachusetts child support amounts increase linearly, while the Betson-Rothbarth estimates increase at a decreasing rate.

Figure 17:
Massachusetts Guidelines v. Betson (2010) (1 Child)



Source: Betson (2010) adjusted for Massachusetts

The guidelines amounts in Figure 17 represent combined child support amounts, so they are not necessarily the amounts a payor will pay in any specific case. How much of the total guidelines amount is allocated to a payor or to a recipient depends on their relative share of combined available income. Only when a recipient has no income will a payor pay the full guidelines amount shown in Figure 17. But in all but very low-income cases, the revised guidelines amounts for one child are still higher than the corresponding Betson-Rothbarth estimates.

2. USDA Estimates

The USDA estimates child costs at the national level for husband-wife and single-headed households, as well as for husband-wife households in the northeast. We presented to the Task

[66] The jagged pattern in the Betson-Rothbarth curve are due to shifts from one tax bracket to the next for income taxes and payroll taxes as income increases.

Force the Massachusetts guidelines amounts compared to both the USDA national and northeast estimates of child costs. For consistency with the Betson-Rothbarth estimates, we considered both sets of USDA estimates excluding child care costs and health care costs.

Directly comparing the Massachusetts guidelines amounts to the USDA estimates requires some adjustments to the reported estimates. The USDA estimates spending on seven components (housing, food, transportation, clothing, child care and education, health care, and miscellaneous expenses) for the younger child in a household with two children both under age 18. As we noted earlier, the economic evidence on whether child costs vary systematically by age is mixed. Betson has previously reported no significant differences in child costs by the age of the child using the Rothbarth approach,[67] and his latest (2010) estimates are not reported separately by age. Overall, the USDA estimates increase with age, but not uniformly, and they vary widely by cost component between married and single-headed households and across income groups.

The USDA reports estimated child costs for each of five income groups: three for married households (low, middle, and high incomes) and two (low and high) for single-headed households. Estimates for each group are reported for both the U.S. overall and by census region, including the Northeast Census Region (consisting of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont). The USDA report lists the range of incomes and the average income for each group.

Like the Massachusetts guidelines amounts, the USDA estimates are based on gross income. But we had to make two adjustments to the USDA estimates in order to compare them to the guidelines amounts: we converted annual amounts to weekly amounts, and we applied adjustment factors listed in the USDA report to convert the reported estimates (for the younger child in a two-child household) into estimates for one, two and three children. The adjustment factors differ slightly for married and single-headed households since the income ranges and reported estimates differ. To derive the cost for two children, the 2017 USDA report says to multiply the reported estimates by two for married households and by 1.96 for single-headed households.[68] This reflects roughly the same spending on the second child in married households

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[67] See*, e.g.,* David M. Betson, "Chapter 5: Parental Expenditures on Children," in *Judicial Council of California, Review of Statewide Uniform Child Support Guidelines*, San Francisco, California, (2001).

[68] USDA (2017), *op. cit.,* Tables 1 and 7.

and slightly less spending on the second child in single-headed households. The adjustment factors also differ for other numbers of children. The adjustment factors are 1.27 and 1.26 for one child, and are 0.76 and 0.78 for each of three or more children, respectively.

a. USDA National Estimates

Table 17 shows the resulting USDA estimates for the overall U.S. by income group for both married and single-headed households. The dollar values at the top of the table are the average estimates within each group, stated in dollars per week.

Table 17:
USDA (2017) Child Costs (Overall U.S.)

	All Costs						Excluding Child Care, Education, and Health Care					
$/week	Married			Single			Married			Single		
	Income Group						Income Group					
	Low	Mid	High	Low	High		Low	Mid	High	Low	High	
Children	$698	$1,571	$3,565	$469	$1,904	**Average**	$698	$1,571	$3,565	$469	$1,904	**Average**
	Total											
1	$237	$317	$505	$232	$429	**$344**	$188	$236	$347	$178	$300	**$250**
2	$373	$499	$795	$361	$668	**$539**	$296	$371	$547	$277	$467	**$392**
3	$426	$569	$907	$431	$798	**$626**	$337	$423	$623	$331	$558	**$454**
4	$475	$635	$1,012	$481	$891	**$699**	$376	$473	$696	$369	$623	**$507**
5	$523	$699	$1,114	$529	$980	**$769**	$414	$520	$765	$406	$685	**$558**
	As % Income											
1	34%	20%	14%	49%	23%	**28%**	27%	15%	10%	38%	16%	**21%**
2	53%	32%	22%	77%	35%	**44%**	42%	24%	15%	59%	25%	**33%**
3	61%	36%	25%	92%	42%	**51%**	48%	27%	17%	70%	29%	**38%**
4	68%	40%	28%	102%	47%	**57%**	54%	30%	20%	79%	33%	**43%**
5	75%	44%	31%	113%	51%	**63%**	59%	33%	21%	87%	36%	**47%**
	Marginal Cost of Additional Child											
1												
2	57%	57%	57%	56%	56%	**56%**	57%	57%	57%	56%	56%	**56%**
3	14%	14%	14%	19%	19%	**17%**	14%	14%	14%	19%	19%	**17%**
4	12%	12%	12%	12%	12%	**12%**	12%	12%	12%	12%	12%	**12%**
5	10%	10%	10%	10%	10%	**10%**	10%	10%	10%	10%	10%	**10%**

Source: USDA (2017), Tables 1 and 7

The percentages in the middle of the table report those dollar values relative to the average income level for each group. The percentages at the bottom of the table report the incremental cost of an additional child, calculated as the percentage change in estimated cost for going from one child to two children, two to three, and so on, within each group. Table 17 reports the USDA estimates both for all costs, and excluding child care, education, and health care costs, since different states' guidelines formulas handle those costs differently.

The average USDA estimates in Table 17 for one child range from $237 for low-income married households to $505 per week for high-income married households. The estimated range for single-headed households is $232 to $429 per week. Over all households, the average estimated cost for one child is $344 per week. The corresponding costs, excluding child care and health care costs, range from $188 to $347 per week for married households, and from $178 to $300 per week for single-headed households, averaging $250 per week. By comparison, child support amounts in the revised guidelines for one child under age 18, with no net credit for child care and health care costs, range from $25 per week to $772 per week, and average $452 per week over the full range of incomes. With the credit for child care and health care costs, the amounts above minimum orders may be up to 15 percent higher or lower, depending on whether the payor or the recipient receives the credit.

Table 18:
Revised Guidelines Amounts by USDA Income Group (Overall U.S.)
($/week; 1 child under age 18; no child care/health care costs)

	Income Group		
	Low	Mid	High
Average Available Income	$ 569	$ 1,602	$ 3,437
Average Guidelines Amount	$ 126	$ 337	$ 609
Guidelines Amount as % Income	22%	21%	18%

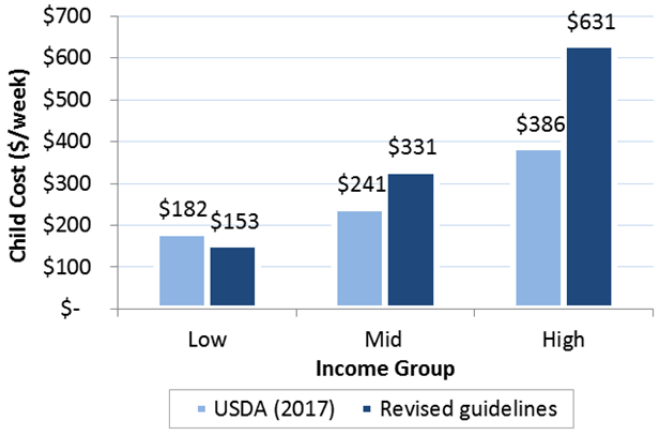
	Married			Single	
	Income Group				
	Low	Mid	High	Low	High
USDA Average Income	$ 698	$ 1,571	$ 3,565	$ 469	$ 1,904
Guidelines Amount	$ 153	$ 331	$ 631	$ 103	$ 394
USDA U.S. Average	$ 182	$ 241	$ 386	$ 173	$ 340
Difference ($)	$ (29)	$ 90	$ 245	$ (70)	$ 54
(%)	-16%	37%	63%	-41%	16%
Guidelines Amount as % Income	22%	21%	18%	22%	21%

Source: USDA (2017) and revised guidelines.

For a more targeted comparison to the USDA national child cost estimates, Table 18 reports the revised guidelines amounts for one child under age 18 split into the same income groups as in the 2017 USDA report: less than $1,138 per week (low income), $1,138 to $2,065 per week (middle income), and above $2,065 per week (high income) for married households, and below/above $1,138 per week for single-headed households. The average income level within each group is different under the revised guidelines than for the households in the USDA report, so Table 18 reports the guidelines amounts both: (1) within each income group, on average, and (2) at the average level of income reported by the USDA for each group.

Figure 18 illustrates the comparison for the amounts listed in Table 18.

Figure 18:
Revised Guidelines v. USDA Estimates (Overall U.S.)



Source: Table 18

The revised guidelines amounts in Table 18 are lower than the USDA national estimates in Table 17 at relatively low incomes, but are increasingly higher at middle- and high-income levels both in dollars and as a percentage of income. For example, the average USDA estimate for married households in the low-income group is $188 per week, compared to $126 per week on average over the same range of incomes in the revised guidelines. At the USDA average income level for that group ($698 per week), the guidelines amount is $153 per week, or 16 percent below the USDA national estimate. Over the middle- and high-income ranges, the revised guidelines amounts are higher than the USDA national estimates by 37 and 63 percent, respectively. The same pattern holds true in the comparison for single-headed households.

Relative to income, the revised guidelines amounts account for 22 percent of income at the low end, compared to 34 percent for married households in the USDA estimates (per Table 17). However, the revised guidelines amounts are increasingly higher than the USDA estimates as income increases: 21 percent compared to 20 percent for middle incomes, and 18 percent compared to 14 percent at high incomes. This result is similar to the comparison of the revised guidelines amounts to the Betson (2010) estimates – the guidelines amounts are increasingly higher than child cost estimates at the middle and upper end.

b. USDA Northeast Estimates

The 2017 USDA report also includes estimates for husband-wife households in each of the same three income groups in the northeast. Table 19 reports the USDA estimates of all child costs for

both the northeast and the overall U.S., side by side. The cost estimates for the northeast are 24 percent higher, on average, than the national estimates across income groups. For example, the estimated cost of one child in a low-income household in the northeast is $212 per week, compared to $188 per week for the same income group nationally. In the middle-income group, the average cost for one child is $262 per week in the northeast, compared to $236 nationally. In the high-income group, the costs are $480 per week and $347 per week, respectively.

Table 19:
USDA (2017) Child Costs (Northeast)

	All Costs (Married Households)											
$/week	U.S.				Northeast				% Difference			
	Income Group				Income Group				Income Group			
	Low	Mid	High		Low	Mid	High		Low	Mid	High	
Children	$698	$1,571	$3,565	**Avg.**	$692	$1,596	$3,683	**Avg.**	-0.8%	1.6%	3.3%	**Avg.**
	Total											
1	$188	$236	$347	**$257**	$212	$262	$480	**$318**	13%	11%	38%	**24%**
2	$296	$371	$547	**$405**	$334	$413	$756	**$501**	13%	11%	38%	**24%**
3	$337	$423	$623	**$461**	$381	$471	$862	**$571**	13%	11%	38%	**24%**
4	$376	$473	$696	**$515**	$425	$526	$963	**$638**	13%	11%	38%	**24%**
5	$414	$520	$765	**$566**	$468	$579	$1,059	**$702**	13%	11%	38%	**24%**
	As % Income											
1	27%	15%	10%	**17%**	31%	16%	13%	**20%**	14%	10%	34%	**16%**
2	42%	24%	15%	**27%**	48%	26%	21%	**32%**	14%	10%	34%	**16%**
3	48%	27%	17%	**31%**	55%	30%	23%	**36%**	14%	10%	34%	**16%**
4	54%	30%	20%	**35%**	61%	33%	26%	**40%**	14%	10%	34%	**16%**
5	59%	33%	21%	**38%**	68%	36%	29%	**44%**	14%	10%	34%	**16%**

Source: USDA (2017), Tables 1 and 7

For comparison to the USDA northeast child cost estimates, Table 20 reports the revised guidelines amounts split into the same income groups. As with the national estimates (in Table 18), the average income level within each group is different under the revised guidelines than for the households in the USDA report, so Table 20 reports the guidelines amounts both: (1) within each income group, on average, and (2) at the average level of income reported by the USDA.

Table 20:
Revised Guidelines Amounts by USDA Income Group (Northeast)

($/week; 1 child under age 18; no child care/health care costs)

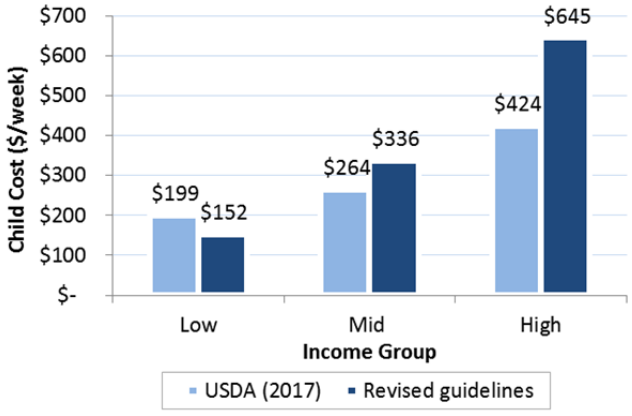
	Income Group		
	Low	Mid	High
Average Available Income	$ 569	$ 1,602	$ 3,437
Average Guidelines Amount	$ 126	$ 337	$ 609
Guidelines Amount as % Income	22%	21%	18%

	Married			Single	
	Income Group				
	Low	Mid	High	Low	High
USDA NE Average Income	$ 692	$ 1,596	$ 3,683		
Guidelines Amount	$ 152	$ 336	$ 645	NA	
USDA Northeast Average	$ 199	$ 264	$ 424		
Difference ($)	$ (47)	$ 72	$ 221		
(%)	-24%	27%	52%	NA	
Guidelines Amount as % Income	22%	21%	18%		

Source: USDA (2017) and revised guidelines

Figure 19 illustrates the comparison for the amounts listed in Table 20.

Figure 19:
Revised Guidelines v. USDA Estimates (Northeast)



Source: Table 20

The comparison to the USDA northeast estimates reflects the same result as for the national estimates: the revised guidelines amounts for one child are roughly equivalent to the USDA estimates at relatively low incomes and are increasingly higher at middle and high incomes. However, because the USDA estimates are higher for the northeast than for the overall U.S., the differences are smaller. At the middle-income level, for example, the difference is 27 percent, on average (rather than 37 percent), with the USDA estimating child costs of $264 per week relative to the revised guidelines amount of $336 per week.

3. Guidelines in Neighboring States

In addition to the comparisons to the Betson (2010) and USDA (2017) studies, we also presented to the Task Force comparisons of the revised guidelines amounts to the guidelines amounts in the five neighboring states: Connecticut, New Hampshire, New York, Rhode Island, and Vermont. As we noted earlier, child support guidelines in all five of these states except New York use the income shares approach, and all of these states other than Rhode Island have revised their guidelines language and/or cost schedules since the 2012-2013 review of the Massachusetts guidelines.

For all five states, and for Massachusetts, we calculated presumptive child support amounts for one child under age 18 for different combinations of payor and recipient incomes over the income range covered under the revised guidelines. Specifically, as we did in the 2012-2013 Massachusetts guidelines review, we calculated child support amounts for fifteen different income combinations, representing all possible combinations of four different income levels for each of the payor and recipient ($20,000, $60,000, $120,000 and $200,000 per year)[69] up to $250,000 per year of combined income (the maximum income level in the guidelines chart), as well as the same four payor income levels run with zero recipient income.

Table 21 shows the child support amounts under the revised guidelines for each of the resulting fifteen income combinations.

Table 21:
Revised Guidelines Amounts for Neighboring State Comparisons
($/week; 1 child under age 18; no child care/health care costs)

Recipient Income	Payor Income			
	$385	$1,154	$2,308	$3,846
$0	$85	$250	$459	$665
$385	$84	$244	$445	$644
$1,154	$65	$229	$414	off Chart
$2,308	$50	$204	$375	
$3,846	$46	off Chart		

Source: Revised guidelines

[69] The corresponding weekly amounts are $385, $1,154, $2,308, and $3,846 per week.

Comparing these child support amounts to guidelines amounts for other states requires certain assumptions about items such as taxes, child care costs and health care costs, to the extent the guidelines in different states handle those items differently. For example, Massachusetts guidelines are based on gross income, as are the guidelines in New Hampshire and Rhode Island. Guidelines in Connecticut and Vermont are based on net income. New York's guidelines also are based on gross income up to a combined income of $141,000[70] but include a deduction for Social Security taxes paid. For the states with guidelines based on net income, we calculated the approximate net-income equivalents of the various gross income numbers we used for Massachusetts.[71]

a. Income-Only Comparisons

For simplicity, our comparisons to guidelines amounts in the five neighboring states consider only various combinations of payor and recipient incomes, without also introducing other adjustments, such as for child care and health care costs. As we have already discussed, child care and health care costs vary widely from case to case and can be significant in some cases. This makes it difficult to specify a given level of "typical" or reasonable child care or health care costs appropriate for broad comparisons of guidelines across cases. Moreover, adjustments for child care costs and health care costs differ by state. The Massachusetts revised guidelines now both deducts reasonable child care and health care costs from available income and then also adjusts the child support amount up or down by up to a 15 percent cap to cover a portion of those costs paid by the parent with the greater net proportional cost. But each of the guidelines in the five neighboring states makes a slightly different adjustment than the rest of the group:

- Connecticut's guidelines deduct the cost of health insurance from available income, but not out-of-pocket health care costs or child care costs. Out-of-pocket health care costs are credited in proportion to relative income, and a portion of a recipient's child care costs are split with the payor up to a cap.
- New Hampshire's guidelines deduct both child care costs and health care costs from available income, but only the child's portion of health care costs is deducted. There are no cost credits.

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[70] Where the total income of both parents exceeds $141,000 of combined income, the law permits, but does not require, the use of the guidelines percentages in calculating child support on the portion of income above $141,000.

[71] A more detailed adjustment from gross income to net income, or actual net income figures in a given case, will yield slightly different results from running the guidelines in the net-income states.

- New York's guidelines do not deduct either child care costs or health care costs from available income, but does include adjustments so that a payor covers a recipient's child care costs and out-of-pocket health care costs not covered by insurance in proportion to the payor's share of combined income. There is no adjustment in the guidelines for the cost of keeping health care coverage.
- Rhode Island's guidelines deduct health insurance premiums and out-of-pocket health care costs from available income, but not child care costs. Instead, it adds the net cost of child care inclusive of the federal child care tax credit to the overall child support amount allocated to each parent in proportion to their shares of combined income. Health care costs are deducted but not later credited as well.
- As in Connecticut, Vermont's guidelines deduct the cost of health insurance from available income, but not out-of-pocket health care costs or child care costs. Child care costs are added to the overall order and allocated in proportion to relative income, as in Rhode Island, but by a different calculation. Out-of-pocket health care costs also are added and prorated by relative income.

Income-only comparisons (with no child care or health care costs) avoid these complexities and still indicate how guidelines in different states compare as absolute and relative incomes vary from case to case. From this starting point, and knowing how child care and health care cost adjustments are applied in each state, their impact can be deduced based on some sense of what constitute reasonable costs in a specific case.

The guidelines amounts in Massachusetts and each of the neighboring states for one child under age 18 for a given income combination sometimes are similar and sometimes are disparate due to differences in both the structure and percentages of each state's guidelines. For example, the guidelines amount for a low-income payor ($20,000 per year) and a recipient with no income is 22 percent of the payor's income Massachusetts and ranges from 13 to 22 percent over the five neighboring states: 13 percent in Vermont, 15 percent in New York, 18 percent in Rhode Island, 21 percent in Connecticut and 22 percent in New Hampshire. The guidelines amounts at higher income combinations are even more varied. For example, the guidelines amount for a relatively high-income payor ($120,000 per year) and a recipient with no income is 20 percent in Massachusetts and ranges from 11 to 15 percent in the neighboring states. Table 22 shows the revised guidelines amounts in the Massachusetts and the average guidelines amounts in the five neighboring states for each of the fifteen income combinations we considered across the range of incomes covered by the Massachusetts guidelines.

Table 22:
Guidelines Amounts Relative to Payor Income
(1 child under age 18; no child care/health care costs)

Recipient Income	Payor Income $385	$1,154	$2,308	$3,846
	Massachusetts			
$0	22%	22%	20%	17%
$385	22%	21%	19%	17%
$1,154	17%	20%	18%	off Chart
$2,308	13%	18%	16%	
$3,846	12%	off Chart		
	Average of Neighboring States			
$0	18%	17%	13%	12%
$385	17%	15%	13%	11%
$1,154	16%	14%	12%	off Chart
$2,308	14%	12%	11%	
$3,846	12%	off Chart		

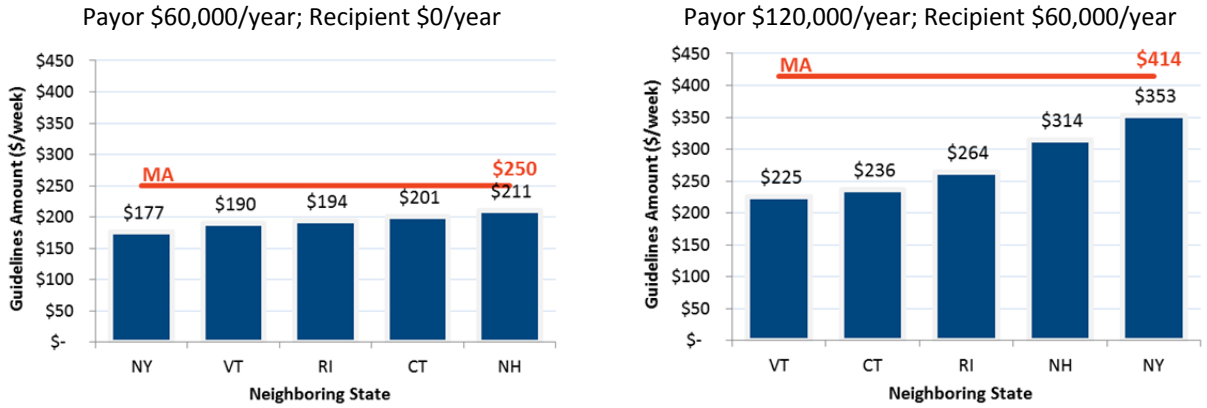
Source: Revised guidelines and guidelines in neighboring states

For most income combinations in Table 22, the Massachusetts revised guidelines amounts for one child under 18 are a higher percentage of the payor's income than the average of the five neighboring states. The Massachusetts percentages are slightly lower (though not materially different) in just two of the fifteen scenarios, with the lowest-income payors paired with the highest-income recipients. The revised guidelines amounts for one child under age 18 are otherwise always higher than the average of the neighboring states, and are significantly higher (by 23 to 51 percent) in all but one scenario, again with a relatively low-income payor and high-income recipient. The Massachusetts guidelines amounts for one child also are consistently significantly higher in the underlying state-level comparisons except in cases of low-income payors paired with high-income recipients.

For example, Figure 20 illustrates the guidelines amounts for Massachusetts and each neighboring state for a payor and recipient with one child under 18 and two income combinations. On the left, a payor with income of $60,000 per year ($1,154 per week) and a recipient with no income. On the right, relative incomes of $120,000 and $60,000 per year ($2,308 and $1,154 per week), respectively.[72]

[72] $60,000 per year is 85 percent of the $70,628/year median household income in Massachusetts, as reported by the U.S. Census Bureau, 2015 American Community Survey, *op. cit.*

Figure 20:
Revised Guidelines v. Neighboring States
(1 child under age 18; no child care or health care costs)



Source: Revised guidelines and guidelines in neighboring states

The $250 per week Massachusetts revised guidelines amount in the lower-income scenario (at left) is 42 percent higher than New York, 32 percent higher than Vermont, 29 percent higher than Rhode Island, 24 percent higher than Connecticut and 19 percent higher than New Hampshire. In the higher-income scenario (at right), the $414 per week Massachusetts revised guidelines amount is 32 to 84 percent higher than the guidelines amounts in the neighboring states other than New York, which is 17 percent lower. We presented to the Task Force similar figures for other income scenarios, all showing similar qualitative results: the Massachusetts guidelines amounts are higher than neighboring states in most cases (all but low-income payors paired with high-income recipients) and by an increasing amount at higher levels of income.

b. Including Child Care and Health Care Costs

Introducing reasonable child care and health care costs into these comparisons changes the specific numeric results reported above, especially since the Massachusetts revised guidelines may now change by up to the 15 percent cap on the child care and health care cost credit, which we think will bind in most cases with either type of cost. But given the differences we observed in the income-only comparisons, which typically exceeded 15 percent, running comparisons with various combinations of child care and health care costs predictably generates the same qualitative result: the Massachusetts revised guidelines amounts are higher than the guidelines in the neighboring states for most income scenarios, but by less than in the income-only comparisons in some cases. This is because the same costs are deducted from available income and/or credited to varying degrees in the neighboring states just as they are under the revised guidelines in Massachusetts. So, as the Massachusetts guidelines amounts increase or decrease to

account for child care and health care costs in a given scenario, the guidelines amounts in the neighboring states move in the same direction, only by different amounts. The resulting changes relative to the Massachusetts guidelines amounts are not large enough to change the directional results of the income-only scenarios, just the specific numbers in a given case.

c. Increases for Additional Children

All of the comparisons we have discussed so far reflect child cost estimates or guidelines amounts for one child. Relative to the latest Betson-Rothbarth child cost estimates, the 2017 USDA estimates, and guidelines amounts in neighboring states, the Massachusetts guidelines amounts for one child are relatively high, especially at middle and high incomes. However, the comparisons for one child reflect only the percentages in Table A of the guidelines worksheet. To see how the revised guidelines compare to economic benchmarks for more than one child requires also applying the new adjustment factors in the revised Table B of the worksheet in cases with more than one child.

We have already discussed the adjustment factors in Table B in the context of the new adjustment to account for the number of children age 18 or older. Conceptually, the adjustment factors reflect the incremental cost of adding one more child to a household. Consistent with sound economic principles, the adjustments increase at a decreasing rate, as do the benchmark adjustment factors.[73] The new adjustment factors in the revised Table B also account for whether a child has turned 18 years old. The guidelines in all of the neighboring states may be applied to children older than 18 in certain circumstances, but none of those guidelines applies a specific formulaic adjustment for children over 18 as the Massachusetts revised guidelines now do.

To evaluate the Massachusetts revised guidelines for more than one child, we compared the amounts for two and three children to each of the three economic benchmarks. Compared to the Betson-Rothbarth estimates, the guidelines amounts for more than one child are still higher at all but very low income levels. Recall, the guidelines amounts for one child are higher than the Betson-Rothbarth estimates at all income levels above $139 per week.[74] For two and three children, the same is true at incomes above $526 per week and $1,048 per week.

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[73] See Figure 8 and the related discussion.

[74] See Figure 17.

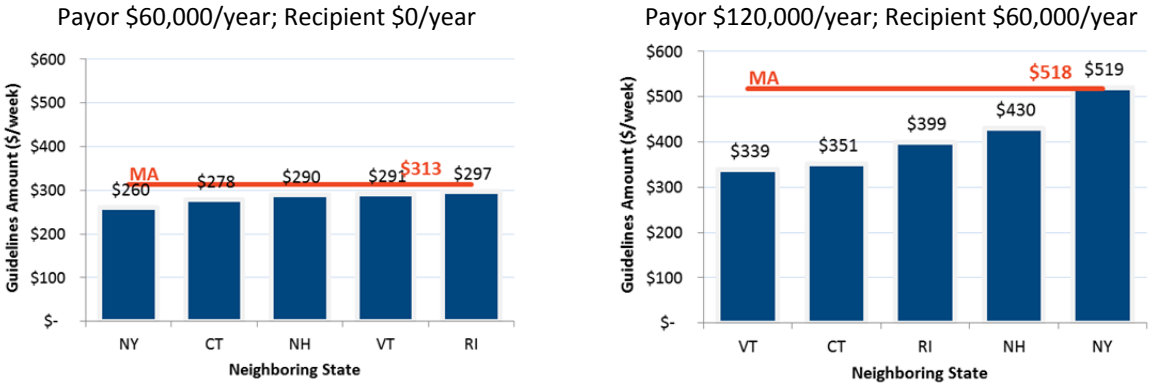
Compared to the USDA 2017 estimates, the revised guidelines amounts for more than one child also are mostly, but not always, higher. For example, the guidelines amounts for two and three children are lower or comparable at the low- and middle-income levels. Relative to the USDA national estimates, the guidelines amounts for two children are 34 percent lower than USDA for the low-income group. For three children, the guidelines amounts are 38 percent lower at low incomes, and are 7 percent lower at middle incomes.[75] The guidelines amounts are higher than the USDA national estimates at higher income levels, by 28 percent for two children and by 20 percent for three children. The same holds for the guidelines amounts relative to the USDA northeast child cost estimates: the guidelines amounts for two children are 40 percent lower than USDA at low incomes, roughly equal (1 percent lower) at middle incomes, and higher by 19 percent at high incomes. For three children, the guidelines are 44 percent lower at low incomes, 6 percent lower at middle incomes, and 12 percent higher at high incomes.

Relative to neighboring states, the current Massachusetts revised guidelines amounts for more than one child are higher in most, but not all, cases. They tend to be lower than neighboring states for low-income payors, especially when paired with high-income recipients and otherwise higher, but by less than the differences in the amounts for one child in many cases. For example, where the revised guidelines amounts for two children are higher for the 15 income combinations discussed above, they are within 8 to 22 percent of New Hampshire guidelines amounts. For three children, they are within 12 percent of the New Hampshire amounts. Compared to other neighboring states, the Massachusetts revised amounts for multiple children are still higher than the benchmarks, but by less than for one child because the increases for multiple children are larger than in Massachusetts.

Figure 21 compares the revised guidelines amounts to neighboring states for the same income combinations as in Figure 20 above, but with two children rather than one, both under age 18. The figure on the left reflects $60,000 per year ($1,154 per week) of payor income and no recipient income. The figure on the right reflects $120,000 per year ($2,308 per week) of payor income and $60,000 per year ($1,154 per week) of recipient income.

[75] These differences are calculated at the average level of income for each income group shown on Table 18 above.

Figure 21:
Revised Guidelines v. Neighboring States
(2 children under age 18; no child care or health care costs)

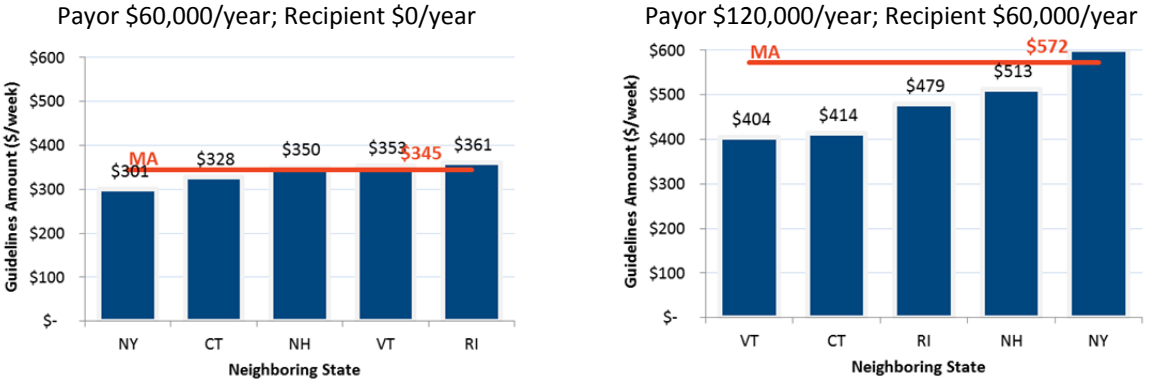


Source: Revised guidelines and guidelines in neighboring states

At these income combinations for two children, the revised guidelines amounts are $340 and $518 per week, respectively. In the lower-income scenario, this amount is within 10 percent of the amounts in three neighboring states (New Hampshire, Rhode Island and Vermont). It is 13 percent higher than Connecticut and 21 percent higher than New York. The Massachusetts guidelines amount in the higher-income scenario is the same as New York but is significantly higher than in the other neighboring states (by 20 to 53 percent).

Figure 22 illustrates the same two income scenarios but for three children under age 18.

Figure 22:
Revised Guidelines v. Neighboring States
(3 children under age 18; no child care or health care costs)



Source: Revised guidelines and guidelines in neighboring states

At these income combinations for three children, the revised guidelines amounts are $345 and $572 per week, respectively. In the lower-income scenario, the Massachusetts revised guidelines

amount is less than the same three states to which it was within 10 percent for two children (New Hampshire, Rhode Island and Vermont). It is within 5 percent of Connecticut and 15 percent of New York. Again in the higher-income scenario disparities persist. The revised guidelines amount is 5 percent lower than New York and within 12 percent of New Hampshire, but is 19 to 41 percent higher than the three remaining neighboring states.

To summarize, the Massachusetts revised guidelines amounts for more than one child are:

- mostly higher than the Betson and USDA estimates (everywhere except at low incomes);
- higher than the guidelines amounts in neighboring states for two children in most cases, but by proportionately less than the relative differences for one child; and
- comparable to, or just higher than, guidelines amounts in neighboring states for three children in low- to middle-income cases, but still higher than most neighboring states at higher levels of income.

V. Other Economic Considerations

Despite this detailed discussion of the economic approaches, studies and child cost estimates, two other economic considerations are worth mentioning in this context: the relatively high cost of living in Massachusetts and its implications for child costs, and the practical importance of tax considerations in determining economically appropriate amounts of child support.

A. Cost of Living

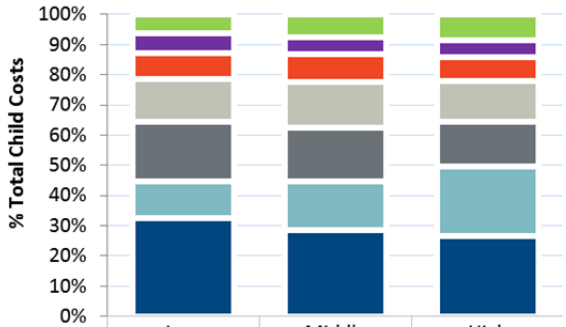
While Massachusetts guidelines amounts have decreased materially in each of the last two quadrennial reviews, they are still relatively high compared to economic estimates of child costs. This is particularly true for one child under 18, and especially at middle and high income levels. From an economic perspective, that may be appropriate if child costs in Massachusetts are higher than for the benchmarks we are comparing against. To the extent that overall incomes and household costs are higher in Massachusetts, for example, then child costs are likely also higher.[76] In addition, higher income is associated with higher levels of spending on children, all else equal.

[76] Whether or not child costs are higher due to higher overall costs depends on whether the additional cost of adult items "crowds out" spending on children, reflecting the household budget constraint. Without further research, it is inconclusive whether higher overall cost of living should result in a net cost of living adjustment to child costs from national data to state data.

The available data indicate that both household income and expenses in Massachusetts are above average. Of course, higher incomes and higher costs manifest themselves differently for different households. Not all households in Massachusetts have similarly higher incomes relative to the national average, but all households, regardless of income, do face the state's higher cost of living. This means household costs in Massachusetts may be disproportionately higher than income for some households. There are competing economic ideas on the impact of above-average household costs on child costs. Higher adult "overhead" (such as housing and utilities) may reduce income available for spending on children. Alternatively, parents may choose to incur higher costs for children rather than spending on other things.

Figure 23 lists the seven separate components of child costs estimated by the USDA in its 2017 report for married households with one child in each of the three income groups.

Figure 23:
Estimated Child Cost Shares by Component



	Low	Middle	High
Misc.	6%	7%	9%
Clothing	7%	6%	5%
Health Care	9%	9%	8%
Transportation	14%	15%	13%
Food	20%	18%	15%
Child Care / Education	12%	16%	23%
Housing	33%	28%	26%

Income Group

Source: USDA (2017), Table 1 averages by expenditure category

According to the USDA estimates, housing costs are the largest component of child costs (33 percent), followed by food (20 percent), transportation (14 percent), and child care and education (12 percent). Health care costs, clothing, and all else are each less than 10 percent of overall child costs. As we have already discussed, incomes, child care costs and health care costs are all higher in Massachusetts than in the U.S. overall. Notably, housing costs – the largest component of child costs – also are above average in Massachusetts.

Table 23 summarizes household income and housing costs for the U.S. and for Massachusetts. Color shading indicates extreme values within a data series. Median household income in Massachusetts ($70,628 per year) is 27 percent higher than in the U.S. overall. Gross rent is higher in Massachusetts in dollar terms, but is 4 percent below the national average as a percent of income. Rent relative to income is higher than the national average in just three Massachusetts counties, most notably in Suffolk County. But owning a home in Massachusetts is more expensive than the national average by almost 10 percent statewide, and by double-digits in four counties (Suffolk, Essex, Bristol, and Hampden).[77]

Table 23:
Income and Housing Costs, Massachusetts v. U.S.

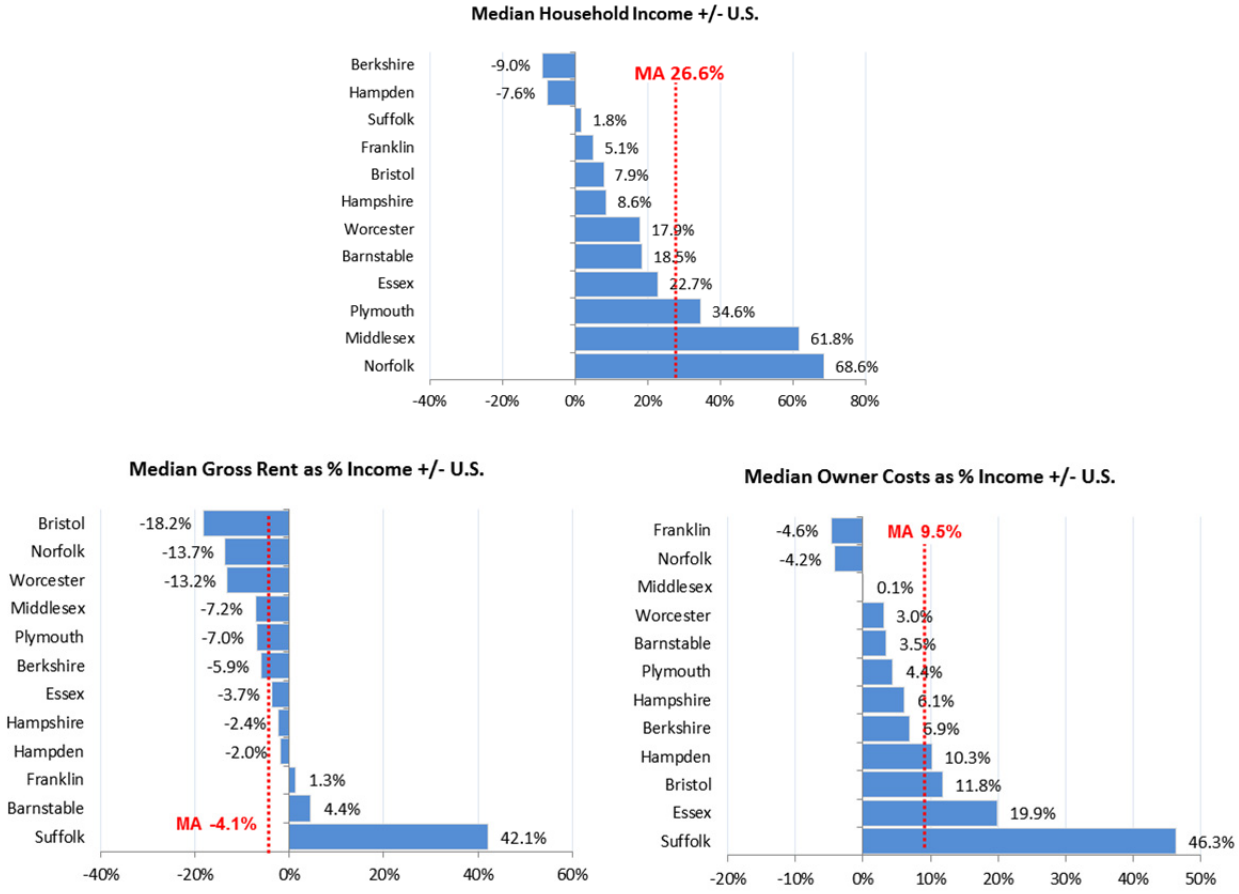
			Household Income		Gross Rent			Owner Costs		
	Population	% Total	$/year	+/- US	$/month	% Income	+/- US	$/month	% Income	+/- US
U.S.	**321,418,821**		**$55,775**		**$ 959**	**20.6%**		**$ 1,477**	**31.8%**	
MA	**6,794,422**	**100%**	**$70,628**	**26.6%**	**$ 1,164**	**19.8%**	**-4.1%**	**$ 2,048**	**34.8%**	**9.5%**
Difference			**$14,364**		**$ 168**			**$ 573**		
			26.9%		**19.2%**			**37.1%**		
Barnstable	214,333	3.2%	$66,102	18.5%	$ 1,187	21.5%	4.4%	$ 1,811	32.9%	3.5%
Berkshire	127,828	1.9%	$50,765	-9.0%	$ 821	19.4%	-5.9%	$ 1,437	34.0%	6.9%
Bristol	556,772	8.2%	$60,183	7.9%	$ 846	16.9%	-18.2%	$ 1,782	35.5%	11.8%
Essex	776,043	11.4%	$68,455	22.7%	$ 1,134	19.9%	-3.7%	$ 2,173	38.1%	19.9%
Franklin	70,601	1.0%	$58,613	5.1%	$ 1,021	20.9%	1.3%	$ 1,480	30.3%	-4.6%
Hampden	470,690	6.9%	$51,514	-7.6%	$ 868	20.2%	-2.0%	$ 1,504	35.0%	10.3%
Hampshire	161,292	2.4%	$60,583	8.6%	$ 1,017	20.1%	-2.4%	$ 1,702	33.7%	6.1%
Middlesex	1,585,139	23.3%	$90,267	61.8%	$ 1,440	19.1%	-7.2%	$ 2,393	31.8%	0.1%
Norfolk	696,023	10.2%	$94,039	68.6%	$ 1,396	17.8%	-13.7%	$ 2,386	30.4%	-4.2%
Plymouth	510,393	7.5%	$75,080	34.6%	$ 1,201	19.2%	-7.0%	$ 2,076	33.2%	4.4%
Suffolk	778,121	11.5%	$56,771	1.8%	$ 1,387	29.3%	42.1%	$ 2,200	46.5%	46.3%
Worcester	818,963	12.1%	$65,753	17.9%	$ 981	17.9%	-13.2%	$ 1,794	32.7%	3.0%

Source: U.S. Census Bureau, 2015 American Community Survey. No data for Dukes and Nantucket counties

Figure 24 illustrates the disparity across counties in the data in Table 23.

[77] The Census Bureau data includes in owner costs all forms of debt where the property is pledged as security for repayment of the debt, including mortgages, home equity loans, deeds of trust, and land contracts. It also includes cost of property insurance, utilities, real estate taxes, *etc.*

Figure 24:
Income and Housing Costs, Massachusetts v. U.S.



Source: Table 23

B. TAX IMPACTS

In addition to the cost categories discussed so far, taxes are another significant cost with important implications for how much money a household has available to spend on children. The Massachusetts guidelines formula considers the gross available income of the payor and recipient, as opposed to their net incomes after taxes and tax-related child benefits. Of the 40 states listed in Table 13 whose guidelines are based on the income shares model, 26 states (including Massachusetts) base child support amounts on gross income. That said, the distinction between gross and net income in this context is not clear-cut, as the underlying tax assumptions and formulas vary widely. For example, the Betson-Rothbarth estimates on which many income shares guidelines are based relate child costs to net income. So many states whose guidelines use gross income simply apply state and federal tax tables to gross up the net income amounts in the

underlying economic studies. In that sense, those guidelines use gross incomes but the guidelines amounts are based on underlying child cost estimates relating to net incomes.

Using gross income in the guidelines is appealing for its simplicity. By considering only gross income, the guidelines worksheet does not have to incorporate information about the payor or recipient's tax filing status, the amount of income taxes each pays, or the relative financial impact of various deductions and credits. This minimizes discovery and analytical burdens for all. But from an economic perspective, gross income may not best reflect the amount of income that is actually available to a payor or recipient to spend on a child.

Gross income also does not reflect the availability or dollar value of child-related tax benefits which include: head of household standard deduction, tax exemptions for dependent children, child tax credits, the earned income credit, and child care tax credit. The availability and dollar-value of such tax benefits does affect the relative incomes actually available to payors and recipients to cover child costs, so we briefly discuss the magnitude of these tax benefits here as a reference to this issue in subsequent guidelines reviews.

The Internal Revenue Service ("IRS") generally attributes child-related tax benefits to the custodial parent in divorced and unwed situations. The custodial parent is entitled to head of household status while the non-custodial parent typically has single tax payer status. Child-related tax benefits are summarized in federal Form 1040 from the IRS. This form for the 2016 tax year highlights the substantial divergent treatment of custodial and non-custodial parents with significant potential monetary value that goes unaccounted-for in the guidelines:

- The standardized deduction (line 40, Form 1040), for a single person (the noncustodial parent) was $6,300 compared to $9,300 for a head of household taxpayer (the custodial parent). This is a bonus of $3,000 in deductions for the custodial parent.
- The 2016 value of each dependent exemption is $4,050.
- For low-income and moderately low-income working parents, custodial parents receive dramatically more favorable treatment than do noncustodial parents in terms of the size of earned income credits under federal income tax law, calendar 2016 code.
- The earned income credit was as much as:
  - $506 if you did not have a qualifying child (noncustodial parent),
  - $3,373 if you had one qualifying child, or
  - $5,572 if you had two qualifying children.

- The Taxpayer Relief Act of 1997 gave custodial parents a tax credit of up to $400 per child. The credit went to up to $500 per child in 1999. Subsequent legislation increased child tax credits which went to up to $1,000 per child in 2010.
- The marginal tax rate increases for head of household taxpayers begin at higher income threshold levels than for single, noncustodial parents. This is seen in Schedule X and Schedule Z, 2015 1040:[78]

Taxable Income						of the
Over -	But not over	The tax is:				amount over:
Schedule X-If your filing status is **Single**						
$ -	$ 9,275	$ -	+	10%		$ -
$ 9,275	$ 37,650	$ 927.50	+	15%		$ 9,275
$ 37,650	$ 91,150	$ 5,183.75	+	25%		$ 37,650
$ 91,150	$ 190,150	$ 18,558.75	+	28%		$ 91,150
$ 190,150	$ 413,350	$ 46,278.75	+	33%		$ 190,150
$ 413,350	$ 415,050	$ 119,934.75	+	35%		$ 413,350
$ 415,050	--	$ 120,529.75	+	39.60%		$ 415,050
Schedule Z-If your filing status is **Head of household**						
$ -	$ 13,250	$ -	+	10%		$ -
$ 13,250	$ 50,400	$ 1,325.00	+	15%		$ 13,250
$ 50,400	$ 130,150	$ 6,897.50	+	25%		$ 50,400
$ 130,150	$ 210,800	$ 26,835.00	+	28%		$ 130,150
$ 210,800	$ 413,350	$ 49,417.00	+	33%		$ 210,800
$ 413,350	$ 441,000	$ 116,258.50	+	35%		$ 413,350
$ 441,000	--	$ 125,936.00	+	39.60%		$ 441,000

There also are differences in child-related tax benefits between custodial and noncustodial parents at the state level.

Overall, the decision of whether it is more appropriate to use gross income or net income when devising child cost schedules should be informed by an understanding of the whether and how to share child-related tax benefits that are a cost offset for the custodial parent unless shared by the child support order explicitly. Although a cost table could be based on net income with the custodial parent's net income including child-related tax benefits, those benefits are shared only to the extent of the marginal rate of child costs in the cost schedule. That is, the marginal child costs percentage is applied to the custodial parent's increased net income. The remainder of child-related tax benefits is retained by the custodial parent and is not shared.

[78] Detail on brackets as published by forbes.com, "IRS Announces 2016 Tax Brackets, Standard Deduction Amounts and More," by Kelly Phillips Erb, October 21, 2015.

To fully share the cost offsets from child-related tax benefits, some method other than inclusion in a net income calculation must be used. This requires separate analysis we have not performed as part of this review. A simplified method used by some states is to use gross income for the cost schedule and then require a presumptive proportional sharing of the dependency exemption(s), which implicitly includes child tax credits (which, in turn, are directly tied to who gets each dependency exemption).

These and other tax-related issues are not easy to deal with in a child support context, but should be considered in future guidelines reviews.

VI. Conclusion

Based on our discussion of economic concepts with the Task Force in the course of its review, and our analysis of current economic data and information, including the latest Betson-Rothbarth estimates, the current USDA estimates, and current guidelines amounts in neighboring states, we find child support amounts in Massachusetts continue to be higher than available child cost benchmarks, but less so than in the past, as a result of decreases in the guidelines amounts resulting from the prior two quadrennial reviews. In particular, the Massachusetts guidelines amounts for one child are relatively high, especially as income increases. However, the marginal increases for additional children are relatively low. As a result, the Massachusetts guidelines amounts for more than one child, while still frequently higher than current benchmarks at middle and high income levels, are proportionately less so than the amounts for one child.

There is not a clear economic rationale to explain why actual child costs, if we could observe them directly, would be higher in Massachusetts than in the U.S. overall (for example, as reflected in the Betson-Rothbarth and USDA estimates), or regionally (as reflected in the USDA northeast numbers and in neighboring states' guidelines). However, there is clear empirical evidence that the overall cost of living in Massachusetts is higher than in the nation as a whole and in neighboring states. Many of these costs, such as housing, child care and health care costs are primary components of child costs.

Ultimately, it is important for the Massachusetts guidelines to have their foundation in fundamental economic principles and actual data on child costs. By having a strong economic foundation, the guidelines can better establish the appropriate amount of support for a child and create positive economic incentives for both payors and recipients. The economic principles, facts, and comparisons in this report provided the Task Force with current information and data to help inform its recommendations with that objective in mind.

The revisions to the guidelines formula recommended by the Task Force as a result of its review are economically sound with predictable and reasonable expected impacts. Those revisions should improve the appropriateness and effectiveness of the guidelines.

On a final note, recent revisions to federal regulations require sharply more in-depth analysis of data from case studies with a particular focus on low-income situations. The next review of the Massachusetts guidelines will involve significantly more data and analysis, not just for the overall sample of cases but for the required component analysis under the new federal regulations. This strongly suggests preparing for, and starting, the next guidelines review process well in advance of the eventual release date for the resulting (2021) Massachusetts child support guidelines.

Respectfully submitted,

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June 23, 2017