



Estimating the Impacts of Legislation to Expand Affordable Quality Child Care and Early Education in Massachusetts

Initial Findings on Utilization, Employment, and Financial Assistance

RESEARCH BRIEF #1 | October 2023

Center for Women in Politics and Public Policy and Institute for Early Education Leadership and Innovation

Authors: Randy Albelda, Alan Clayton-Matthews, Anne Douglass, Christa Kelleher, Songtian Zeng, Laurie Nsiah-Jefferson



UMass Boston Early Education CUSP (Cost and Usage Simulator Project)

The UMass Boston Early Education CUSP is led by a multidisciplinary team that designed the simulator and uses it to produce current, relevant, accurate, and responsive estimates about the key impacts of proposed legislation to expand access to affordable, quality child care and early education. One of the simulator's valuable features is that it can produce estimates for a range of policy parameters and provisions. The team will release additional briefs in the coming months to offer a more detailed look at the impacts outlined in this initial publication. Other planned briefs will examine key topics, such as impacts related to additional family characteristics, cliff effects, and child care and early education provider supply. Therefore, this initial brief is one in a series of publications aimed to provide essential information to guide policymaking on child care and early education affordability, quality, and access in Massachusetts.

Updates, future briefs, and additional information about this project may be found at umb.edu/earlyedinstitute/research-policy.



About the Authors

Randy Albelda, PhD, is professor emerita of economics at the University of Massachusetts Boston. Her research covers a broad range of economic policies affecting women's economic status, especially for low-income workers in the United States, with particular attention to the intersection of public supports and earnings. Albelda has worked with various local, state, and national groups on policies that promote gender, racial, and income equality. She co-developed a paid family and medical leave simulator with Alan Clayton-Matthews in conjunction with the Institute for Women's Policy Research.

Alan Clayton-Matthews, PhD, is an associate professor emeritus in the School of Public Policy and Urban Affairs and the Department of Economics at Northeastern University. He is a senior contributing editor of *MassBenchmarks*, a joint publication of the University of Massachusetts in cooperation with the Federal Reserve Bank of Boston; a member of the Board of Economic Advisors of the Associated Industries of Massachusetts (AIM); and a director of the New England Economic Project.

Anne Douglass, PhD, is professor of early childhood education policy and founding executive director of the Institute for Early Education Leadership and Innovation at the University of Massachusetts Boston. She is an expert on the early care and education workforce, leadership, and quality improvement, and she brings years of experience leading innovations to equitably increase early educator access to higher education and professional development. She also has 20 years of experience as an early educator. She is the author of *Leading for Change in Early Care and Education: Cultivating Leadership from Within*; has been published in a wide range of journals, books, and news media; and presents nationally and internationally to academic, policy, and professional audiences.

Christa Kelleher, PhD, serves as research and policy director of UMass Boston's Center for Women in Politics and Public Policy. She enjoys building and managing diverse teams to conduct collaborative applied research on public leadership and a range of public policy issues. Among other projects, she has directed studies on women's economic status, the midwifery workforce, women in construction, gender parity in higher education leadership, the early care and education workforce, and pay equity. She also partners with UMass Boston's Collins Center for Public Management, helping to coordinate the Diversity, Equity, Inclusion, and Anti-Racism Practice.

Songtian (Tim) Zeng, PhD, is assistant professor of curriculum and instruction in the College of Education and Human Development and director of research for the Institute for Early Education Leadership and Innovation at UMass Boston. His research aims to support the health and social-emotional well-being of young children with adverse childhood experiences and disabilities by promoting equitable health and social service access for them. He has published over 30 peer-reviewed articles and secured a number of grants to support his research.

Laurie Nsiah-Jefferson, PhD, MPH, MA is director of the Center for Women in Politics and Public Policy at UMass Boston and graduate program director of the Gender, Leadership, and Public Policy graduate certificate program. She is committed to equity and inclusion in her work as a faculty member, executive leader, and researcher. An expert on the intersection of race, class, and gender in health, health care and social policy, she is extremely well versed in the tools and applications of diversity, equity, inclusion, and anti-racism in multiple spheres and venues. She has held faculty and senior scientist positions at the Heller School for Social Policy and Management at Brandeis University, where she was affiliated with the Institute for Child, Youth and Family Policy, the Institute on Assets and Social Policy, and the Sillerman Center for the Advancement of Philanthropy.

Recommended Citation:

Albelda, R., Clayton-Matthews, A., Douglass, A., Kelleher, C., Zeng, S., and Nsiah-Jefferson, L. (2023). Estimating the Impacts of Legislation to Expand Affordable Quality Child Care and Early Education in Massachusetts: Initial Findings on Utilization, Employment, and Financial Assistance. Research Brief #1. Boston: University of Massachusetts Boston. <http://www.umb.edu/earlyedinstitute/research-policy>

ACKNOWLEDGEMENTS

“It takes a village to raise a child” and it takes a dedicated group of individuals to prepare a publication to inform policymaking on the topic of affordable, quality child care and early education.

This initial research brief based on the findings of a sophisticated simulator developed over the past year has been made possible by the contributions of many hardworking and talented individuals.

First, we acknowledge the Commonwealth Children’s Fund for funding that supported the development of the simulator, data analysis, and products. It has been a pleasure to work collaboratively with Partners Melora Myslik Balson and Lydia Magliozzi Icke.

We also acknowledge contributions to the project from: Kori Lantas, Chief of Staff, and Erin Pelton, Chief Financial Officer, and Susan Ryan-Vollmar, Director of Communications, at UMass Boston’s Institute for Early Education Leadership and Innovation; Center for Women in Politics and Public Policy Research Assistants Emma Xiang, Alex Hara, and Beimnet Kebede, as well as Assistant Program Director Muna Killingback.

We thank those who offered creative expertise and assistance including Erica Sawyer, Designer; Anne McLaughlin, Senior Editor/Writer, and Senior Graphic Designer Rose Coveney from UMass Boston’s Creative Services Department.

We are also grateful to those who made it possible for us to access and utilize data required for the development of the simulator, including UMass Boston Institutional Review Board (IRB) Administrator Sharon Wang; Bryan Duff, NSECE Research Director, NORC at the University of Chicago; Amy Checkoway, Jocelyn Bowne, and Michelle Saulnier from the Massachusetts Department of Early Education and Care (EEC); Alan Mozaffari and the entire study team from the Zaentz Early Education Initiative/the Early Learning Study (ELS) at Harvard University; William Scarborough of the University of North Texas and Liana Christin Landivar of the Women’s Bureau, U.S. Department of Labor; and Michelle Haimowitz, Executive Director, Massachusetts Head Start Association.

ESTIMATING THE IMPACTS OF LEGISLATION TO EXPAND AFFORDABLE QUALITY CHILD CARE AND EARLY EDUCATION IN MASSACHUSETTS: INITIAL FINDINGS ON UTILIZATION, EMPLOYMENT, AND FINANCIAL ASSISTANCE

UMass Boston Early Ed Cost and Usage Simulator (CUSP) Project

This project aims to estimate the impacts of the expansion of affordable quality child care and early education under the provisions of Massachusetts Senate Bill 301—An Act Providing Affordable and Accessible High Quality Early Education and Care to Promote Child Development and Well-Being and Support the Economy in the Commonwealth; similar legislation to expand affordable high-quality child care and early education (House Bill 489) has been filed in the Massachusetts House of Representatives. These impacts include changes in the utilization of licensed care and education, out-of-pocket costs for families, parental employment, and family income when eligible families pay considerably less for quality child care and early education. The bill provides financial assistance in stages and with priorities that depend on sufficient funding. The stage studied here is for assistance for families with incomes up to 85 percent of the state median family income. The estimates presented in this research brief were produced with a simulator developed by a team from the University of Massachusetts Boston.

Who is Eligible?

It is estimated that 315,400—just about half—of the 624,000 Massachusetts families with children under 14 (or under 17 with special needs) meet the income eligibility requirements under the legislative proposal [S. 301]. Because single-parent families have lower incomes on average than two-parent families, 87% of all single-parent families are income eligible while 36% of two-parent families are eligible. Seventy percent of eligible families have incomes above the poverty income threshold and half are two-parent families.

Financial Assistance: Access and Cost

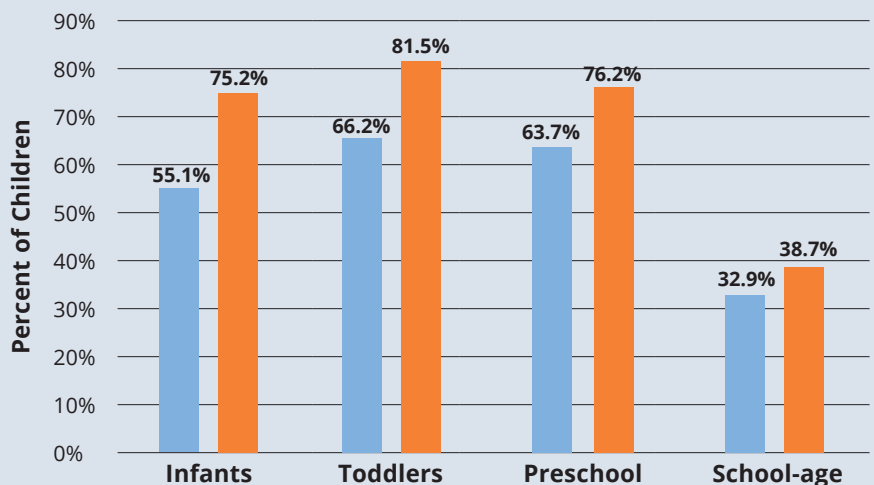
Of those eligible families, it is estimated that 128,500 will use the financial assistance provided under the legislative proposal [S. 301], covering 47% of all families that pay for care. And while this covers 20.6% of all families with children, financial assistance reaches almost one-third (31.9%) of all families using any type of nonparental care. For those families receiving financial assistance under the proposal, the average annual amount received is \$13,260 (using 2022 prices). The legislative proposal [S. 301] will shift the cost burden for child care and early education from the families that receive financial assistance onto the state. The aggregate cost to the state for providing this financial assistance to families is \$1.7 billion.

What are the Key Impacts?

Having access to affordable licensed child care and early education can significantly impact families by influencing choices around care for children, parental employment, and family finances. All of these may have both short- and long-term impacts on children themselves. The legislative proposal [S. 301] will enable families that rely only on parental care or on another type of unlicensed care to use licensed care. It is expected that there would be a large increase in the percentage of families choosing to use licensed care due to the availability of financial assistance and the increase would be most pronounced for children not yet school-age: up from 55% to 75% for infants; from 66% to 82% for toddlers; and from 64% to 76% for preschool children.

Percent of Children in Nonparental Care That Use Any Licensed Care Currently and Under Legislative Proposal [S.301]

- Currently
- Under Legislative Proposal [S.301]



Note: Excludes Head Start, Public Pre-K and K-12

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

Reduced Cost Burden on Families

- The legislative proposal [S. 301] reduces all child care costs (licensed and unlicensed) as a percentage of income from 13.6% to 4.2% for families whose children are not yet school-age. For the income-eligible families that use financial assistance, the percentage of income going to child care is reduced from 17.2% to 4.3%.
- For single-parent families using financial assistance and whose youngest child is not yet school-age, the cost burden is reduced from 24.7% of income to 3.7% and for two-parent families that burden falls from 16.3% to 4.8%.

Increased Parental Employment

- With financial assistance provided for quality child care and early education, mothers' employment increases by 10,400—from 74.2% to 76.0% of mothers being employed.
- The increase in the percentage of mothers employed is greatest for mothers whose youngest child is not yet school-age (i.e. an infant, toddler, or preschooler) from 70.5% to 74.0%—this represents new employment.
- In addition to new employment, 21,000 currently employed parents will increase the number of hours worked representing 1.3% of currently employed fathers and 3.7% of currently employed mothers.
- Because of higher employment levels and more working hours, there would be a 3.2% increase in mothers' total hours worked.

Reduced Poverty

- Access to affordable child care and early education is expected to reduce the single-parent family poverty rate by 3.1 percentage points from 41.6% to 38.5%; the two-parent poverty rate is reduced from 5.2% to 4.5%. The overall family poverty rate falls by 1.3 percentage points, from 15.5% to 14.1%.
- Just over 53 percent of all single-parent families with young children (under school-age) are poor. Access to affordable quality child care and early education reduces that rate to 46.6%.

A More Level Child Care and Early Education Playing Field

Quality child care and early education matters for children's development. But it is expensive for families, despite the relatively low compensation rates for early childhood and out-of-school time educators. For far too many families in Massachusetts the cost is prohibitive, especially for infants, toddlers, and preschool children. The legislative proposal [S. 301] provides two types of crucial investments in child care and early education. First, operational grants to providers enhance the quality of care and stabilize the system, largely through increased compensation, quality measures, and training. Second, financial assistance for families improves the affordability of care and increases access. Together, these investments will help ensure that many more children receive quality care and education, which can help level the child care and early education playing field.

Conclusion

The estimates presented in this brief suggest that financial assistance would effectively enable more children access to licensed care as well as substantially reduce the cost burden on families. Additionally, because parents would be able to afford reliable care, a portion of them, especially mothers of young children, would be able to engage in more employment opportunities. The additional earnings will lift some families, especially single-parent families, out of poverty.

The UMass Boston Early Ed CUSP will offer additional analyses in the coming months to inform policymaking processes as Massachusetts lawmakers consider greatly enhanced public investment in child care and early education for children, families, and the Commonwealth's economy.

For more information about the project, please go to:



umb.edu/earlyedinstitute/research-policy

INTRODUCTION

What will it take to ensure access to affordable, quality child care and early education that is provided by an appropriately compensated workforce? What types and level of public investment would make it possible for all infants, toddlers, preschool, and school-age children in need of child care and early education to receive it at a cost manageable for families? How would parental employment, family income, and poverty rates be impacted if the family cost burden of such care and education were lowered? How many more children would gain access to high-quality learning environments during a critical developmental period?

These questions have been front and center for child care and early education providers, advocates, philanthropic leaders, scholars—and some policymakers—for decades. The COVID-19 pandemic made it clear just how essential affordable, high-quality, and accessible child care and early education is for children, families, employers, and the economy. There is now considerable movement toward addressing the gaps that exist in the complex child care and early education system in the United States. Efforts to transform the system are taking place across the country with federal, state, and even local measures beginning to address the long-identified needs to realize a vision of access, equity, affordability, and quality care and education.

Massachusetts, historically on the forefront of child care and early education as the first state in the nation to launch an independent, consolidated department focused on early learning and child care¹ is now poised to take another step forward. Legislation to make high-quality child care and early education more affordable for families, ensure appropriate compensation and benefits for educators, and provide stable funding to providers is under consideration by Massachusetts lawmakers. Several bills have been filed with a broad coalition of stakeholders advocating for changes to ensure a stable, equitable, high-quality child care and early education system that lowers the cost burden on families.²

Making quality care more affordable for parents and guardians will affect the decisions parents make about the care and education their children receive. Many parents will choose to use less parental care and more licensed care which will have several important outcomes—given sufficient care providers to meet new demand. Research indicates that financial assistance for child care leads to more licensed center-based care for children in families that cannot currently afford resulting in higher quality care. This in turn improves educational, social, and economic outcomes for children.³ It also means more reliable care for longer periods of time, which paves the way for both increased and more stable employment for parents, especially mothers. Finally, as child care and early education access improves, mothers' employment opportunities are expanded. This boosts the economic status of families and has advantages for employers, especially in Massachusetts with its tight labor market.⁴

In order to estimate how much more licensed care might be needed in Massachusetts and what employment and income changes may take place with increased access to affordable licensed quality child care and early education, a multi-disciplinary UMass Boston team created a statistical model that simulates parents' decisions about care usage. The UMass Boston Early Ed Cost and Usage Simulator is described briefly in the following Methods section (and in more detail in a forthcoming technical report).

METHODS

The goal of this study is to estimate the impacts of the expansion of affordable quality child care and early education under the provisions of Massachusetts Senate Bill 301—An Act Providing Affordable and Accessible High Quality Early Education and Care to Promote Child Development and Well-Being and Support the Economy in the Commonwealth. These impacts include changes in the utilization of licensed care and education, in the out-of-pocket costs for families with children under age 14, or under 17 with special needs, and in employment and income when eligible families pay considerably less for quality child care and early education for their children. The bill provides financial assistance in stages and with priorities that depend on sufficient funding. The stage studied here is for assistance for families with income up to 85 percent of Massachusetts median family income.⁵

The estimates presented in this initial research brief were produced with a simulator model [hereafter simulator] developed by a team from UMass Boston. More detail about the simulator and methodology may be found on the UMass Boston Early Ed Cost and Usage Simulator (CUSP) Project webpage.⁶

The simulator was developed using surveys of families' child care usage and academic studies on the impacts of child care financial assistance on families' child care usage and parental employment.

Estimates on child care usage behavior are based on data from the 2019 National Survey of Early Care and Education (NSECE) household survey, sponsored by the Office of Planning, Research, and Evaluation (OPRE) in the Administration for Children and Families (ACF), U.S. Department of Health and Human Services. This nationally-representative, publicly available survey includes 8,576 households with 15,981 children under 13 years of age with basic demographic, employment (weekly hours of employment, training, and education), and income information about adults in the households and detailed information on early care and education usage for each child in the household, including hours of care, types of care, and out-of-pocket costs during the survey week. The survey is used to estimate the probability of a child using each of several types of child care, conditional on the child's and the child's family characteristics. This information is also used to estimate weekly hours of care and weekly out-of-pocket costs of care for the child.

To obtain estimates of child care usage in Massachusetts, the simulator “runs” scenarios for each child in the 2015-2019 Census Bureau's American Community Survey Public Use Microdata Sample (PUMS), a five percent representative sample of Massachusetts households and the individuals who live in them.

In order to help calibrate the simulator to reflect current child care usage in Massachusetts, the team relied on administrative data from the Massachusetts Department of Early Education and Care (EEC)⁷ and from a survey of Massachusetts families with children 3 to 4 years of age.⁸

To incorporate estimates of the impact of financial assistance that lowers families' out-of-pocket costs for child care expenditures on child care usage and parents' employment, several studies from the literature were used to simulate these effects.⁹ Because the literature provides a wide range of estimates on employment, the simulator incorporated assumptions related to the impact of increased earnings net of out-of-pocket child care costs on parental employment and hours of work using the 2015-19 Massachusetts PUMS data. The simulator uses impacts in the mid-range which is consistent with that literature.

This study is focused primarily on licensed care provided in early education and care centers, by family child care providers, and by organizations that provide out-of-school time activities for school-age children. Please see Glossary (Table 2 in Appendix) for relevant definitions. While the simulator also estimates Head Start and Public Pre-K usage, these are not reported here. This is, among other reasons, because these programs are at or close to current capacity and it is anticipated that new demand for child care and early education will largely be provided by licensed centers, non-school organizations, and family child care providers.

The estimates from the simulator have several limitations:

1. Child care usage behavior is based on survey data (the NSECE household survey) and therefore is subject to sampling and non-sampling error.
2. The NSECE does not identify state geographies. Therefore, the simulated behavior may not be representative of Massachusetts. The NSECE survey provides regional identifiers and these were used to adjust the constant terms of behavioral models.
3. The NSECE household survey asks about only out-of-pocket costs, so information on financial assistance that families may already be receiving is not available.
4. The NSECE survey reflects child care activity during a week in the spring and therefore may not represent annual average usage.
5. The NSECE survey was conducted in 2019 and current usage may differ from 2019 usage.
6. Academic studies on the effects of financial assistance for child care differed by methods and settings, providing a range of impact estimates and varying degrees of threats to validity.

The simulator will be updated as additional information on child care usage—particularly in Massachusetts—and the impacts of financial assistance on child care usage and employment become available.

WHICH FAMILIES ARE ELIGIBLE?

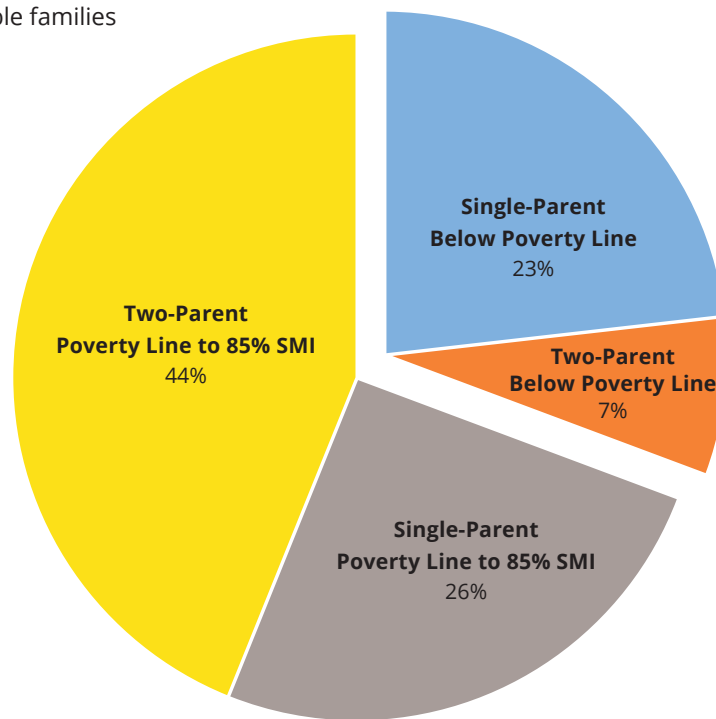
The estimates presented in this brief are based on eligibility and financial assistance guidelines set forth in Massachusetts Senate Bill 301 [S. 301]. This legislation specifies that all children under age 14 (and those under 16 with special needs) are covered if a family meets income eligibility requirements. S. 301 specifies several eligibility levels of family income, depending on available funding. The initial level of income eligibility is set at 85% of state family median income (SMI), which is used in all estimates prepared for this brief.

As is the case with current child care subsidies, the bill specifies that families with incomes below the federal poverty line would not pay anything (or are fully reimbursed) for licensed child care. Families with up to 85% of state median income incur an out-of-pocket cost of up to 7% of their income above the poverty line for licensed child care costs. Income thresholds for the poverty line and SMI vary by family size¹⁰ and Table 3 in the Appendix provides 2019 levels of SMI, 85% of SMI, and federal poverty guidelines by family

size. In 2019, 85% of SMI for a family of three is \$81,264 and the poverty income threshold is \$21,330. Therefore, as an example, a family of three with an income of \$50,000 would pay no more than \$2,007¹¹ annually for licensed child care and early education for their children under 14, or under 17 with special needs.

Using these eligibility criteria, it is estimated that 315,400—just about half—of the 624,000 Massachusetts families with children under 14 (or under 17 with special needs) meet the income eligibility requirements under the legislative proposal [S. 301]. Because single-parent families have much lower incomes on average than two-parent families, 87% of all single-parent families are income eligible while 36% of two-parent families are eligible. Still, because 72% of all families with age-eligible children are two-parent families, they comprise just over half of all income-eligible families. As depicted in Figure 1, most eligible families (70%) have incomes above the poverty income threshold.

Figure 1. Distribution of Eligible families



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

Of those families that are income eligible under the legislative proposal [S.301], it is estimated that 128,500—40.7% of all income-eligible families—will use financial assistance, accounting for 47% of all families that pay for care and one-third of all families that use nonparental care. It may seem surprising that close to 60% of eligible families would not use the newly available financial assistance. However, many families with incomes at or below 85% of SMI may already be receiving child care financial assistance through a voucher, or have a child attending Head Start or Early Head Start, enrolled in a public Pre-K program, or participating in a subsidized out-of-school program.¹² Other families might prefer to provide only parental or unlicensed care by a relative or someone else in their own home. Income-eligible families receiving financial assistance have slightly lower average incomes, are much more likely to have a child younger than school-age, and pay a much higher percentage of their income toward child care costs as compared to eligible families who do not take advantage of the financial assistance under the provisions of the legislative proposal [S.301]. Table 4 in the Appendix provides more detailed information about all families, eligible families, and eligible families by receipt of financial assistance.

KEY IMPACT: MORE CHILDREN RECEIVE LICENSED CARE

How many children would receive licensed child care and early education under the legislative proposal [S. 301]? This is perhaps the most fundamental question addressed in this study. There is substantial evidence about the benefits of receiving quality child care and early education,¹³ yet many children do not have access to such care and education given the unmanageable cost burden it imposes on many families living in the Commonwealth.

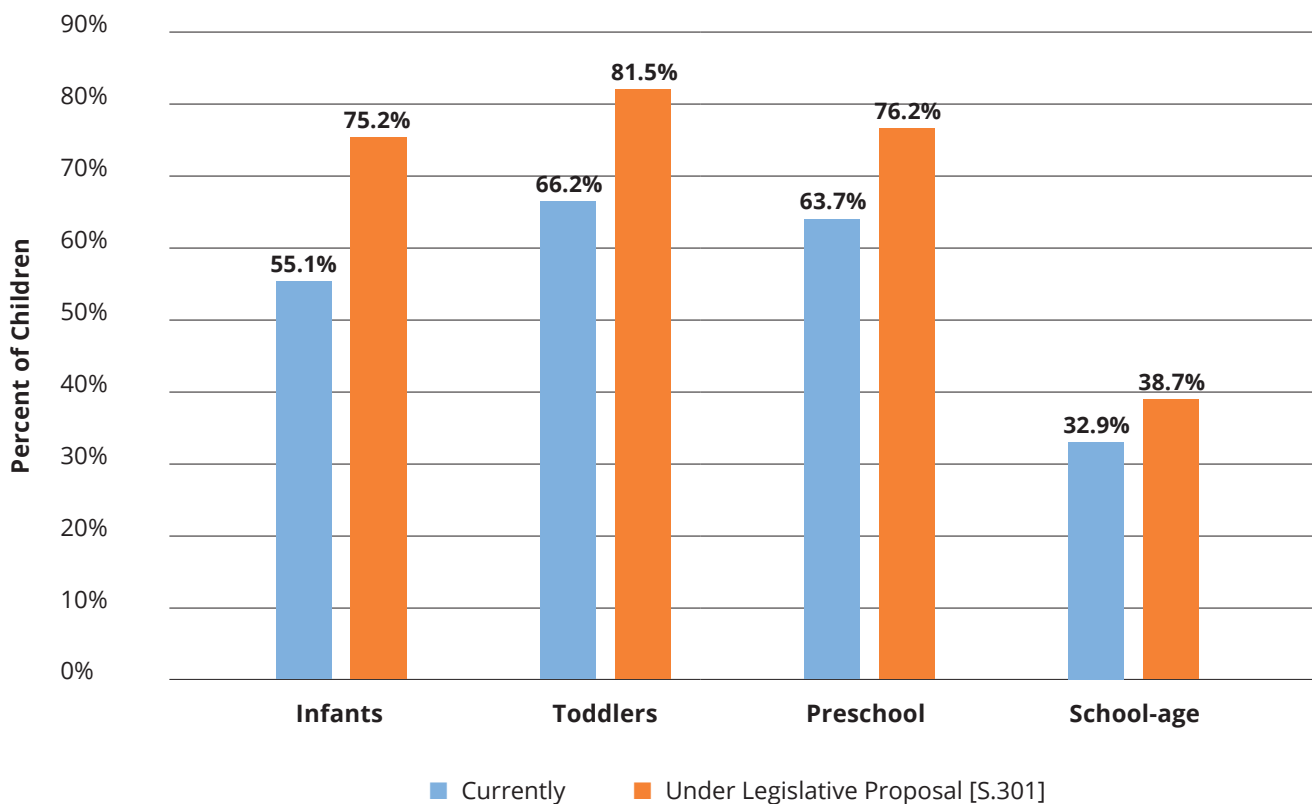
The proposed legislation [S. 301] under analysis in this brief is clear in its intent to ensure that high-quality care and education is provided to children, through quality standards and sufficient operational funding, with appropriate levels of compensation and benefits for educators. The simulator estimates both the increase in current usage of licensed care as well as new usage, as parents shift from parental only care or unlicensed care to licensed care. While the simulator generates estimates of licensed care, it does not incorporate or indicate quality measures aside from

child care licensure, which is a critical element of quality care according to the literature.¹⁴

Because the type and cost of licensed care parents find is shaped by the age of their child, estimates here are broken down by age in two ways: 1) school-age and under school-age children; and 2) for those children not yet school-age, by age group (infant, toddler, preschool). Please refer to the Glossary (Table 2 in the Appendix) for age definitions used in this brief.

Massachusetts has just under 624,000 families with just over 1 million children under age 14 (or under 17 with special needs). Approximately 631,000 children are school-age children while 408,000 children are under school-age. Most children currently receive some type of nonparental care, including 70% of children who are not school-age and 43% of school-age children. Of children receiving nonparental care, just under 63% of children under school-age and one-third of school-age children receive licensed care and education.

Figure 2. Percent of Children in Nonparental Care That Use Any Licensed Care Currently and Under Legislative Proposal [S.301]

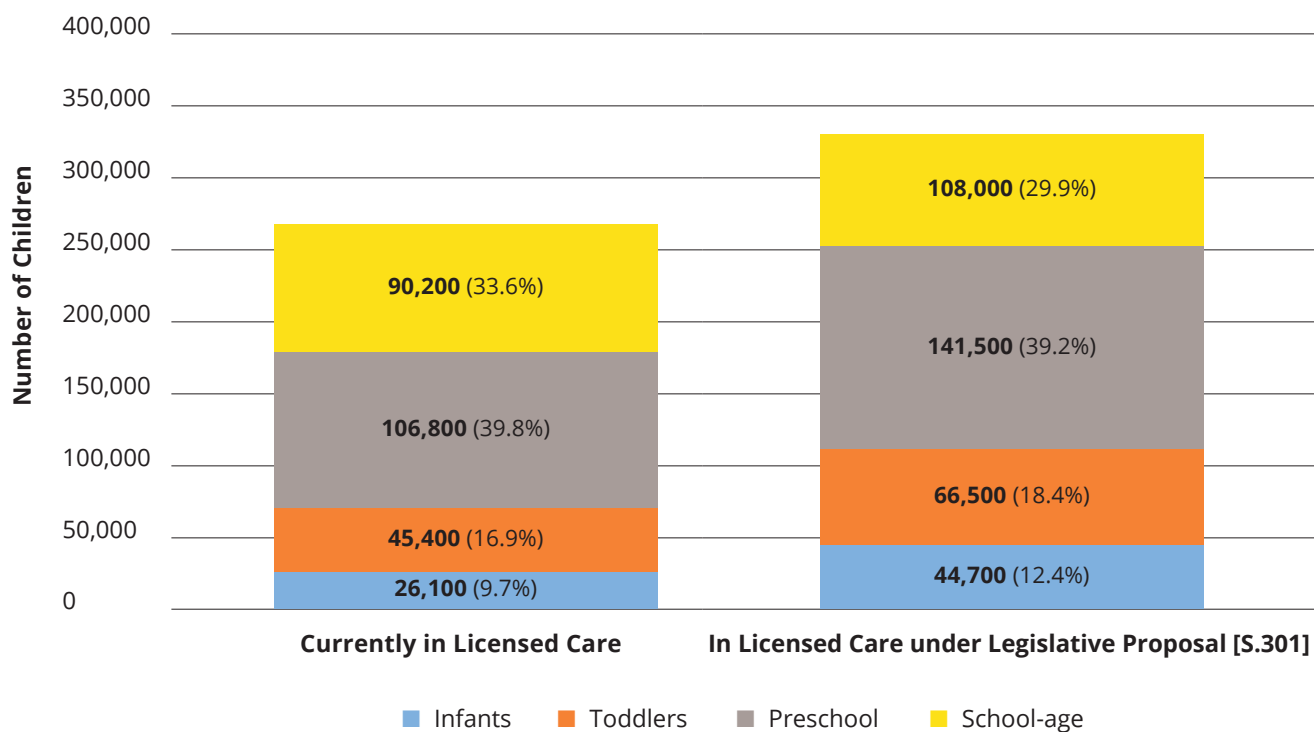


Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

The legislative proposal [S. 301] that helps families pay for licensed child care will encourage families that rely only on parental care or on another type of unlicensed care to use licensed care. As Figure 2 shows, among families that currently use nonparental care, there is a large increase in the percentage of families that would choose to use licensed care due to the availability of financial assistance under the legislative proposal [S. 301]. This increase in licensed care usage is most pronounced for children not yet school-age: up from 55% to 75% for infants; from 66% to 82% for toddlers; and from 64% to 76% for preschool children.

The total increase in the number of children who will use any licensed care and education is 92,100 (a 34% increase). Figure 3 shows the number of children in licensed care currently and under the legislative proposal [S. 301] by age of child. Because children use more than one kind of care, the numbers in center-based and family child care add up to more than the number of children in that age group as depicted in Figure 3.

Figure 3. Children in Any Licensed Care Currently and Under Legislative Proposal [S. 301]



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

Table 1. Licensed Care Usage by Child Age, Excluding Head Start and Public Pre-K

Usage by Age	Currently	Under Legislative Proposal [S. 301]	Additional Children in Licensed Care	Percent Change
Total Infants	29,500	52,400	22,900	77.8%
Center-based	22,500	43,400	20,900	92.9%
Family Child Care	7,000	9,000	2,000	29.2%
Total Toddlers	53,100	81,100	28,000	52.7%
Center-based	42,300	67,800	25,600	60.6%
Family Child Care	10,900	13,200	2,400	21.8%
Total Preschool	126,100	173,200	47,200	37.4%
Center-based	111,200	155,700	44,500	40.1%
Family Child Care	14,900	17,500	2,600	17.7%
Total School-age	95,300	115,800	20,500	21.5%
Organization	79,700	91,300	11,600	14.5%
Family Child Care	15,600	24,500	8,900	57.2%

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

Note: Numbers have been rounded; therefore, some totals may not add up. Because children use more than one kind of care, the numbers in center-based and family child care add up to more than the number of children in that age group.

Table 1 provides a breakdown of licensed care estimates by age group and by center-based and family child care providers. 47,200 additional preschool children are estimated to be in licensed care, with the majority of those in center-based care and education. The next largest age group in terms of the number of additional children in licensed care is toddlers at 28,000.

The greatest impact of the legislative proposal [S. 301] will be on families that can least afford that care now. The average income of families eligible for financial assistance under the legislative proposal [S. 301] is \$41,000, assuring that it will disproportionately improve child care and early education options for those with the fewest options currently. Eighty-five percent of income-eligible families that use financial assistance under the provisions of the legislative proposal [S. 301] have a child who is not yet school-age, targeting funds primarily to young children.

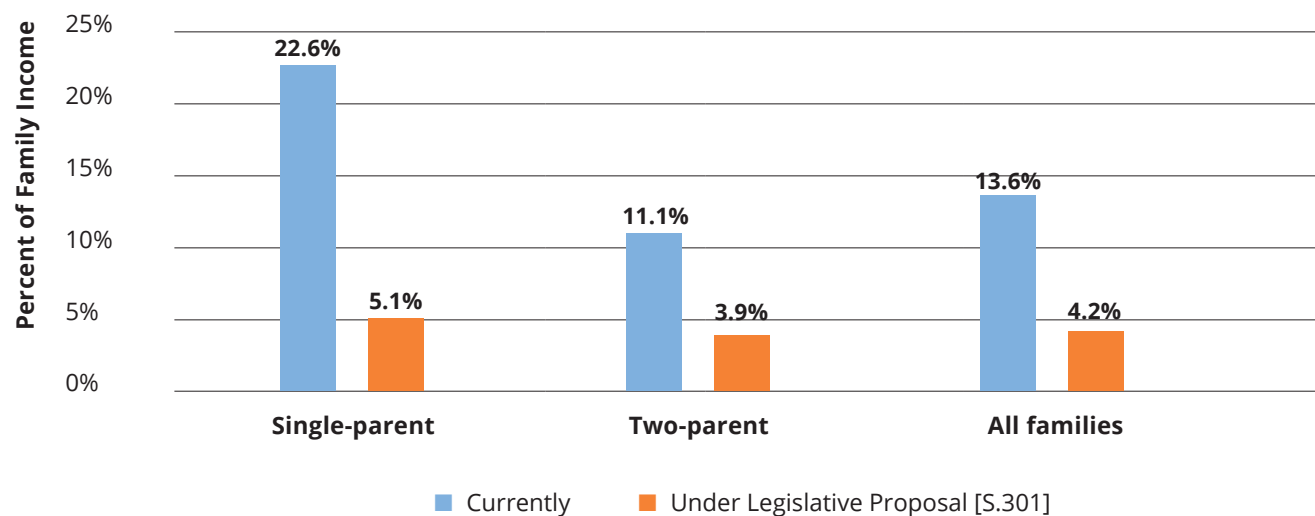
KEY IMPACT: REDUCED COST BURDEN ON FAMILIES

Massachusetts is one of the highest-cost states when it comes to child care and early education.¹⁵ Currently, 59.3% of all families with a child under 14 (or 17 if a child has special needs) use nonparental care, with 33.6% paying for that care. For those families that do pay for care, the simulator estimates the average amount annually is \$19,800 (in 2022 dollars).¹⁶

- For all income-eligible families with children who are not yet school-age the legislative proposal [S. 301] reduces all child care costs (licensed and unlicensed) as a percentage of income from 13.6% to 4.2% (see Figure 4).

Under the legislative proposal [S. 301], financial assistance would be provided to 128,500 families. And while this covers 20.6% of all families with children, financial assistance reaches almost one-third (31.9%) of all families using any type of nonparental care and almost half (47.3%) of all families that pay for that care. The average amount a family receiving financial assistance from this program is \$13,260 (using 2022 prices).

Figure 4. Child Care and Early Education Costs as Percent of Family Income for Families with Income up to 85% SMI with Child Younger than School-age, Currently and Under Legislative Proposal [S.301]



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

- Poor single-parent families with a child who is not yet school-age—75% of all poor families with children—currently pay 38.6% of their income toward all child care. Under the legislative proposal [S. 301], that would fall to 8.5%.
- For families with children who are not yet school-age and with income between the poverty line and up to 85% of SMI, the legislative proposal [S. 301] reduces child care costs from 12.2% to 4.1% of income.
- For income-eligible families that use financial assistance under legislative proposal [S. 301], the percentage of income that goes to child care is reduced from 17.2% to 4.3%.
- For single parents who use financial assistance and whose youngest child is not yet school-age the cost burden is reduced from 24.7% of income to 3.7% and for two-parent families that burden falls from 16.3% to 4.8%.

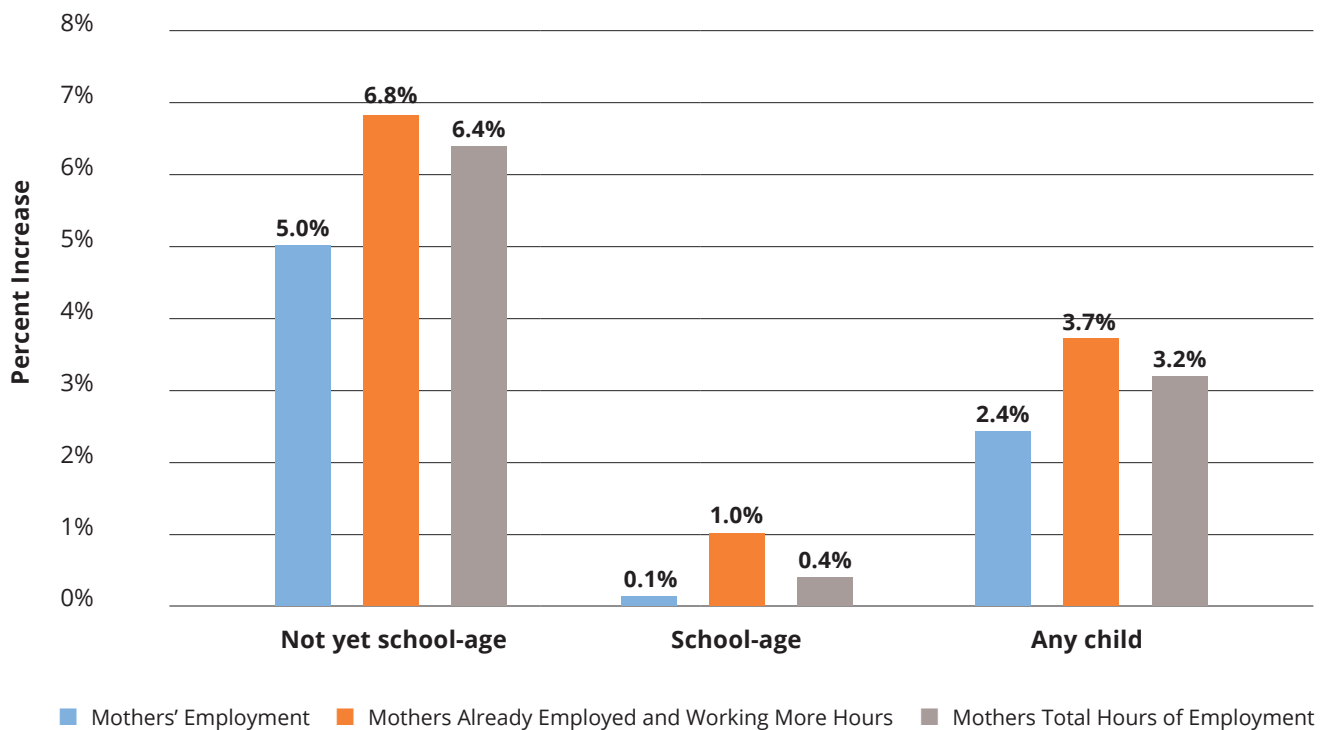
The aggregate costs to the state for providing financial assistance to families are \$1.70 billion.

KEY IMPACT: INCREASED PARENTAL EMPLOYMENT

There is a substantial body of research that shows how parents', especially mothers', employment decisions change when licensed care is subsidized.¹⁷ This happens for two main reasons. First, when the cost of care falls, the gains from being employed are considerably higher, so it becomes more worthwhile to enter the labor force or to work more hours. Second, research shows that licensed care is often much more reliable than unlicensed care—which is what many

parents can afford with child care financial assistance. This reliability allows for more stable employment opportunities. After consulting the literature on employment effects of subsidizing care, as detailed in the Methods section, the team estimated the increases in new employment in the labor market and increases in the hours of those already employed under the legislative proposal [S. 301].

Figure 5. Percent Increase in Employment, Already Employed and Working More Hours, and Total Hours of Employment of Mothers Due to Legislative Proposal [S.301], by Age of Youngest Child



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

- Of the over 1 million parents living with their children under 14 or younger (or 17 with special needs) in the Commonwealth, 584,000 (55%) of parents are mothers and 473,000 (45%) are fathers (seventy-two percent of all families are two-parent families, while 28% are single parents). Currently 83% of all these parents are employed. Fathers have a higher employment rate (i.e. the number of employed fathers as a percent of all fathers) at 91.4% with an employment rate of mothers of 74.2%.
- With financial assistance provided for quality child care and early education, fathers' total employment changes very little (by less than 1,000), but mothers' employment increases by 10,400—from 74.2% to 76.0% of mothers being employed.
 - The increase in mothers' employment rate is greatest for mothers whose youngest child is not yet school-age (so either an infant, toddler, or preschooler)—from 70.5% to 74.0%.

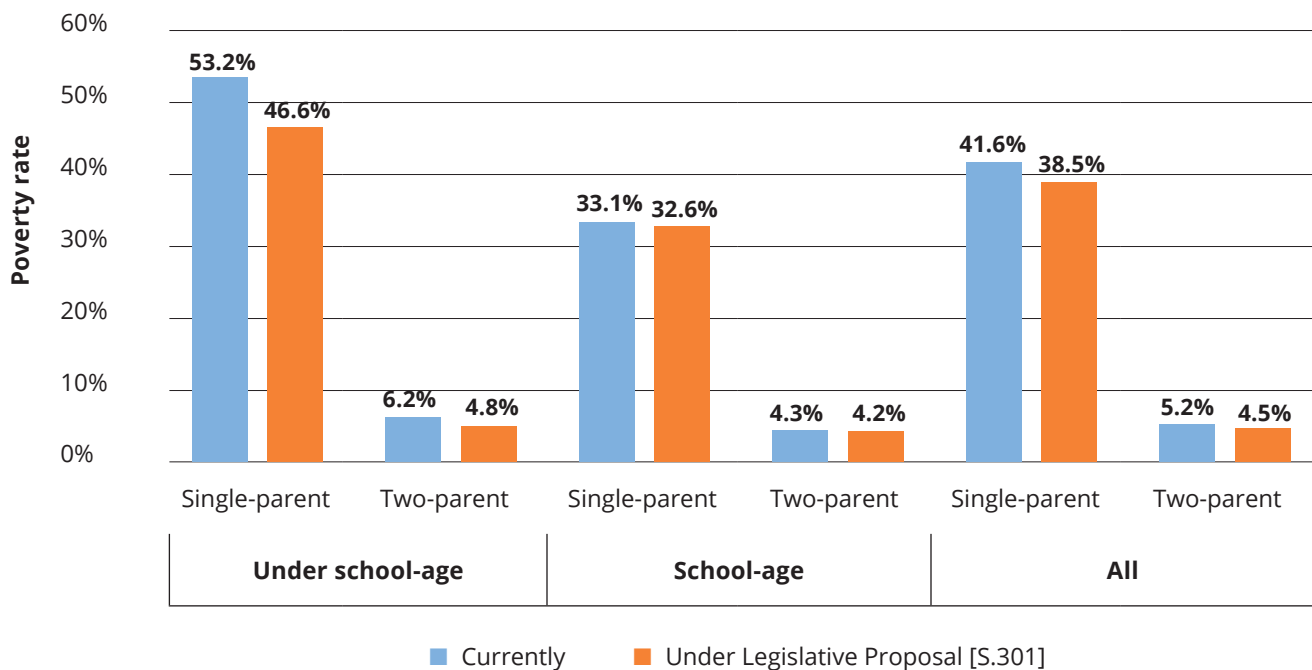
- In addition to new employment, 21,000 currently employed parents will increase the number of hours worked representing 1.3% of currently employed fathers and 3.7% of currently employed mothers. Parents whose youngest child is not yet school-age will see larger increases (2.3 percent increase for fathers and 6.8 percent increase for mothers) in the number of hours worked.
- Because of higher employment levels and more working hours, there will a 1.7 percent increase in the total number of hours that all parents work: a 0.5 percent increase in fathers' total hours and a 3.2 percent increase in mothers' total hours.
- Figure 5 depicts three types of changes in maternal employment by age of youngest child:¹⁸
 - 5.0% increase in mothers' total employment (the increase in the number of mothers employed under the legislative proposal [S. 301] as a percent of those currently employed)
 - 6.8% increase in the number of mothers already employed who increase their hours worked under the legislative proposal [S. 301] (the additional mothers working more hours divided by the number of mothers working)
 - 6.4% increase in the total number of hours of work for newly employed mothers and those working more hours (the total increase in hours worked by mothers divided by total mothers' hours worked currently)

KEY IMPACT: POVERTY RATE REDUCTION

When parents work more, they earn more. As a result, some families will earn enough to exit poverty. In Massachusetts, the poverty rate of families with children under 14 (and under 17 if a child with special needs) is 15.5%—that is, 15.5% of such families have income below the poverty line.¹⁹ Single-parent families, with one adult who is both the primary breadwinner and caretaker in families, face a poverty rate of 41.6% compared to that of 5.2% for

two-parent families. All of these families are eligible for financial assistance through the legislative proposal [S. 301]. The parental time and costs associated with care for younger children tend to be greater than they are for school-age children. These demands shape mothers' employment options and, as a result, families with young children, especially single-parent families, are poorer than families whose youngest child is school-age.

Figure 6. Poverty Rates Currently and Under Legislative Proposal [S.301] by Type of Family and Age of Youngest Child



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

Figure 6 depicts poverty rates for all single-parent and two-parent families and by age of youngest child currently and under the provisions of the legislative proposal [S. 301].

In terms of all eligible families, no matter the age of the child:

- For all families, access to affordable quality child care and early education under the legislative proposal [S 301] reduces family poverty rates by 1.3 percentage points to 14.1%.
- For all single-parent families, poverty rates fall to 38.5% and the two-parent poverty rate is reduced to 4.5%.

And while 50% of all eligible families have a youngest child who is not yet school-age, 87% of poor families that use financial assistance do. As a result of the increased child care and early education opportunities, these parents are more likely to increase their employment than other parents, hence there is a much larger reduction in poverty among families with young children. In addition, estimates demonstrate the following:

- There is a 6.6 percentage point reduction in poverty rates for single-parent families whose youngest child is not yet school-age to from 53.2% to 46.6% (a 12.4% decrease in the number of such families in poverty).
- Two-parent family poverty rates are much lower compared to single-parent family poverty rates, but for two-parent families with young children, there would be a decrease in them as well under the legislative proposal [S. 301] from 6.2% to 4.8% (a 22.6% decrease in the number of such families in poverty).

CONCLUSION

Quality child care and early education matters for children's development. But it is expensive for families, despite the relatively low compensation rates for early childhood and out-of-school time educators. For far too many families in Massachusetts the cost is prohibitive, especially for infants, toddlers, and preschool children.

The estimates presented in this brief suggest that financial assistance would effectively enable more children access to licensed care as well as substantially reduce the cost burden on families. Additionally, because parents would be able to afford reliable care, a portion of them, especially mothers of young children, would be able to engage in more employment opportunities. The additional earnings will provide more resources for their families and it will lift some families, especially single-parent families, out of poverty.

The UMass Boston CUSP will offer additional analyses in the coming months to inform policy-making processes as Massachusetts lawmakers consider greatly enhanced public investment in child care and early education for children, families, and the Commonwealth's economy.

Table 2. Glossary of Key Terms

This table defines key terms used in this brief. For many of the key terms, the brief adopts definitions used by the Massachusetts Department of Early Education and Care, as indicated by an asterisk.

Term	Definition
Policy Status	
Current	Current early care and education system conditions in the Commonwealth of Massachusetts, including services supported by federal programs such as Child Care and Development Fund (CCDF) and Head Start.
Under Legislative Proposal [S. 301]	Policy proposal to provide affordable and accessible high-quality early education and care to promote child development and well-being and support the economy in the Commonwealth, based on provisions of Senate Bill 301 under consideration by the Massachusetts 193rd General Court. The analyses presented in this brief are based on the following income eligibility requirement: at or below 85% of the State Median Income (SMI).
Children and Families	
Child	Using the U.S. Census Bureau’s age and relationship codes on the PUMS, a child is a person under 18 years of age who is a: child in a subfamily; biological, adopted, or stepchild of the household head; grandchild, other relative, or foster child of the household head.
Eligible Child	For the purposes of cost and usage estimates generated for this brief, “eligible child” is a child who is under 14 years of age; or under 17 if they have a disability indicated on the PUMS. Massachusetts legislation S. 301 limits eligibility of children with a disability to under 16 years of age, unless they turn 16 during the school year, in which case they remain eligible until the end of the school year.
Infant*	Any child 0-14 months old
Toddler*	Any child 15-32 months old
Preschool Child	Any child 33 months to 5 years 8 months old <i>MA EEC Definition: Any child at least two years and nine months old but not yet attending first grade</i>
Pre-K Child	A child typically aged 4 or 5 during the year prior to kindergarten entry
School-Age Child	<ul style="list-style-type: none"> • A child aged 5 years 9 months or older • Five years 9 months and older was used as defining school-age because the probability of a child being in a K-8 setting rose sharply at this age threshold in the 2019 NSECE household survey. The 2015-19 PUMS for Massachusetts estimates that 36,734 children in kindergarten were 5 years old and 33,444 children were 6 years old (4,736 were younger than 5 and 1,219 were older than 6 in the PUMS). • <i>MA EEC Definition: A kindergarten child, or a child who is attending a public or approved private elementary school</i>

Parent / Caregiver	<p>Using the U.S. Census Bureau's relationship codes on the PUMS, a parent is someone who has 1 or more children in the household and is: the head of the household, an opposite sex or same sex husband/wife/spouse/unmarried partner of the household head, or a husband or wife in a subfamily with children, or a parent in a subfamily with children.</p> <p>Caregivers include grandparents or household heads when the child has no other identifiable parents but is a grandchild or other relative of the household head.</p> <p><i>MA EEC Definition: Father or mother, guardian, or person or agency legally authorized to act on behalf of the child in place of, or in conjunction with, the father, mother, or guardian</i></p>
Family	A family consists of the children and their parents or caregivers and has at least one "eligible" child as defined above
Income-Eligible Family	Family with one or more children whose family income is at or below 85 percent of State Family Median Income (SMI) for a family of its size or is below the poverty threshold; Income is the sum of the parents' incomes and does include the income of other family or household members

Care Types

Family Child Care	<p>Child care and early education provided by an individual that takes place in a private residence outside the parent's home where the provider does not have a prior relationship to the parent and is not a center or organization, using the definitions from the 2019 NSECE household survey</p> <p><i>MA EEC Definition: Temporary custody and care provided in a private residence during part or all of the day for no more than ten children younger than 14 years old or children younger than 16 years old if such children have special needs. Family child care shall not mean an informal cooperative arrangement among neighbors or relatives, or the occasional care of children with or without compensation therefore.</i></p>
Center-based	<p>Child care and early education that takes place in a center-based early care and education (ECE) setting, using the definitions from the 2019 NSECE household survey</p> <p><i>MA EEC Definition: [Child Care Center] Any facility operated on a regular basis whether known as a day nursery, nursery school, kindergarten, child play school, progressive school, child development center, day care center, pre-school, or known under any other name which receives children, not of common parentage, younger than seven years old, or younger than 16 years old if such children have special needs, for non-residential custody and care during part or all of the day separate from their parent(s). Child Care center shall not include: any part of a public school system; any part of a private organized educational system, unless the services of such a system are primarily limited to kindergarten, nursery or related pre-school services; a Sunday school conducted by a religious institution; a facility operated by a religious organization where children are cared for during short periods of time while persons responsible for such children are attending religious services; a family child care home; an informal cooperative arrangement among neighbors or relatives; or the occasional care of children with or without compensation therefore</i></p>
Head Start Early Head Start	<p>Child care and early education that is provided by a Head Start program as defined in the 2019 NESCE household survey</p> <p>Head Start and Early Head Start are federal programs that provide funding for children ages 0-5 from low-income families to receive quality early education services.</p>
Public PreK	Child care and early education that is provided by a public pre-kindergarten as defined in the 2019 NSECE household survey
Organizational Care	Child care and early education that takes place in an Other Organizational ECE setting, using the definitions from the 2019 NSECE household survey

Licensed Care	Center-based child care and early education, other organizational early care and education, and family child care, as defined in the 2019 NSECE household survey (see above) that is covered by a license to operate issued by a state or territory government
Unlicensed Care	Child care and early education provider that does not have a license to operate issued by a state or territory government. This can be paid as is the case with some in-home care (e.g. nanny) or can be unpaid.
Nonparental Care	Child care that is provided by someone who is not the child’s parent, guardian, or grandparent if there is no parent or guardian in the household. It is one of the forms of care defined above.
Child Care and Early Education	Child care and early education services provided to any person younger than 14 years old, or 16 years old with special needs

Income, Funding, and Costs

Poverty Line	The federal government’s poverty income guideline set annually by the U.S. Department of Health and Human Services; Levels for 2019 are reported in the Appendix and vary by family size; Family size is the number of parents (as defined above) and number of children 18 and under.
State Family Median Income (SMI)	The term poverty line is used interchangeably with the term poverty income guideline. The median level of family income by family size in Massachusetts as determined annually by the U.S. Department of Health and Human Services (HHS) for purposes of determining eligibility for the Low Income Home Energy Assistance Program (LIHEAP). The Massachusetts Department of Early Care and Education also uses this determination. HHS uses the 5-year American Community Survey to calculate SMI for a family of four and then uses a set formula to calculate SMI for families of different sizes. Massachusetts SMI levels for 2019 are reported in Table 3 in the Appendix.
Family Income	The total income of parents (using definition of family above); A parent’s income is the PUMS concept total person’s income, which includes income from wages and salaries, self-employment, interest, dividends, and rent, retirement, social security, supplemental security, public assistance, and all other income (alimony, child support, gambling, etc.)
Family Out-Of-Pocket Cost	Any child care and early education costs incurred by a family associated with any forms of nonparental care.
Family Financial Assistance	Funding assistance to licensed providers as set forth in Senate Bill 301 to cover all or a portion of fees for care and education of children in income-eligible families; Such provisions delineate that families with income of no more than the federal poverty guideline pay 0% of their income for fees, and those above the poverty line but at or below 85% shall pay 7% of their income above the poverty line.

Sources:

- [606 CMR 7: Department of Early Education and Care](#)
- [NSECE 2019 Household Survey](#)
- [MGL Chapter 15D](#)
- [Senate Bill 301](#)

Sources & Endnotes

1. Strategies for Children, Inc. and Rennie Center for Education Research & Policy (2008, April). A Case Study of the Massachusetts Department of Early Education and Care. www.strategiesforchildren.org/doc_research/08_Rennie_Case.pdf
2. The Common Start Coalition is a “statewide partnership of organizations, providers, parents, early educators and advocates working together to make high-quality early education and child care affordable and accessible to all Massachusetts families.” The Coalition advocates for a system that provides “affordable care options for families; significantly better pay and benefits for early educators; a new, stable source of funding for providers; high-quality programs and services for children; and substantial relief for businesses and our economy.”
3. See for example the following:

Cascio, E. (2021). Early childhood education in the United States: What, when, where, who, how, and why. *National Bureau of Economic Research Working Paper 28722*. www.nber.org/system/files/working_papers/w28722/w28722.pdf

Herbst, C. M. (2017). Universal child care, maternal employment, and children’s long-run outcomes: Evidence from the U.S. Lanham Act of 1940. *Journal of Labor Economics*, 35(2), 519–564. www.iza.org/publications/dp/7846/universal-child-care-maternal-employment-and-childrens-long-run-outcomes-evidence-from-the-us-lanham-act-of-1940

Herbst, C. M. (2022, November 21). Child care in the United States: Markets, policy, and evidence. *Journal of Policy Analysis and Management*, Vol. 42, No. 1, 255–304. <https://onlinelibrary.wiley.com/doi/abs/10.1002/pam.22436>

Pilarz, A. Ros. (2018). Child care subsidy programs and child care choices: Effects on the number and type of arrangements, *Children and Youth Services Review*, 95: 160-173. www.sciencedirect.com/science/article/abs/pii/S0190740918304651?via%3Dihub

Ryan, R. M., Johnson, A., Rigby, E., & Brooks-Gunn, J. (2011). The impact of child care subsidy use on child care quality. *Early Childhood Research Quarterly*, 26(3), 320–331. <https://doi.org/10.1016/j.ecresq.2010.11.004>
4. See for example, Massachusetts Taxpayers Foundation (2022) The Untold Cost of Inadequate Child Care, retrieved at <https://www.mass-taxpayers.org/untold-cost-inadequate-child-care>.
5. The bill also provides operational funding to providers to improve the quality of care for all children. The simulator is not designed to estimate the cost of quality care, however, the results do provide an estimate of how many more children would demand licensed care under the provisions of the bill, how much parents pay for child care and early education, and the dollar value of financial assistance. This information can be used to assist in estimating operational costs. It is important to also note that there has been similar legislation filed in the House to expand affordable high-quality child care and early education (House Bill 489).
6. Please see www.umb.edu/earlyed/institute/research-policy/
7. Through a data sharing agreement with the Massachusetts Department of Early Education and Care (EEC), the team utilized a May 2022 dataset of all EEC licensed programs as well as EEC-funded programs.
8. Jones, S. M., Lesaux, N. K., Gonzalez, K. E., Hanno, E. C., & Guzman, R. (2020). Exploring the role of quality in a population study of early education and care. *Early Childhood Research Quarterly*, 53, 551–570. <https://doi.org/10.1016/j.ecresq.2020.06.005>
9. These included Borowsky, J., Brown, J. H., Davis, E. E., Gibbs, C., Herbst, C. M., Sojourner, A., Tekin, E., & Wiswall, M. J. (2022, June 13). An equilibrium model of the impact of increased public investment in early childhood education. *National Bureau of Economic Research*. www.nber.org/papers/w30140; Berlinski, S., Ferreyra, M. M., Flabbi, L., & Martin, J. D. (2020, January). Child care markets, parental labor supply, and child development. IZA. www.iza.org/publications/dp/12904/child-care-markets-parental-labor-supply-and-child-development; Pilarz, A. R. (2018, October 10). Child care subsidy programs and child care choices: Effects on the number and type of arrangements. *Children and Youth Services Review*. www.sciencedirect.com/science/article/pii/S0190740918304651; Tekin, E. (2005, October). Child care subsidy receipt, employment, and child care choices of single mothers. *Economic Letters*, 89 (1), 1-6. <https://doi.org/10.1016/j.econlet.2005.03.005>; Griffen, A. (2018). Evaluating the effects of child care polices on children’s cognitive development and maternal labor supply. *Society of Labor Economics*. www.sole-jole.org/assets/docs/14098.pdf; and Landivar, L., Scarborough, W., Collins, C. & Ruppner, L. (2022, February). Do high childcare costs and low access to Head Start and childcare subsidies limit mothers’ employment? A state-level analysis. *Social Science Research* 102, 102627. www.sciencedirect.com/science/article/abs/pii/S0049089X21001046
10. Massachusetts state family median income used here comes from the federal government and is used for LIHEAP (Low Income Home Energy Assistance Program) eligibility (U.S. Department of Health and Human Services (2019)). The federal determination of SMI is based on the most recently available Census data, which for the 2019 levels is based on data from the 2012-2016 American Community Survey. The team applies the 2019 poverty guidelines to families that consist of parents (as defined in the Glossary in Table 2 in the Appendix) with any children under the age of 18.
11. This is calculated as: $(\$50,000 - \$21,330) \times .07$.
12. The estimates presented in this brief apply to families, but there are administrative data on the number of children in subsidized arrangements. According to [Massachusetts EC101](https://www.mass.gov/info-details/massachusetts-ec101), in FY2023, nearly 53,159 children in Massachusetts receive subsidies, of whom 32,557 (61%) receive an income-eligible voucher or contract. The [Massachusetts Department of Elementary and Secondary Education](https://www.mass.gov/info-details/massachusetts-department-of-elementary-and-secondary-education) reports that 30,924 are enrolled in public Pre-K in 2022-23, while in FY2020 [Head Start](https://www.mass.gov/info-details/head-start) enrolled just under 12,000.

- 13.** Cascio, E. U., & Schanzenbach, D. W. (2014, May 1). The impacts of expanding access to high-quality preschool education. *Brookings Papers on Economic Activity*. <https://muse.jhu.edu/article/543820>; Araujo, M. Caridad, M.D., & Schady, N. (2019). Child care quality and child development. *Journal of Human Resources* 54(3), 656-682. <https://doi.org/10.3368/jhr.54.3.0217.8572R1>; Hartley, R. P., Chaudry, A., Boteach, M., Mitchell, E., & Menefee, K. (2021, March). A Lifetime's worth of benefits - The effects of affordable, high-quality child care on family income, the gender earnings gap, and women's retirement security. *National Women's Law Center*. <https://nwc.org/wp-content/uploads/2021/04/A-Lifetimes-Worth-of-Benefits-FD.pdf?ftag=YHF5b931b>;
- 14.** See for example, Maxwell, K. L., & Starr, R. (2019). The Role of Licensing in Supporting Quality Practices in Early Care and Education. *OPRE Research Brief #201931*. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. www.acf.hhs.gov/opre/report/role-licensing-supporting-quality-practices-early-care-and-education
- 15.** 15 See for example, Lurye, S. (2022, March 22). The states with the most and least affordable child care. *US News and World Report*. www.usnews.com/news/best-states/articles/2022-03-31/states-with-highest-and-lowest-cost-of-daycare; and U.S. Department of Labor, *Women's Bureau*. (2023). Childcare prices by age of children and care setting. www.dol.gov/agencies/wb/topics/childcare/price-by-age-care-setting
- 16.** The simulator estimated all costs in 2019 dollars. The team has adjusted financial assistance and out-of-pocket costs reported in this brief to 2022 dollars using the U.S. Bureau of Labor Statistics CPI-U Price Index: Day care and preschool in U.S. city average, all urban consumers, seasonally adjusted. That value from 2019 to 2022 is 8.91 percent from: *U.S. Bureau of Labor Statistics* (2023, September). Consumer Price Index, Day care and preschool in U.S. city average, all urban consumers, seasonally adjusted. <https://www.bls.gov/cpi/data.htm>
- 17.** Please see Note #9.
- 18.** The data in Figure 5 depict the percent change in mothers' employment, those working more hours, and total hours worked while the data in the text refer to the percentage point changes. Percent change in a number less than 100% will always be larger than the percentage point change. As an example, the percentage point change in employment under the proposed legislation is equal to the employment rate under the proposed legislation minus the employment rate currently. For women with young children, that is 3.5 percentage points: 74% employed with legislation (211,600 employed mothers out of 286,000 mothers) minus 70.5% currently (201,500 employed out of 286,000). The percent change in employment is the increase in the number of employed due to the change under proposed legislation divided by the current level of employment. For mothers with young children that is 10,100 divided by 201,500 or 5.0%.
- 19.** All poverty rates reported here are based on data from the 2015-2019 PUMS.

Appendix

Table 3. 2019 State Annual Median Income (SMI), 85% of SMI, and Federal Poverty Guideline for Family Sizes 2-8

Family Size	State Median Income (SMI)	85% State Median Income (SMI)	Poverty Guideline
2	\$77,394	\$65,785	\$16,910
3	\$95,605	\$81,264	\$21,330
4	\$113,815	\$96,743	\$25,750
5	\$132,025	\$112,222	\$30,170
6	\$150,236	\$127,700	\$34,590
7	\$153,650	\$130,603	\$39,010
8	\$157,065	\$133,505	\$43,430

Note: 85% SMI is calculated using U.S. Department of Health and Human Services (2018) LIHEAP State Median Income (SMI) estimates for a family of four and methodology for determining .60 SMI for families of different sizes.

Source: U.S. Department of Health and Human Services, Office of Community Services. (2018). *LIHEAP IM 2018-3 State Median Income Estimates for Optional Use in FY 2018 and Mandatory Use in FY 2019*. <https://www.acf.hhs.gov/ocs/policy-guidance/liheap-im-2018-3-state-median-income-estimates-optional-use-fy-2018-and>.

U.S. Department of Health and Human Services, Office of Assistant Secretary for Planning and Evaluation. (2019). *2019 Poverty Guidelines*. <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2019-poverty-guidelines>.

Table 4. Table 4. Comparison of Income and Poverty for All Families and Income-Eligible Families Receiving and Not Receiving Financial Assistance Under Legislative Proposal [S. 301]

Note: Table 4 was corrected on 10.26.2023 in the top row labeled “Total Families.” The numbers in that row are now accurate and the authors regret the error.

	Income-Eligible and Receiving Financial Assistance	Income-Eligible and Not Receiving Financial Assistance	All Income-Eligible	All Families
Total families	128,500	186,900	315,400	623,700
Total single-parent families	63,500	90,000	153,500	176,200
Total two parent families	65,000	96,800	161,900	447,500
Percent of families whose youngest child is under school-age	85.3%	25.4%	49.8%	48.1%
Poverty rate of families currently (percent of families with income below the poverty line)	32.9%	11.0%	15.5%	15.5%
Poverty rate of single-parent families	49.6%	37.1%	41.6%	41.6%
Poverty rate of two-parent families	16.6%	3.3%	5.2%	5.2%
Poverty rate of families under legislative proposal [S. 301]	26.3%	11.0%	14.1%	14.1%
Poverty rate of single-parent families	41.3%	37.0%	38.5%	38.5%
Poverty rate of two-parent families	11.6%	3.3%	4.5%	4.5%
Average family income currently	\$37,400	\$43,400	\$41,000	\$123,500
Single-parent families	\$23,900	\$26,100	\$25,200	\$38,600
Two-parent families	\$50,600	\$59,500	\$55,900	\$156,900
Average family income under legislative proposal [S. 301]	\$41,300	NA	\$42,500	\$124,400
Single-parent families	\$27,100	NA	\$26,500	\$39,800
Two-parent families	\$55,200	NA	\$57,700	\$157,700
Average percent of income toward child care and early education (CCEE) costs currently	17.2%	1.4%	7.3%	4.8%
Single-parent families	21.3%	1.7%	9.4%	6.6%
Two-parent families	15.3%	1.3%	9.4%	4.6%
Average percent of income toward CCEE costs currently when youngest child is under school-age	18.7%	4.3%	13.6%	9.3%
Single-parent families	24.7%	12.8%	22.6%	17.9%
Two-parent families	16.3%	3.2%	11.1%	8.8%
Average percent of income toward CCEE costs under legislative proposal [S. 301]	4.3%	NA	2.4%	4.0%
Single-parent families	3.6%	NA	2.5%	2.7%
Two-parent families	4.7%	NA	2.4%	4.2%
Average percent of income toward CCEE costs under legislative proposal [S. 301] when youngest child is under school-age	4.4%	NA	4.2%	7.7%
Single-parent families	3.7%	NA	5.1%	6.4%
Two-parent families	4.8%	NA	3.9%	7.8%

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

Note: Dollar amounts are in 2019 dollars. Total number of income-eligible receiving financial assistance and those not receiving assistance may not total to all income-eligible families due to rounding. NA is not applicable.

Table 5. Number of Children in Nonparental Care by Type of Care and Age of Child Currently and Under Legislative Proposal [S. 301]

Note: Table 5 was corrected on 10.24.2023 in the row labeled “Number of children in any unlicensed care.” The numbers in that row are now accurate and the authors regret the error.

	All Children	Infants	Toddlers	Preschool	School-Age
Total Number of Children	1,039,200	84,000	108,900	215,100	631,100

Current Nonparental Care

Number of children using any nonparental care (excludes K-8)	558,000	47,500	68,600	167,700	274,200
Number of children in any licensed care (excludes Head Start and Public Pre-K)	268,600	26,100	45,400	106,800	90,200
Number of children in any unlicensed care	363,000	31,900	42,700	66,700	221,700
Number of children using unpaid nonparental care	186,700	17,400	25,700	35,800	107,900

Nonparental Care Under Legislative Proposal [S. 301]

Number of children using any nonparental care (excludes K-8)	605,900	59,500	81,600	185,600	279,300
Number of children in any licensed care (excludes Head Start and Public Pre-K)	360,700	44,700	66,500	141,500	108,000
Number of children in any unlicensed care	331,600	27,700	37,500	57,300	209,000
Number of children using unpaid nonparental care	174,600	16,200	24,000	31,500	102,900

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) October 2023

Note: Numbers have been rounded; therefore, some totals may not add up. Because children use more than one kind of care, the numbers in center-based and family child care add up to more than the number of children in that age group.

About the Institute for Early Education Leadership and Innovation

The Institute for Early Education Leadership and Innovation at the University of Massachusetts Boston (The Leadership Institute) provides the leadership development opportunities and infrastructure that early educators need to support thriving children and families. Founded in 2016, we drive systems change by cultivating effective leaders who reflect and represent their communities—through workforce and leadership development, research, and partnerships that strengthen the larger early education ecosystem. We are nationally recognized as a model of excellence, and we make high-quality early care and education a reality for more children and families while supporting the professional growth of a diverse workforce of early educators. Get involved or learn more by visiting umb.edu/earlyed institute.

About the Center for Women in Politics and Public Policy

The Center for Women in Politics and Public Policy, established in 1994, aims to promote diverse women's leadership to achieve more just, equitable, and responsive public and institutional policies and meaningful inclusion. Through its innovative educational programs, policy-relevant research, and public forums, it works to ensure that the voices, expertise, and experiences of all women are valued and included in civic discourse and the policymaking process. The center collaborates across sectors to build a prosperous economy that increases access and opportunity for all, particularly low-wage workers and women of color. All center initiatives and research utilize an anti-racist approach and explore the intersection of gender, race/ethnicity, class, and other identities on policymaking and politics. The center is part of the McCormack Graduate School of Policy and Global Studies in the College of Liberal Arts at the University of Massachusetts Boston. Visit umb.edu/cwppp for more information.



University of Massachusetts Boston

100 Morrissey Boulevard, Boston, MA 02125-3393
617.287.5000 umb.edu