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Building a Foundation for Racial and Ethnic Equity: Estimated Impacts of Massachusetts Legislation to Expand Affordable Quality Child Care and Early Education

Randy Albelda

University of Massachusetts Boston

Alan Clayton-Matthews

Northeastern University

Anne Douglass

University of Massachusetts Boston

Christa Kelleher

University of Massachusetts Boston

Laurie Nsiah-Jefferson

University of Massachusetts Boston

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Authors

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



Building a Foundation for Racial and Ethnic Equity: Estimated Impacts of Massachusetts Legislation to Expand Affordable Quality Child Care and Early Education

RESEARCH BRIEF #2 | JUNE 2024

Center for Women in Politics and Public Policy and
Early Education Leaders Institute

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



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

The UMass Boston Early Education CUSP is led by a multidisciplinary team that designed a simulator 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 generate estimates for a range of policy parameters and provisions. The team's publications aim 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.



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 support 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 a professor of early childhood education policy and the founding executive director of the Early Education Leaders Institute (formerly 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.

Laurie Nsiah-Jefferson, PhD, MPH, MA is the director of the Center for Women in Politics and Public Policy at UMass Boston and 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.

Songtian (Tim) Zeng, PhD, is an assistant professor of curriculum and instruction in the College of Education and Human Development and director of research for the Early Education Leaders Institute. 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 several grants to support his research.

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BUILDING A FOUNDATION FOR RACIAL AND ETHNIC EQUITY: ESTIMATED IMPACTS OF MASSACHUSETTS LEGISLATION TO EXPAND AFFORDABLE QUALITY CHILD CARE AND EARLY EDUCATION

Background

In Massachusetts, the availability of quality child care and early education is limited and expensive, particularly for Black and Latino children. In part because of a long history of racial and ethnic inequities, families of color have less access to affordable, quality care than White families. While there are many reasons for this, racial segregation and discrimination have left a legacy of unequal access to public education, housing, and jobs. All of these factors, especially income, affect families' access and use of stable, quality child care and early education. Yet research shows that quality child care improves educational, social, and economic

outcomes for children. Research also demonstrates that those with financial assistance in paying for care choose higher quality care than those without such assistance. Proposed Massachusetts legislation to provide financial support for families that cannot otherwise afford licensed care should reduce racial and ethnic disparities in access to licensed care which, over time, has the potential to level the educational and economic playing fields. It can also pave the way for both increased and more stable employment for parents, especially single mothers of color, which in turn boosts the economic status of families, lifting some out of poverty.

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

A multi-disciplinary UMass Boston team of researchers through the Early Education Cost and Usage Simulator Project (CUSP) seeks to better understand some of the impacts of expanding financial assistance to families for child care and early education. The team has developed and uses a statistical model that simulates parents' decisions about care usage to estimate how much more licensed care might be needed in Massachusetts and what employment and income changes may take place with increased utilization of affordable licensed quality child care and early education.

Massachusetts Legislation

Using the CUSP simulator, the team estimates the impacts of the expansion of affordable quality child care and early education by race and ethnicity 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 children's utilization of licensed care and education, the out-of-pocket costs for families with children under age 14, or under 17 with special needs, and parental employment and family 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. In March 2024, an amended version of Senate 301 passed the Senate, and it was renumbered Senate Bill 2707. The key eligibility and financial assistance parameters remain the same. The bill is referred to in this brief by its original number—Senate Bill 301—for easy tracking.

Eligibility

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]. But because the distribution of family income differs substantially between racial and ethnic groups, so does the percentage of eligible families. So while 40% of all White and Asian families are eligible for the program, 82% of Latino, 78% of Black, and 69% of Other (including multiracial) families are eligible.

Under the legislative proposal, financial assistance would be provided to 128,500 families in the Commonwealth. And while this covers 20.6% of all families with children, it reaches 33% of Latino, Black, and Other families compared to 20% of Asian and 15% of all White families with age-eligible children.

Licensed Care and Education Usage

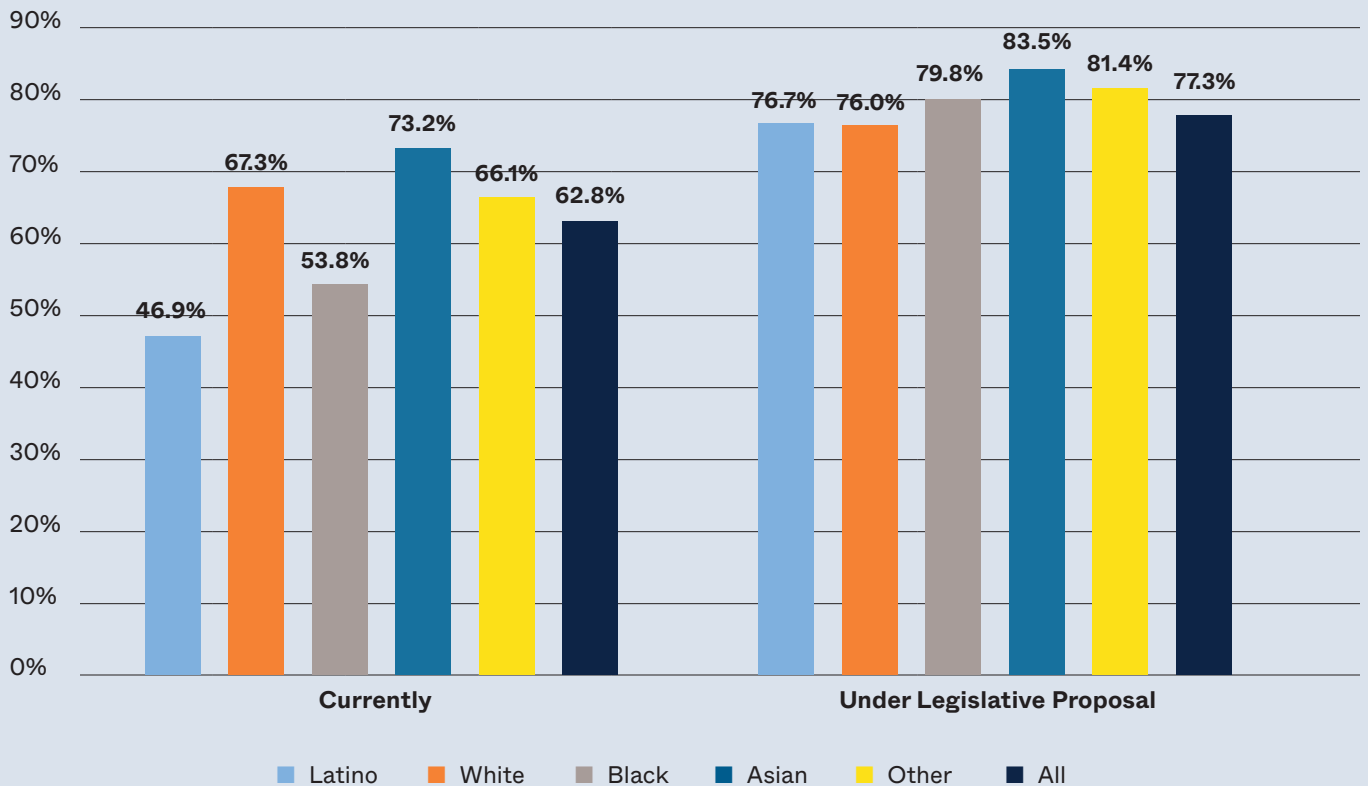
The figure below depicts the percent of children in nonparental care who use licensed care currently and under the legislative proposal for children not yet school aged.

Of all children younger than school age in nonparental care, currently 73% of Asian and 67% of White children are in licensed care compared to 54% of Black and 47% of Latino children. The largest gap—between Asian and Latino children—is 26 percentage points.

With the financial assistance in the legislative proposal, the percentage of children younger than school age (in any nonparental care) that would use licensed care increases for all groups, but especially for Black and Latino children—to 77% for Latino children and 80% for Black children. The largest gap is between Asian and White children at 7.5 percentage points.

The legislative proposal increases licensed care for children of all racial and ethnic groups and virtually eliminates racial/ethnic gaps, assuming an adequate supply of child care. Provided that parents can access education and care, the legislative proposal has an equalizing effect. Given the documented benefits of licensed care, this legislation has great potential to narrow existing racial and ethnic educational and economic gaps.

Percent of Children Younger than School-age in Nonparental Care that Use any Licensed Care Currently and under Legislative Proposal by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Cost of Child Care and Early Education

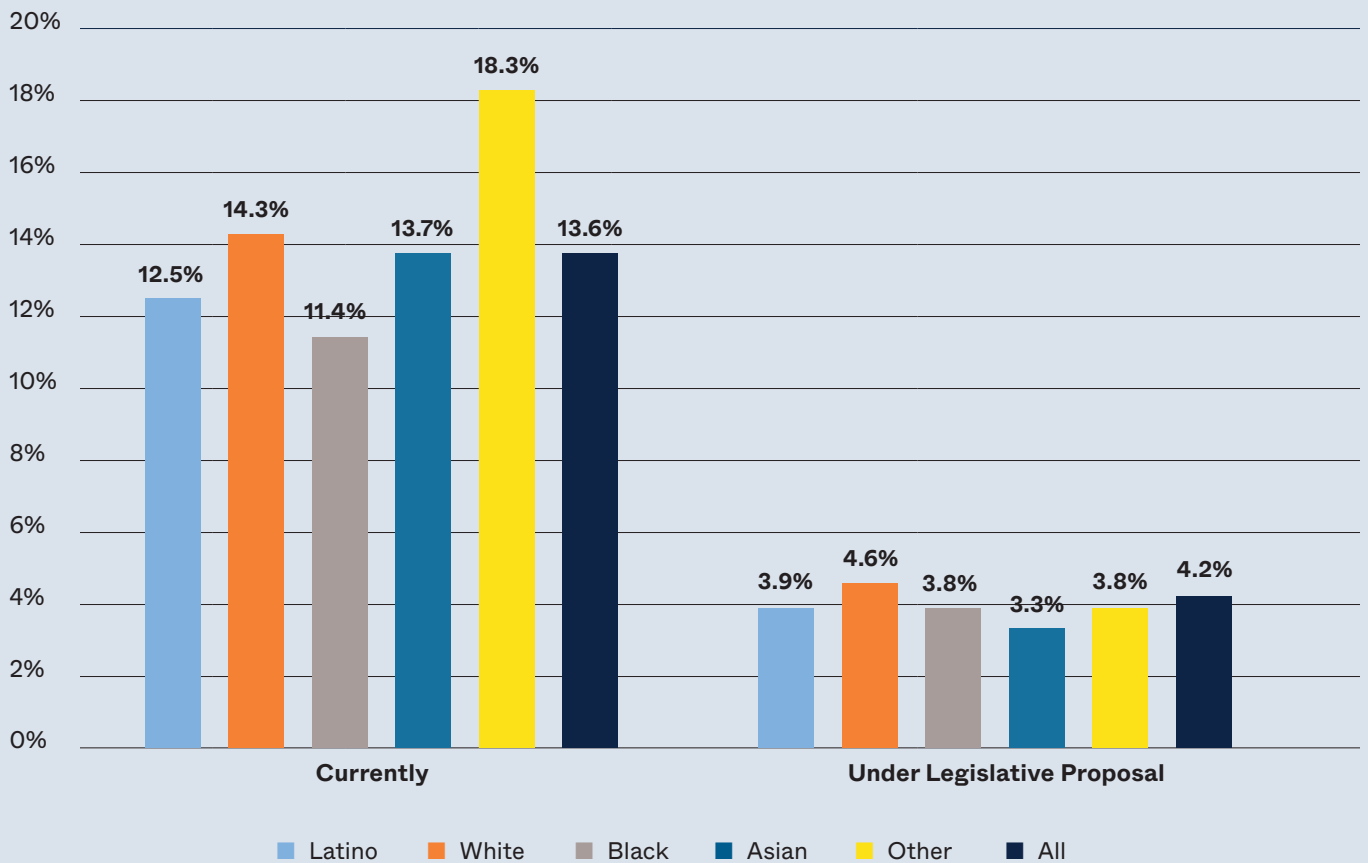
Currently, approximately 370,000 Massachusetts families (59.3% of all families) with a child under 14 (or 17 if a child has special needs) use nonparental care, with one-third paying for that care. For those families that do pay for care, the simulator estimates the average annual amount to be \$19,800 (in 2022 dollars). But the percentage of families paying for care and how much they pay vary considerably by race and ethnicity.

- 34% of Other, 36% of White, and 38% of Asian families pay for care compared to 23% of Latino and 26% of Black families. Of families with child care costs, on average, White families and Asian families currently spend just under \$20,500 annually compared to \$12,700 for Black families, \$13,700 for Latino families, and \$18,700 for Other families (in 2022 dollars). Not surprisingly, families with income at or below 85% of median state family income that pay for child care spend less ranging from \$14,300 for Other families to \$11,000 for Black families (in 2022 dollars).
- Under the legislation, the number of income-eligible families paying for care doubles, but the average cost for all income-eligible families paying for child care drops from \$13,200 to \$2,600.

Income-eligible families with a child younger than school age are paying close to 14% of their income toward child care costs, ranging from 18% for Other families to 11% for Black families.

- As depicted in the figure below, there would be a reduction in the percentage of family income going toward child care, ranging from 3.3% for Asian families, 3.8% for Black families, 3.9% for Latino families, and 4.6% for White families, indicating a decrease in racial and ethnic disparities in income going to care and education.

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 by Race/Ethnicity, Currently and Under Legislative Proposal [S.301]



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Parental Employment

- Employment rates for mothers of all racial and ethnic groups increase with the proposed legislation, with Latina and Other mothers seeing the largest increases.
- 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.
- Black mothers would experience the largest percentage increase in the number of hours worked (6.2%), followed by Latinas at 5.8% and 5.4% for Other mothers under the legislative proposal.
- Other and Latina mothers see the largest overall increase in total hours worked (at 7.0% and 6.8% respectively).

Equalizing Effect of Financial Assistance

The estimates presented in this brief suggest that financial assistance would go a long way in leveling the playing field of licensed care usage. Given the range of documented benefits of licensed care, the legislative proposal has the potential to make important strides in reducing racial inequalities currently prevalent in accessing quality child care and early education. However, to effectively address racial inequality in access to care and education, the care must be available and of equally high quality as that available to White children. Neither of these are directly addressed in the current Massachusetts legislation, making it vital for policymakers, advocates, and child care and early education administrators to take into account differential access and quality in the proposal's implementation.

Poverty Reduction

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

- Poverty rates differ substantially by race and ethnicity, with one-third of all Latino families living at incomes at or below the poverty income threshold, compared to just under 10% of White families.
- For families of all racial and ethnic groups, access to affordable quality child care and early education under the legislative proposal reduces family poverty rates by 1.3 percentage points to 14.1%, a 9.0 percent reduction in poverty.
- For Latino families there is a reduction of 2.9 percentage points; there is a decrease of 2.8 percentage points for Other families, and 1.7 percentage point reduction for Black families. White families would see a 0.9 percentage point decrease and Asian families a 1.5 percentage point decrease.

While the proposed legislation makes licensed care arrangements more affordable, it does not address the flexibility of arrangements, which may be crucial for single-parent families, parents in low-wage jobs which afford little control over work schedule, and/or parents without reliable transportation options, all factors that are disproportionately experienced by Black and Latino parents. Therefore, the Commonwealth will need to pay close attention to making sure that all families, especially those that are newly entering licensed care venues, are able to find quality care that meets the needs of their families. This will be important not only to increase licensed care utilization by children of color but also to make it possible for the other anticipated impacts cited in this brief, including increased parental employment and decreased poverty, to be experienced by Black and Latino families in Massachusetts.

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/earlyed/institute/research-policy
<https://blogs.umb.edu/earlyed/2024/06/26/cusp/>

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INTRODUCTION

Massachusetts, the first state in the nation to launch an independent, consolidated department focused on early learning and child care¹ nearly two decades ago is moving in the direction of making child care and early education more affordable for families, ensuring appropriate compensation and benefits for educators, and continuing to stabilize funding to providers. A broad coalition of stakeholders² is encouraging legislative and budget action to build on steps taken over the last few years and Governor Healey, as well as state legislative leaders, have prioritized increased investment in child care and early education the FY2025 budget.

All levels of government are already investing in child care and early education through federal and state grants, the Head Start Program, and state and local funding for Pre-K. However, this investment does not reach the majority of families using and needing child care and early education. Most federal and state programs are targeted toward poor and low-income families, and even so, these programs have lengthy waiting lists. And while public Pre-K has expanded in recent years, it serves only a portion of children (primarily those ages 4 and 5). In short, although the benefits of high-quality early education and care are clear, there is simply not enough available and what is available is often unaffordable for families despite the low wages paid to early educators.

Because the availability of quality child care is limited and expensive, many parents who cannot find or afford the high costs of care use “work arounds” that include multiple forms of child care arrangements (licensed or unlicensed), reducing employment to provide parent care, and reliance on friends and relatives. In part because of a long history of racial and ethnic inequities, families of color have less access to affordable, quality care than White families.³ The reasons are many, but racial segregation and discrimination have left a legacy of unequal access to public education, housing, and jobs. All of these, especially income, matters in the ability for families to access and use stable, quality care and education. Yet research shows that quality child care improves educational, social, and economic outcomes for children and those with financial assistance in paying for care choose higher quality care than those without it.⁴ Proposed legislation that provides financial support for families that cannot otherwise afford licensed care, therefore, should reduce racial and ethnic disparities in access to licensed care, which over time, has the potential to level the educational and economic playing fields. It can also pave the way for both increased and more stable employment for parents, especially single mothers of color, which in turn boosts the economic status of families, including lifting some out of poverty.

A multi-disciplinary UMass Boston team of researchers through the Early Education Cost and Usage Simulator Project (CUSP) seeks to better understand some of the impacts of expanding financial assistance to families for child care and early education. The team has developed and uses a statistical model that simulates parents’ decisions about care usage 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. The team’s October 2023 brief provided findings for all families and children in the Commonwealth. This brief disaggregates data by race and ethnicity to explore disparities that currently exist in terms of children’s access to licensed care and costs and what happens to such disparities when the cost of licensed care is substantially reduced.

METHODS

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, parental employment (weekly hours of employment, training, and education), and income information about adults in the household 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 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. The simulator is calibrated to reflect current child care usage in Massachusetts using administrative data from the Massachusetts Department of Early Education and Care (EEC) and from a survey of Massachusetts families with children 3 to 4 years of age.⁵ Several previous studies were used to program the simulator to estimate the impact of lower out-of-pocket costs for child care expenditures on child care usage and parents' employment.⁶ There is a wide range of estimates on employment; the simulator uses mid-range estimates, consistent with that literature.

The simulator allows for estimations on many policy parameters such as the age of children eligible and family income eligibility. Currently proposed legislation covers a substantial portion of care costs for eligible families with children in a licensed setting. The research presented here 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 programming for school-age children and only for children under 14 years of age or under 17 if they have a disability. 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.

Children's, parent's, and family's race and ethnicity (described more precisely in the box on page 10) are included in estimating the probabilities of usage from the NSECE. Simulating child care usage with the PUMS allows for a more detailed account of usage by the race and ethnicity of children, parental employment by the race and ethnicity of the parent, and the income earned and child care costs incurred by the race and ethnicity of the family. Identification of race and ethnicity in datasets is both complex and controversial. The team relies on the Census Bureau's classifications, recorded from responses provided by survey household participants. Some racial/ethnic groups have very small representation in the PUMS, so for statistical estimation purposes, several groups are merged into other categories. Finally, there is considerable variation within each of these categories, as no racial or ethnic group, especially when grouped into a small number of categories, is homogeneous. The averages, as presented here, do not capture the diversity of child care and education use and costs within each racial and ethnic category. The five categories used in this brief are: Latino, White, Black, Asian, and Other (see box for definitions of categories).

RACIAL AND ETHNIC CATEGORIES

The racial and ethnic categories used in this brief are derived from those used by the U.S. Census. The U.S. Census survey asks about various characteristics of every person in the household, including if they are of Hispanic origin and in what racial group(s) they identify. Until 2024, the Census has not asked about ethnicities beyond Hispanic. The 2015-2019 PUMS Census data (used to simulate estimates) recodes racial information collected on each person into nine categories (the variable RAC1P on the PUMS). Using this information, this analysis constructs five mutually exclusive racial/ethnic categories that mirror those commonly used in data analyses. They are:

- 1. Latino:** indicated being of Hispanic origin (regardless of race)
- 2. White:** indicated only one race (White) and not of Hispanic origin
- 3. Black:** indicated only one race (Black) and not of Hispanic origin
- 4. Asian:** indicated only one race (Asian) and not of Hispanic origin
- 5. Other:** includes those indicated as American Indian, Alaska Native tribe, Native Hawaiian, other Pacific Islanders, any other race, and those who identify as two or more races and not of Hispanic origin. Almost three quarters (73.4%) of people in this category indicate that they are more than one race.

Racial and ethnic identities are complicated and difficult to capture in a survey and, not surprisingly, the racial and ethnic categories used in the Census have been historically contested.⁷ The challenges in identifying racial and ethnic categories are compounded when trying to “collapse” people’s identities into five categories and when the racial and ethnic identities of people in the same family differ. When referring to children and their early education usage, the team uses the racial/ethnic identity recorded for the child (even if it differs from other family members) and when referring to parental employment, the team uses the racial/ethnic identity recorded for each parent (regardless of the race/ethnicity of other family members). For all care costs, income, and poverty data reported here, the team uses families as the unit of analysis and assigns the entire family the racial/ethnic identity of the “head” of the family as designated by the parent (or grandparent/caregiver if no parent is in the household) whose person weight is closest to the Census household weight.⁸ This means that a family’s racial/ethnic designation may not match the identities of all members in that family. And in 12.9% of Massachusetts families this is the case (that is, one out of every eight families are multi-racial).

Although the term “Latinx” is frequently used to refer to people of Latin American descent as a broad and more inclusive term for Hispanics, it remains a controversial term. Acknowledging the diversity of the community, this brief utilizes the term Latino, as currently used by the U.S. Census Bureau, to refer to the population of Latin American descent, i.e., Latino/Hispanic; Latina is used as the genderized Spanish term.

The goal of this study is to estimate the impacts of the expansion of affordable quality child care and early education by race and ethnicity 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 children’s 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 parental employment and family 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. In March 2024, an amended version of Senate 301 passed the Senate, and it was renumbered Senate Bill 2707. The key eligibility and financial assistance parameters remain the same. It is referred to here and accompanying tables and figures by its original number—Senate Bill 301—for easy tracking.

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.
7. There is complexity involved in representing race and ethnicity for children and for families; given the available data, racial, and ethnic categories are assigned to children, parents, and families and the assigned categories may differ even within families.
8. There are limitations with existing racial and ethnic categories used in the U.S. Census and it may be that the categories do not allow for accurate self-identification given that the categories themselves are not inclusive nor expansive.

Massachusetts legislation S. 301 limits eligibility of children to children under 14 years of age, or under 16 years of age with special needs, unless they turn 14 (or 16 with special needs) during the school year, in which case they remain eligible until the end of the school year. The simulator uses age cutoffs of under 14 and under 17 if disabled, thus undercounting eligible children who begin the school year at age 13 and overcounting eligible children who begin the school year at age 15. These discrepancies are small in terms of the number of children receiving assistance and in the amount of assistance received.

CURRENT CHILD CARE AND EARLY EDUCATION USAGE

As depicted in the first panel of Table 1, there are just over 1 million children under 14 years of age (or under 17 if they have a disability) in the Commonwealth. Sixty percent of children are White, 19% Latino, 8% Black, 7% Asian, and 6% Other (including multiracial).

- Currently, 558,000 children use some form of nonparental care. Children are in a variety of forms of licensed and unlicensed nonparental care. The second panel of Table 1 includes information on current nonparental usage of child care and early education for all children by race and ethnicity. While almost half of all children in nonparental care spend time in licensed care, this differs considerably by race and ethnicity. Just over 55% of Asian children, 51% of White children, and 50% of Other children in nonparental care are in licensed care, while just 38% of Latino children and 41% of Black children are.
- Conversely, 41.5% of Black children and 37% of Latino children who are in nonparental care use unpaid care compared to 31% of both Asian and Other children, and 32% of White children.

The data from NSECE does not distinguish if a family is currently receiving a child care subsidy or voucher. But according to available administrative data, a small percentage of children in nonparental care are in government subsidized child care and early education (beyond public K-8 education). In 2022, just over 52,000 children under the age of 15 in Massachusetts receive subsidies through the state⁹, which is less than 10% of children in nonparental care settings and just under 20% of those in licensed care. Representative data on the racial or ethnic breakdown of children in subsidized care in Massachusetts is not available. However, the Massachusetts Department of Elementary and Secondary Education reports that 30,924 children are enrolled in public Pre-K in 2022-23. Half of those children are White, 26% are Latino, 11% are Black, 8% are Asian, and 6% are Other. In FY2023, Head Start enrolled just under 11,300 children. Of the 90% of participants reporting their race/ethnicity, 47% are Latino, 22% are Black, 20% are White, 7% are Other, and 4% are Asian.¹⁰ Please note that children in public Pre-K and Head Start are not included in Table 1.

Table 1. Total Number of Children and Number of Children in Nonparental Care by Race/Ethnicity of Child Currently and Under Legislative Proposal [S. 301]

	All Children	Latino	White	Black	Asian	Other
Total						
Total number of children	1,039,200	196,800	622,400	87,300	68,300	64,300
Percent of all children	100%	18.9%	59.9%	8.4%	6.6%	6.2%
Current Nonparental Care						
Number of children using any nonparental care (excludes K-8)	558,000	93,700	345,400	46,900	34,800	37,300
Number of children in any licensed care (excludes Head Start and Public Pre-K)	268,600	35,500	176,000	19,400	19,300	18,500
Number of children in any unlicensed care	363,000	62,500	223,600	31,500	20,500	24,900
Number of children using unpaid nonparental care	186,700	34,700	110,300	19,500	10,800	11,400
Percent of children in nonparental care that are in licensed care (excludes Head Start and Public Pre-K)	48.1%	37.9%	51.0%	41.3%	55.4%	49.6%
Percent of children in nonparental care that are in unpaid nonparental care	33.5%	37.1%	31.9%	41.5%	31.0%	30.5%
Nonparental Care Under Legislative Proposal [S. 301]						
Number of children using any nonparental care (excludes K-8)	605,900	109,500	364,200	53,600	38,300	40,400
Number of children in any licensed care (excludes Head Start and Public Pre-K)	360,700	66,900	210,900	32,700	25,100	25,100
Number of children in any unlicensed care	331,600	52,100	211,100	27,600	18,600	22,200
Number of children using unpaid nonparental care	174,600	30,400	106,100	17,500	10,000	10,600
Percent of children in nonparental care that are in licensed care (excludes Head Start and Public Pre-K)	59.5%	61.1%	57.9%	61.0%	65.5%	62.1%
Percent of children in nonparental care that are in unpaid nonparental care	28.8%	27.7%	29.1%	32.7%	26.1%	26.2%
Change in Licensed and Unlicensed Care						
Increase in number of children in licensed care under legislative proposal (excludes Head Start and Public Pre-K)	92,100	31,400	35,000	13,300	5,800	6,600
Percent change in licensed care under legislative proposal (excludes Head Start and Public Pre-K)	34.3%	88.4%	19.9%	68.6%	30.1%	35.9%
Decrease in number of children in unlicensed care under legislative proposal	(31,500)	(10,400)	(12,500)	(3,900)	(1,900)	(2,800)
Percent change in unlicensed care under legislative proposal	-8.7%	-16.6%	-5.6%	-12.4%	-9.5%	-11.1%

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Note: Numbers have been rounded; therefore, some totals may not add up. Because children use more than one kind of care, the numbers in licensed and unlicensed care will add up to more than the number of children in nonparental care.

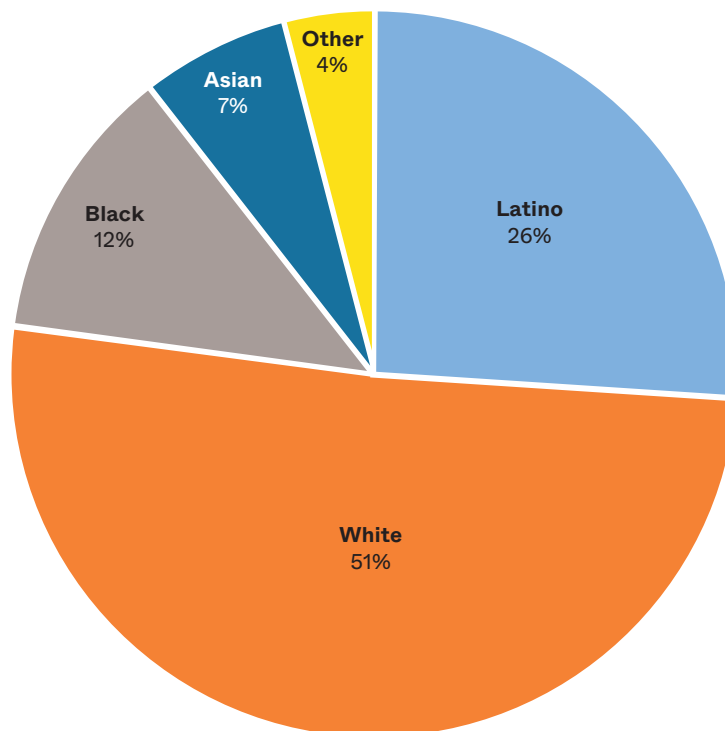
WHICH FAMILIES ARE ELIGIBLE UNDER SENATE BILL 301?

Massachusetts Senate Bill 301 specifies that all children under age 14 (and those under 16 with special needs) using licensed care 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 and early education. 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 size¹¹ and Table 2 (SMI & Poverty in 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 \$2,007¹² annually for licensed child care and early education for their children under 14, or under 17 with special needs.

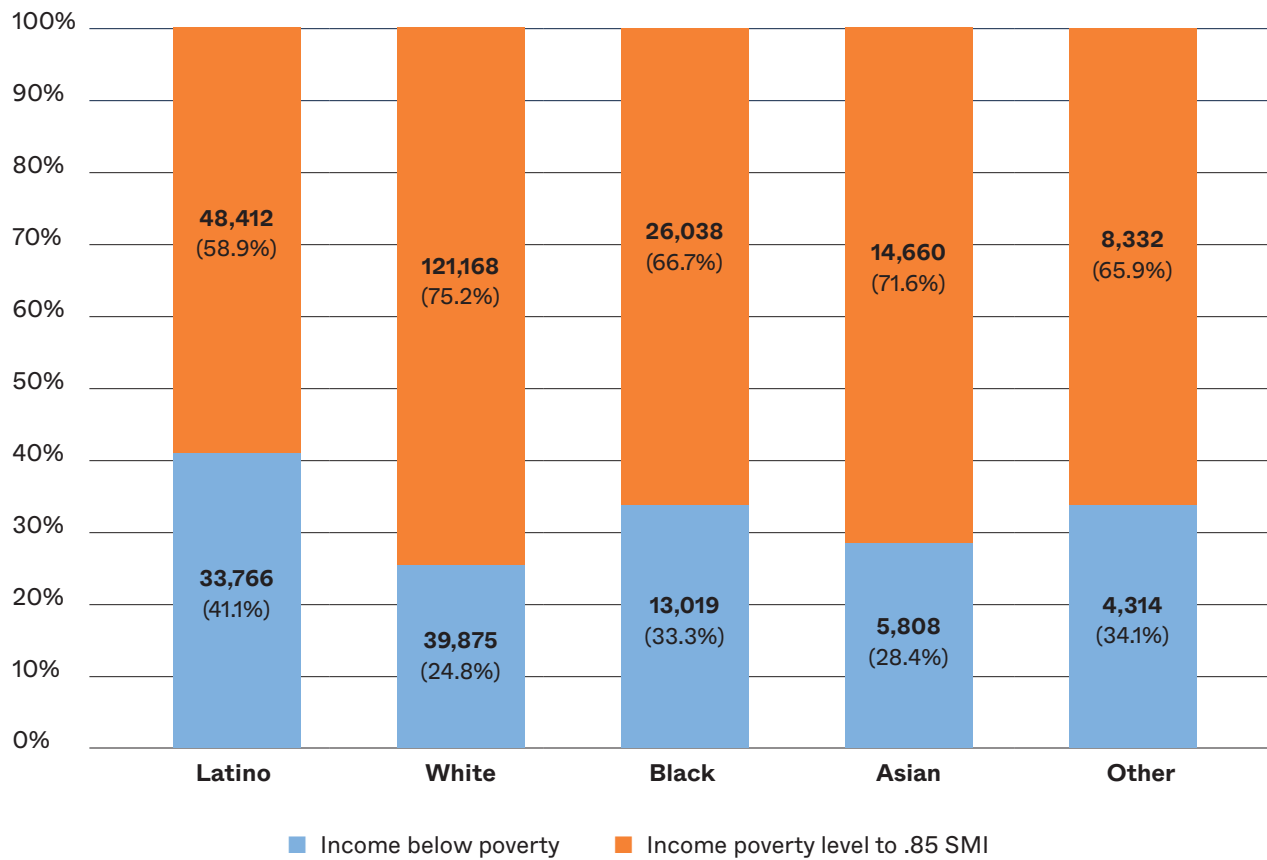
Using these eligibility criteria it is estimated that 315,400¹³—just about half—of the 624,000 Massachusetts families with children under 14 (or under 17 with special needs) meet the income eligibility requirements under the legislative proposal [S. 301]. But because the distribution of family income differs substantially between racial and ethnic groups, so does the percentage of eligible families. So while 40% of all White and Asian families are eligible for the program, 82% of Latino, 78% of Black, and 69% of Other families are eligible (see Table 3 in Appendix “All, Eligible, and Receiving”). Because of the size of the White population in Massachusetts, White families comprise 51% of all eligible families. Figure 1 depicts the distribution of eligible families by the race/ethnicity of the head of the family. Most families that are eligible have incomes above the poverty income threshold, but this differs by race and ethnicity, as depicted in Figure 2. One-quarter of White eligible families have incomes below the poverty line (but at or below 85% of SMI) compared to 41% of Latino eligible families.

Figure 1. Distribution of All Eligible Families by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Figure 2. Number and Distribution of Eligible Families by Income Level, by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) March 2024

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. This differs by race and ethnicity of families ranging from 50% of eligible Asian families to 39% of eligible White families using financial assistance. Table 3 in the Appendix provides more detailed information about all families, eligible families, and eligible families receiving financial assistance by race and ethnicity.

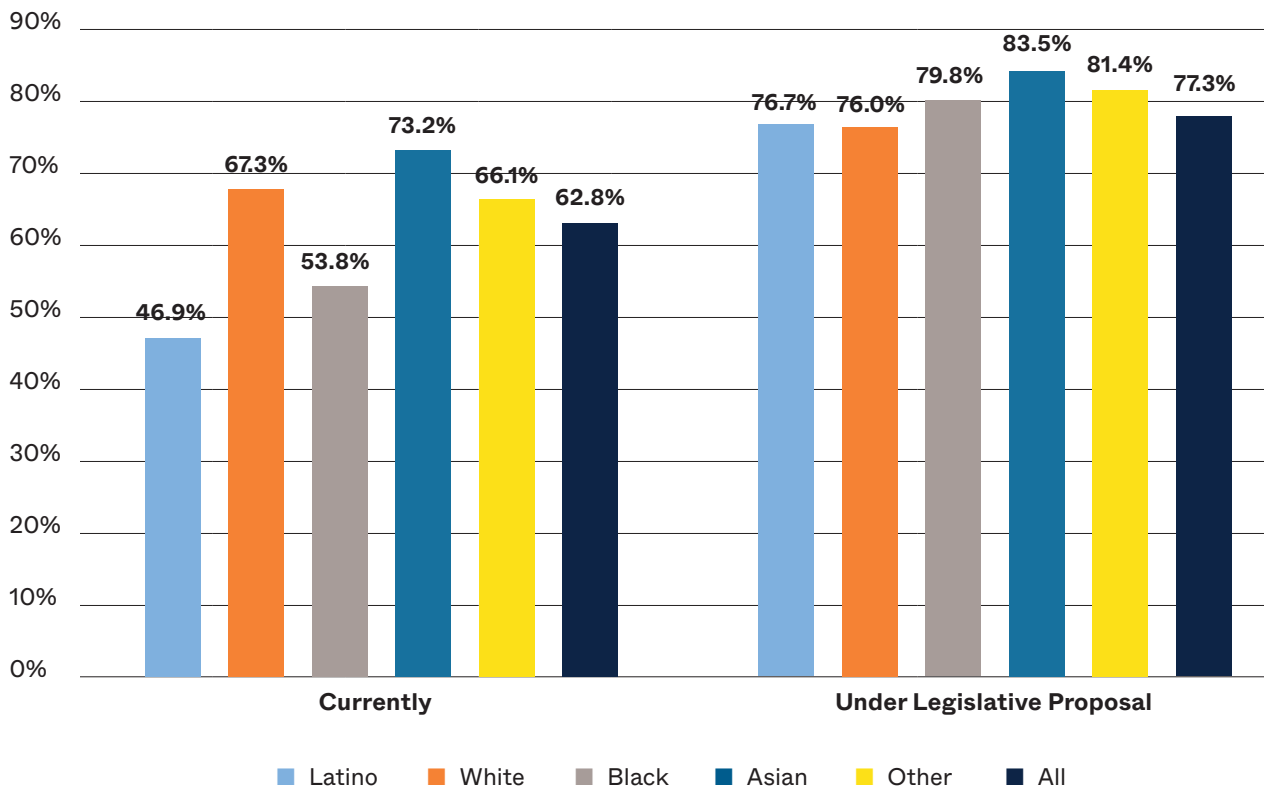
KEY IMPACT: LEVELING THE PLAYING FIELD OF LICENSED CARE USAGE

The proposed legislation [S. 301] under analysis in this brief is clear in its intent to ensure that high-quality child care and early education is provided to children in the Commonwealth, 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 However, there is substantial research indicating that when children move from no nonparental child care or early education or unlicensed care to a more formal care setting, there are positive impacts on children’s educational outcomes. Further, research confirms that licensed child care and programs such

as Head Start and public Pre-K have larger impacts for children who are more disadvantaged in terms of family income and the educational levels of parents.¹⁵

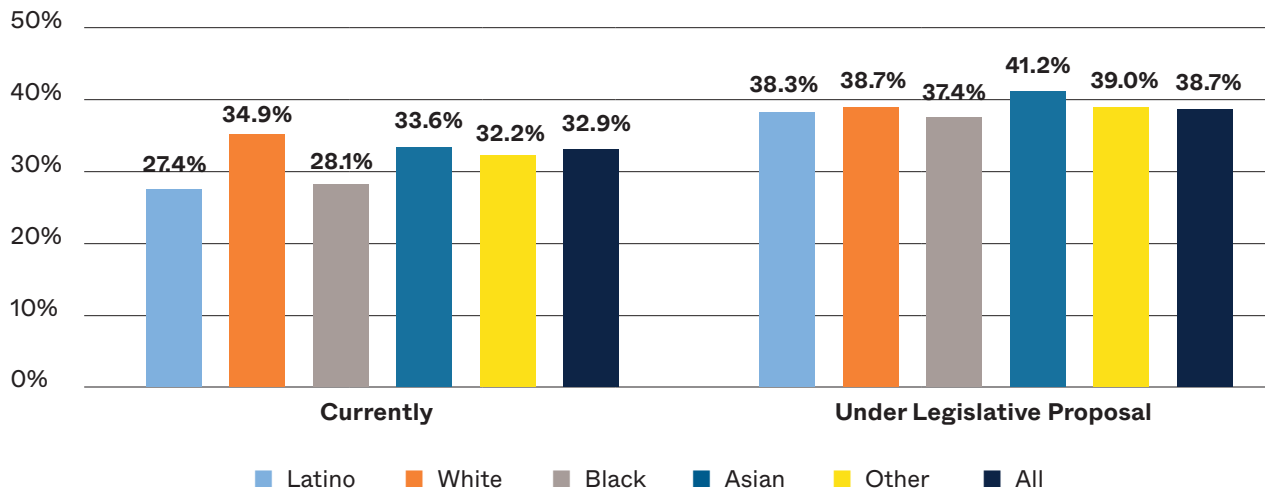
Because the amount, type, and cost of licensed care parents use is shaped by the age of their child, estimates here are broken down for those children not yet school-age (infant, toddler, and preschool) and school-aged. As depicted in Table 4 in the Appendix, approximately 631,000 children are school-age 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 44% of school-aged children. Of children receiving nonparental care, just under 63% of children under school-age and one-third of school-age children currently receive licensed child care and early education.

Figure 3a. Percent of Children Younger than School-age in Nonparental Care that Use any Licensed Care Currently and under Legislative Proposal by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Figure 3b. Percent of School-age Children in Nonparental Care that Use any Licensed Care Currently and under Legislative Proposal by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Figures 3a and 3b depict the percent of children in nonparental care who use licensed care currently and under the legislative proposal for children broken down by not yet school aged and school-age. Figure 3a depicts the large degree of unequal access to licensed care for children younger than school age. Figure 3b shows the marked increase in the portion of school-age children in nonparental care that are in a licensed care setting under the legislative proposal.

- Of all children younger than school age in nonparental care, currently 73% of Asian and 67% of White children are in licensed care compared to 54% of Black and 47% of Latino children. The largest gap—between Asian and Latino children—is 26 percentage points.
- With the financial assistance in the proposed legislation, the percentage of children younger than school age (in any nonparental care) that would use licensed care increases for all groups, but especially for Black and Latino children—to 77% for Latino children and 80% for Black children. The largest gap is between Asian and White children at 7.5 percentage points.

- For school-age children the racial/ethnic gaps in the use of licensed care by children in nonparental care currently are considerably smaller (as depicted in the third set of columns in Figure 3b). The largest gap is at 8 percentage points (35% of White children versus 27% for Latino children). The legislative proposal increases licensed care for all children and virtually eliminates racial/ethnicity gaps, assuming an adequate supply of child care.

Provided that parents can access education and care, the legislative proposal has an equalizing effect. Given the documented benefits of licensed care, this legislation has great potential to narrow existing racial and ethnic educational and economic gaps.

KEY IMPACT: REDUCED COST BURDEN

Massachusetts is one of the highest-cost states when it comes to child care and early education.¹⁶ And while median family income, at just over \$97,600 (in 2022 dollars), is also high in Massachusetts, it varies widely by race. Median annual inflation-adjusted income for a Latino family is \$38,200, followed by \$50,500 for Black families, and \$58,400 for Other families. The average annual median White family income is \$123,900 and \$126,300 for Asian families (See Table 3 “All, Eligible, and Receiving” in the Appendix).

Currently, approximately 370,000 Massachusetts families (59.3% of all families) with a child under 14 (or 17 if a child has special needs) use nonparental care, with one-third paying for that care. For those families that do pay for care, the simulator estimates the average annual amount to be \$19,800 (in 2022 dollars).¹⁷ But the percentage of families paying for care and how much they pay varies considerably by race and ethnicity.

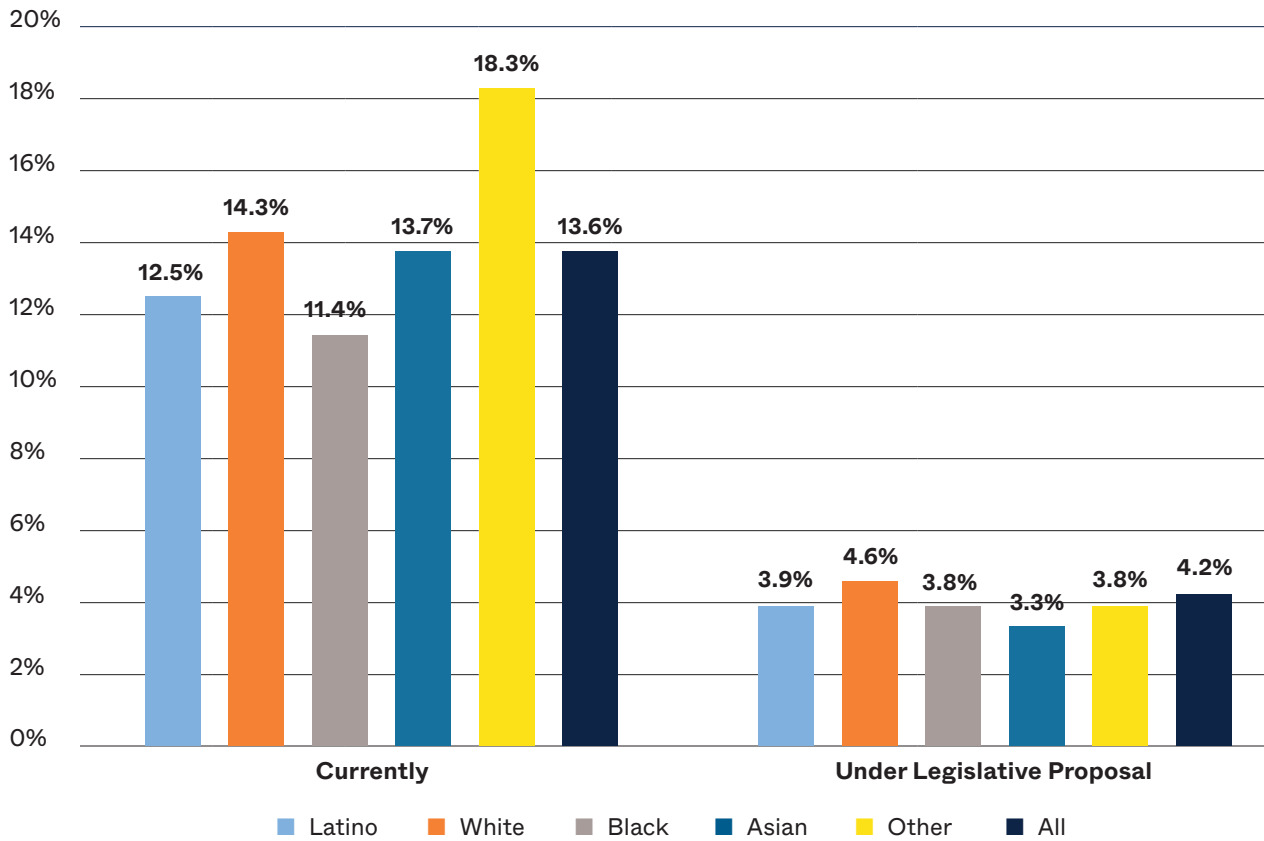
- 34% of Other, 36% of White, and 38% of Asian families pay for care compared to 23% of Hispanic and 26% of Black families. One quarter of all families whose income is less than 85% of SMI pay for care, with 29% of Other families, 28% of Asian families, 27% of White families, and 24% of Black families, and 20% of Latino families paying for care.
- Of families with child care costs, on average White families and Asian families currently spend just under \$20,500 annually compared to \$12,700 for Black families, \$13,700 for Latino families, and \$18,700 for Other families (in 2022 dollars). Not surprisingly, families with income at or below 85% that pay for child care spend less ranging from \$14,300 for Other families to \$11,000 for Black families (in 2022 dollars).
- Currently, all income-eligible families with a child under age 14 (or 17 if the child has special needs) are paying 7.3% of their income toward care (this includes families with no costs), ranging from 10.2% for Other families to 6.4% for Black families (See Table 3 in Appendix).

Under the legislation, the number of income-eligible families paying for care doubles, but the average cost for all income-eligible families paying for child care drops from \$13,200 to \$2,600. The percentage of income all income-eligible families pay toward child care drops from 7.3% to 2.4%.

Figure 4 depicts the percent of income all families (regardless of whether they pay for care or not or if they are income eligible) with at least one child not yet school-aged and whose income is at or below 85% of SMI currently pay and would pay under the legislative proposal. Currently, this accounts for 13.6% of income for all families but varies by race and ethnicity, from 18% for Other families to 11.4% for Black families. Under the legislative proposal, these percentages are reduced by almost a third for all families. There is also a reduction in the percentage of family income going toward child care by race and ethnicity, ranging from 3.3% for Asian families, 3.8% for Black families, 3.9% for Latino families, and 4.6% for White families, indicating a decrease in racial and ethnic disparities in income going to care and education.

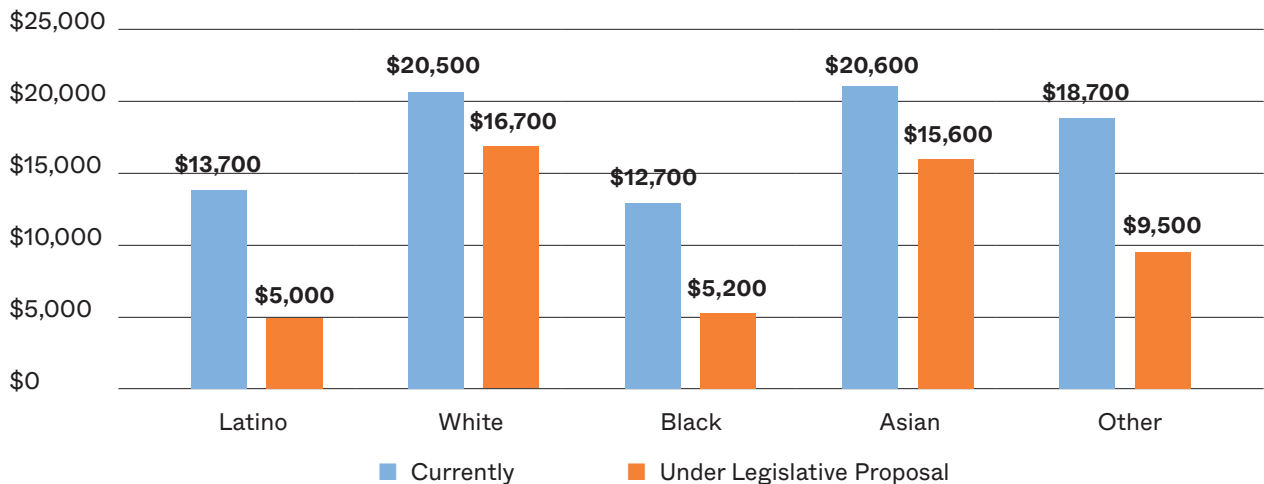
Under the legislative proposal [S. 301], financial assistance would be provided to 128,500 families in the Commonwealth. And while this covers 20.6% of all families with children, it reaches 33% of Latino, Black, and Other families compared to 20% of Asian and 15% of all White families with age-eligible children. The average amount a family receives through the financial assistance under the legislative proposal is \$13,260 (using 2022 prices) and only varies slightly by race and ethnicity of the family.

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 by Race/Ethnicity, Currently and Under Legislative Proposal [S.301]



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Figure 5. Average Annual Cost (in 2022 Dollars) for Families with Child Care Costs Currently and Under Legislative Proposal, by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) March 2024

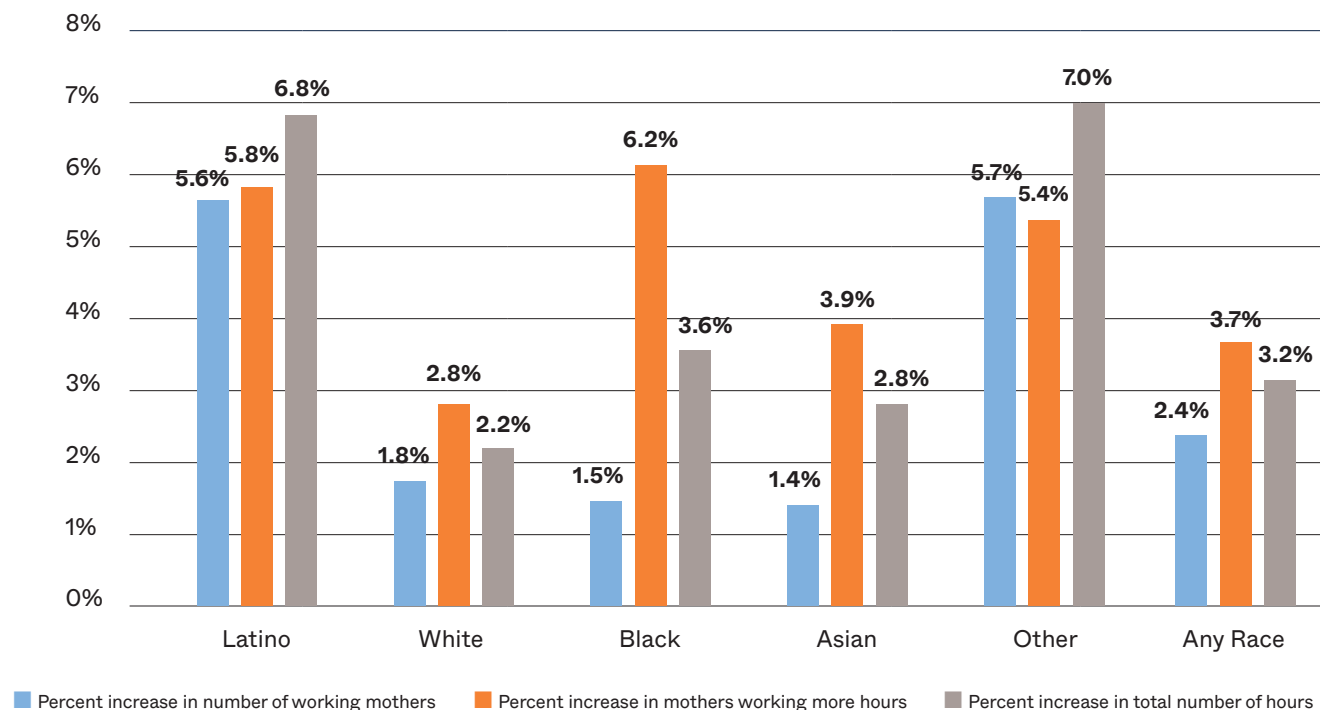
KEY IMPACT: INCREASED PARENTAL EMPLOYMENT

A substantial body of research shows how parents, especially mothers, employment decisions change when licensed care is subsidized.¹⁸ 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 confirms that licensed care is often much more reliable than unlicensed care. Proposed legislation increases licensed care usage and increased reliability allows for more stable employment opportunities.

Currently, employment instability caused by problems with child care varies considerably by race. Interactive data from the 2021-2022 The National Survey of Children's Health indicates that 9.6% of parents of a White child younger than 6 years old in Massachusetts had to quit a job, not take a job, or change jobs due to problems with child care while 23% of those with a Latino child and 14% of those with a non-White, non-Latino child did.¹⁹

Using the literature on employment effects of subsidizing care, as explained 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.

Figure 6. Percent Change in Mothers' Employment, Employed and Working More, and Total Hours under Legislative Proposal, Any Child, by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

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%) are mothers and 473,000 (45%) are fathers (seventy-two percent of all families are two-parent families, while 28% are single-parent families). 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% while the employment rate of mothers is 70.5%. Mothers' employment rates vary considerably by race. Black and White mothers have the highest employment rates (74.2% and 73.2%, respectively) while Latina, Asian, and Other mothers have the lowest (63.9%, 63.2%, and 64.1%).

With affordable licensed care, some parents—especially mothers—will enter the labor force increasing the employment rate while others will increase the number of hours they currently work. Together, these two types of employment changes result in a third change, the increase in the total number of hours of employment. Figure 6 depicts the percentage change in employment rates, in those currently employed but working more hours, and in total hours of employment for mothers by race and ethnicity.²⁰

The employment rate for mothers (the percent of mothers employed of all mothers in Massachusetts) increases to 76.0% under the legislative proposal, with the largest increases for mothers whose children are not yet school age—from 70.5% to 74.0%.

- Employment rates for all mothers increase with the proposed legislation, with Latina and Other mothers seeing the largest increases.

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.

- Black mothers would experience the largest percentage increase in the number of hours worked (6.2%), followed by Latinas at 5.8% and 5.4% for Other mothers under the legislative proposal.

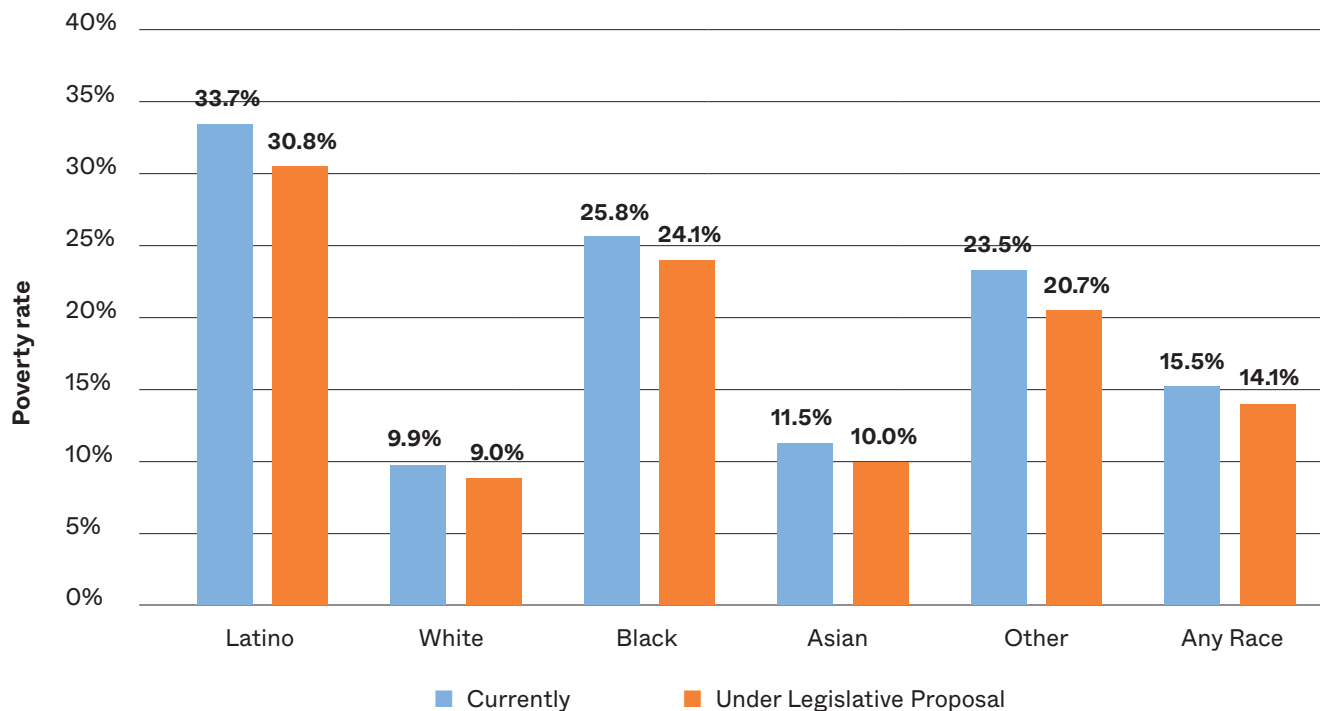
Because of higher employment levels and more working hours, there will be a 1.7 percent increase in the total number of hours that all parents work: a 0.5 percent increase in fathers' total hours and a 3.2 percent increase in mothers' total hours.

- Other and Latina mothers see the largest overall increase in total hours worked (at 7.0% and 6.8% respectively).

KEY IMPACT: POVERTY RATE REDUCTION

When parents work more, their earnings increase. Given increased employment due to reliable licensed care for their children, some families will earn enough to exit poverty. In Massachusetts, the poverty rate of families with children under 14 (and under 17 for a child with special needs) is 15.5%—that is, 15.5% of such families have income below the poverty line.²¹ All of these families are income-eligible for financial assistance through the legislative proposal [S. 301].

Figure 7. Poverty Rates Currently and Under Legislative Proposal by Race/Ethnicity



Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Figure 7 depicts poverty rates for all families and by race and ethnicity currently and under the provisions of the legislative proposal.

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

- Poverty rates differ substantially by race and ethnicity, with one-third of all Latino families living at incomes at or below the poverty income threshold, compared to just under 10% of White families.
- For all families, access to affordable quality child care and early education under the legislative proposal reduces family poverty rates by 1.3 percentage points to 14.1%, a 9.0 percent reduction in poverty.
- For Latino families there is a reduction of 2.9 percentage points; there is a decrease of 2.8 percentage points for Other families and a 1.7 percentage point reduction for Black families. White families would see a 0.9 percentage point decrease and Asian families a 1.5 percentage point decrease.

The legislative proposal reduces the gap in poverty rates among racial/ethnic families, but large gaps in poverty rates between White and Asian families and those of Latino and Black families still persist.

CONCLUSION

Quality child care and early education matters for children's development. The high cost of that care and education currently makes it unaffordable for many families, especially Black and Latino families. Currently about half of all White, Asian, and Other (including multiracial) children in nonparental care use licensed care compared to 38% of Latino and 41% of Black children. The estimates presented in this brief suggest that financial assistance would go a long way to leveling the playing field in terms of usage of licensed care. Given the range of documented benefits of licensed care, the proposed legislation has the potential to make important strides in reducing racial inequalities currently prevalent in accessing quality child care and early education.

However, to effectively address racial inequality in access to care and education, the care must be available and of equally high quality as that available to White children. Neither of these aspects are directly addressed in the current Massachusetts legislation, making it vital for policymakers, advocates, and child care and early education administrators to take into account differential access and quality if and when the proposed legislation is implemented.

Additionally, the simulator's estimates do not account for challenges accessing child care and early education faced by families, which are likely to vary by race and ethnicity. The estimates presented here do not account for how the supply of child care and early education will need to be increased to meet new demand and how equitably or inequitably that increase in supply will be distributed. Furthermore, while the proposed legislation makes licensed care arrangements more affordable, it does not speak to the flexibility of arrangements, which may be crucial for single-parent families, parents in low-wage jobs which afford little control over work schedule, or parents without reliable transportation options, all factors that are disproportionately experienced by Black and Latino parents. Therefore, the Commonwealth will need to pay close attention to making sure that all families, especially those that are newly entering licensed care venues, are able to find quality care that fits the needs of their families. This will be important not only for increasing licensed care utilization for children of color but also for making it possible for the other anticipated impacts cited in this brief—increased parental employment and decreased poverty—to be experienced by Black and Latino families in the Commonwealth.

Notes

1. Strategies for Children, Inc. and Rennie Center for Education Research & Policy. (2008). A case study of the Massachusetts Department of Early Education and Care. www.strategiesforchildren.org/doc_research/O8_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 child care and early education 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.” <https://commonstartma.org>
3. See for example, McCormick, M. et al. (2023). Going the distance: Exploring variation in access to high-quality PreK by geographic proximity, race/ethnicity, family income, and home language. (EdWorkingPaper: 23-730). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/t5hq-1b40>; Mattingly J. M. & Carson J. (2021). Proposal to offset families’ child-care costs could enhance equity by dramatically cutting poverty among people of color across New England. *Federal Reserve Bank of Boston*. <https://www.bostonfed.org/publications/community-development-issue-briefs/2021/proposal-to-offset-families-child-care-costs.aspx>
4. Cascio, E. U., & Schanzenbach, D. W. (2014). 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.54.3.02178572R1>; Hartley, R. P., Chaudry, A., Boteach, M., Mitchell, E., & Menefee, K. (2021). 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://nwlc.org/wp-content/uploads/2021/04/A-Lifetimes-Worth-of-Benefits-FD.pdf?ftag=YHFa5b931b>; Garcia, J.L. Heckman, J.J. Leaf, D.E., & Prados, M.J. (2016). The life-cycle benefits of an influential early childhood program, *IZA Institute of Labor Economics*. <https://docs.iza.org/dp10456.pdf>; Herbst, C. M. (2022). Child care in the United States: Markets, policy, and evidence. *Journal of Policy Analysis and Management*, 42(1): 255–304. <https://onlinelibrary.wiley.com/doi/abs/10.1002/pam.22436>; Pilarz, A. R. (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
5. 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://www.sciencedirect.com/science/article/abs/pii/S0885200620300764?via%3Dihub>
6. These included Borowsky, J., Brown, J. H., Davis, E. E., Gibbs, C., Herbst, C. M., Sojourner, A., Tekin, E., & Wiswall, M. J. (2022). 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). Child care markets, parental labor supply, and child development. *IZA Institute of Labor Economics*. www.iza.org/publications/dp/12904/child-care-markets-parental-labor-supply-and-child-development; Pilarz, A. R. (2018). Op. cit.; Tekin, E. (2005). 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). 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
7. See, for example: Strmic-Pawl, H.V., Jackson, B., Garner, S. (2018). Race counts: Racial and ethnic data on the U.S. Census and the implications for tracking inequality. *Sociology of Race and Ethnicity*, Vol. 4(1) 1–13. <http://www.hephzibahvsp.com/uploads/3/1/7/8/31787185/strmicpawl.jackson.garner.racecounts.pdf>; Lai, K.K. R., Medina, J. (2023, October 16). An American puzzle: Fitting race in a box. *New York Times*. <https://www.nytimes.com/interactive/2023/10/16/us/census-race-ethnicity.html>
8. The U.S. Census Bureau weights the household and person records on the PUMS to best approximate two sets of population targets: the number of households and the number of persons. These targets vary by region and select demographic characteristics. Each household has a household weight. Each person in that household has their own person weight. These weights can and usually vary between the people in the household. The Census Bureau’s procedure for creating and assigning weights is described in their Design and Methodology Report (<https://www.census.gov/programs-surveys/acs/methodology/design-and-methodology.html>). The procedure used for this research aims to make the person weight of the household head and their spouse (if present) close to that of the household weight. Weights of other household members can vary substantially to hit the population targets.
9. Massachusetts Department of Early Education and Care. (2022). 2022 annual report to the Legislature. <https://www.mass.gov/lists/departments-of-early-education-and-care-legislative-reports>
10. Massachusetts Department of Elementary and Secondary Education. (2023). Enrollment data by district/grade 2022-2023. www.doe.mass.edu/info/services/reports/enroll/; and <https://profiles.doe.mass.edu/statereport/pkenrollment.aspx>; United States Department of Health and Human Services, Administration for Children and Families. (2023). Head Start data from 2023 program information report, received in communications with Michelle Haimowitz, Executive Director, Massachusetts Head Start Association on March 12, 2024.

11. The 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 applied the 2019 poverty guidelines to families that consist of parents (as defined in the Glossary) with any children under the age of 18.
12. This is calculated as: $(\$50,000 - \$21,330) \times .07$.
13. The raw numbers presented in this brief don't precisely match the numbers presented in the October 2023 brief given that weighting for families may generate slightly different numbers.
14. 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
15. 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
16. 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
17. 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>
18. Please see Note #4.
19. Data retrieved interactively from National Survey of Children's Health (Child and Family Health Measures, Family Health and Activities, Indicator 6.17: Job change due to problems with child care, age 0-5 years). https://www.childhealthdata.org/browse/survey#51_23_3013
20. 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%.
21. All poverty rates reported here are based on data from the 2015-2019 PUMS.

Appendix

Table 2. 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 3. Number, Median Income (in 2019 dollars), Percent Poor, and Percent of Income toward Child Care and Early Education Currently and under Legislative Proposal for All, Income-Eligible, and Financial-Assistance-Receiving Families

		Number of Families		Total single-parent families	Total two parent families	Percent of families that are single-parent	Percent of families whose youngest child is under school-age	Median Income (in 2022 dollars) currently	Percent that are poor currently	Percent that are poor under program	Average percent of income toward child care and early education (CCEE) costs currently	Average percent of income toward CCEE costs currently when youngest child is under school-age	Average percent of income toward CCEE costs under legislative proposal [S. 301]	Average percent of income toward CCEE costs under legislative proposal [S. 301] when youngest child is under school-age
All Families	Latino	100,200		50,200	50,100	50.0%	51.0%	\$38,200	33.7%	30.8%	5.2%	9.7%	3.1%	5.5%
	White	404,100		85,600	318,600	21.2%	46.3%	\$123,900	9.9%	9.0%	4.7%	9.3%	4.1%	8.1%
	Black	50,400		26,400	23,900	52.5%	49.9%	\$50,500	25.8%	24.1%	4.9%	9.6%	2.9%	5.6%
	Asian	50,500		7,000	43,500	13.9%	53.2%	\$126,300	11.5%	10.0%	4.8%	8.6%	4.1%	7.4%
	Other	18,400		7,300	11,000	39.9%	53.5%	\$58,400	23.5%	20.7%	6.8%	12.2%	4.5%	7.8%
	All Families	623,600		176,500	447,100	28.3%	48.1%	\$97,600	15.5%	14.1%	4.8%	9.3%	4.0%	7.7%
Percent of all families														
All Income-Eligible	Latino	82,200	82.0%	47,700	34,400	58.1%	52.0%	\$30,400	41.1%	37.6%	7.0%	12.5%	2.4%	3.9%
	White	161,000	39.9%	69,600	91,400	43.2%	47.4%	\$48,900	24.8%	22.6%	7.3%	14.3%	2.6%	4.6%
	Black	39,100	77.5%	24,200	14,900	61.8%	51.8%	\$38,500	33.3%	31.1%	6.4%	11.4%	2.2%	3.8%
	Asian	20,500	40.5%	5,400	15,000	26.6%	54.0%	\$44,200	28.4%	24.9%	8.0%	13.7%	2.1%	3.3%
	Other	12,600	68.8%	6,800	5,800	54.1%	54.4%	\$34,800	34.1%	30.1%	10.2%	18.3%	2.3%	3.8%
	All Families	315,400	50.6%	153,800	161,600	48.8%	49.8%	\$40,700	30.7%	28.1%	7.3%	13.6%	2.4%	4.2%
Percent of eligible families														
Income-Eligible and Receiving Financial Assistance Under Legislative Proposal	Latino	33,300	33.2%	18,200	15,100	54.7%	87.7%	\$31,000	40.7%	32.2%	15.9%	17.2%	4.1%	4.3%
	White	62,100	15.4%	28,800	33,300	46.4%	83.7%	\$42,500	29.0%	23.4%	18.2%	19.9%	4.6%	4.7%
	Black	16,900	33.6%	10,000	6,900	59.0%	87.7%	\$38,100	32.3%	27.2%	14.2%	14.7%	4.2%	4.3%
	Asian	10,200	20.1%	3,000	7,200	29.6%	82.6%	\$41,600	29.4%	22.5%	16.5%	18.0%	3.8%	3.9%
	Other	6,000	32.6%	3,600	2,300	60.9%	86.0%	\$33,000	36.8%	28.2%	22.5%	24.7%	4.1%	4.2%
	All Families	128,500	20.6%	63,700	64,800	49.5%	85.3%	\$37,700	32.9%	26.3%	17.2%	18.7%	4.3%	4.4%

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Note: Numbers have been rounded; therefore, some totals may not add up.

Table 4. Number of Younger than School-Age and School-aged Children in any Nonparental Care and Licensed Care by Race/Ethnicity Currently and Under Legislative Proposal

	All Children	Latino	White	Black	Asian	Other
Total Number of Children						
Younger than school-age (<i>infants, toddlers, and preschoolers</i>)	408,000	82,200	236,100	35,200	27,500	27,100
School-age	631,100	114,600	386,400	52,100	40,800	37,200
Current Nonparental Licensed Child Care						
Younger than school-age (<i>infants, toddlers, and preschoolers</i>)						
Number of children using any nonparental care (<i>excludes K-8</i>)	283,800	50,300	171,000	24,200	19,200	19,100
<i>Percent of all children in any nonparental care (excludes K-8)</i>	69.6%	61.2%	72.4%	68.8%	69.8%	70.6%
Number of children using any nonparental licensed care (<i>excludes K-8</i>)	178,400	23,600	115,000	13,000	14,100	12,600
<i>Percent of all children in licensed care (excludes Head Start and Public Pre-K)</i>	43.7%	28.7%	48.7%	37.0%	51.1%	46.6%
<i>Percent of children in nonparental care that use any licensed care</i>	62.8%	46.9%	67.3%	53.8%	73.2%	66.1%
School-age						
Number of children using any nonparental care (<i>excludes K-8</i>)	274,200	43,400	174,400	22,700	15,600	18,100
<i>Percent of all children in any nonparental care (excludes K-8)</i>	43.4%	37.8%	45.1%	43.5%	38.2%	48.7%
Number of children using any nonparental licensed care (<i>excludes K-8</i>)	90,200	11,900	60,900	6,400	5,200	5,800
<i>Percent of all children in licensed care (excludes Head Start and Public Pre-K)</i>	14.3%	10.4%	15.8%	12.2%	12.8%	15.7%
<i>Percent of children in nonparental care that use any licensed care</i>	32.9%	27.4%	34.9%	28.1%	33.6%	32.2%
Nonparental Licensed Child Care Under Legislative Proposal						
Younger than school-age (<i>infants, toddlers, and preschoolers</i>)						
Number of children using any nonparental care (<i>excludes K-8</i>)	326,700	65,000	187,800	29,800	22,000	22,000
<i>Percent of all children in any nonparental care (excludes K-8)</i>	80.1%	79.0%	79.6%	84.8%	80.0%	81.4%
Number of children using any nonparental licensed care (<i>excludes K-8</i>)	252,700	49,800	142,700	23,800	18,400	17,900
<i>Percent of all children in licensed care (excludes Head Start and Public Pre-K)</i>	61.9%	60.6%	60.5%	67.7%	66.8%	66.2%
<i>Percent of children in nonparental care that use any licensed care</i>	77.3%	76.7%	76.0%	79.8%	83.5%	81.4%
School-age						
Number of children using any nonparental care (<i>excludes K-8</i>)	279,300	44,500	176,400	23,700	16,300	18,300
<i>Percent of all children in any nonparental care (excludes K-8)</i>	44.2%	38.8%	45.7%	45.5%	40.0%	49.2%
Number of children using any nonparental licensed care (<i>excludes K-8</i>)	108,000	17,100	68,200	8,900	6,700	7,100
<i>Percent of all children in licensed care (excludes Head Start and Public Pre-K)</i>	17.1%	14.9%	17.7%	17.0%	16.5%	19.2%
<i>Percent of children in nonparental care that use any licensed care</i>	38.7%	38.3%	38.7%	37.4%	41.2%	39.0%
Change in Licensed Care						
Younger than school-age (<i>infants, toddlers, and preschoolers</i>)						
Increase in number of children in licensed care under legislative proposal (<i>excludes Head Start and Public Pre-K</i>)	74,300	26,200	27,700	10,800	4,300	5,300
<i>Percent change in licensed care under legislative proposal (excludes Head Start and Public Pre-K)</i>	41.7%	110.9%	24.1%	82.8%	30.7%	42.0%
School-age						
Increase in number of children in licensed care under legislative proposal (<i>excludes Head Start and Public Pre-K</i>)	17,800	5,200	7,300	2,500	1,500	1,300
<i>Percent change in licensed care under legislative proposal (excludes Head Start and Public Pre-K)</i>	19.7%	43.6%	11.9%	39.4%	28.2%	22.5%

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Note: Numbers have been rounded; therefore, some totals may not add up.

Table 5. Licensed Care by Race/Ethnicity, Age of Child, and Type of Care, Currently and Under Legislative Proposal

	Latino	White	Black	Asian	Other	All
Current Nonparental Licensed Care						
Younger than school-age (infants, toddlers, and preschoolers)						
Number of children using any nonparental licensed care (excludes K-8)	26,600	136,100	14,500	15,800	15,600	208,600
Center-based care	21,700	114,200	12,300	15,400	12,300	175,900
Family child care	4,900	21,800	2,300	400	3,300	32,700
School-age						
Number of children using any nonparental care (excludes K-8)	12,300	64,900	6,400	5,400	6,200	95,300
Center-based care	10,500	53,500	6,000	5,300	4,500	79,700
Family child care	1,900	11,500	400	100	1,700	15,600
Nonparental Licensed Child Care Under Legislative Proposal						
Younger than school-age (infants, toddlers, and preschoolers)						
Number of children using any nonparental licensed care (excludes K-8)	60,200	174,200	28,100	21,100	23,100	306,700
Center-based care	52,700	150,000	24,700	20,200	19,300	266,900
Family child care	7,500	24,200	3,400	900	3,700	39,800
School-age						
Number of children using any nonparental licensed care (excludes K-8)	18,100	73,500	9,300	7,000	7,800	115,800
Center-based care	14,100	58,400	7,300	6,000	5,400	91,300
Family child care	4,000	15,100	2,000	1,000	2,400	24,500
Change in Licensed Care						
Younger than school-age (infants, toddlers, and preschoolers)						
Additional children in licensed care	33,600	38,100	13,600	5,300	7,400	98,100
Center-based care	31,000	35,700	12,400	4,900	7,000	91,000
Family child care	2,600	2,400	1,100	400	400	7,000
Percent change	126.6%	28.0%	93.4%	33.5%	47.3%	47.0%
Center-based care	143.1%	31.3%	101.4%	31.6%	56.5%	51.7%
Family child care	53.7%	11.0%	50.0%	105.7%	13.1%	21.5%
School-age						
Additional children in licensed care	5,800	8,600	2,900	1,600	1,600	20,500
Center-based care	3,700	4,900	1,300	700	900	11,600
Family child care	2,100	3,700	1,500	900	700	8,900
Percent change	47.0%	13.3%	44.7%	30.3%	25.1%	21.5%
Center-based care	35.0%	9.2%	22.2%	14.0%	19.7%	14.5%
Family child care	114.5%	32.1%	359.5%	740.8%	39.7%	57.2%

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Note: Numbers have been rounded; therefore, some totals, including percentage changes, 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 6. Number of Children in any Nonparental Care and Licensed Care of Infants, Toddlers, and Preschool Children by Race/Ethnicity Currently and Under Legislative Proposal

	Latino	White	Black	Asian	Other	All Children
Total Number of Children						
Infants	16,800	48,100	8,100	5,400	5,600	84,000
Toddlers	23,200	62,000	9,900	7,000	6,800	108,900
Preschool	42,200	126,000	17,200	15,200	14,600	215,100
Current Nonparental Licensed Child Care						
Infants						
Number of children using any nonparental care (excludes K-8)	8,200	29,000	4,300	2,700	3,300	47,500
Percent of all children in any nonparental care (excludes K-8)	48.7%	60.2%	52.9%	51.2%	59.3%	56.6%
Number of children in licensed care (excludes Head Start and Public Pre-K)	2,900	17,600	2,000	1,700	1,900	26,100
Percent of all children in licensed care (excludes Head Start and Public Pre-K)	17.5%	36.6%	24.7%	31.7%	33.9%	31.1%
Toddlers						
Number of children using any nonparental care (excludes K-8)	12,500	41,500	6,100	4,300	4,200	68,600
Percent of all children in any nonparental care (excludes K-8)	53.7%	67.0%	61.9%	61.8%	61.1%	63.0%
Number of children using any nonparental licensed care (excludes K-8)	5,700	29,700	3,900	3,300	2,800	45,400
Percent of all children in licensed care (excludes Head Start and Public Pre-K)	24.3%	47.9%	39.3%	47.3%	41.0%	41.7%
Preschool						
Number of children using any nonparental care (excludes K-8)	29,700	100,500	13,800	12,200	11,600	167,700
Percent of all children in any nonparental care (excludes K-8)	70.4%	79.8%	80.2%	80.1%	79.3%	78.0%
Number of children using any nonparental licensed care (excludes K-8)	15,000	67,700	7,100	9,000	7,900	106,800
Percent of all children in licensed care (excludes Head Start and Public Pre-K)	35.7%	53.8%	41.4%	59.4%	54.2%	49.7%
Nonparental Licensed Child Care Under Legislative Proposal						
Infants						
Number of children using any nonparental care (excludes K-8)	12,200	33,600	6,100	3,500	4,100	59,500
Percent of all children in any nonparental care (excludes K-8)	72.6%	69.7%	75.8%	65.9%	72.7%	70.8%
Number of children in licensed care (excludes Head Start and Public Pre-K)	9,500	24,400	4,900	2,700	3,300	44,700
Percent of all children in licensed care (excludes Head Start and Public Pre-K)	56.5%	50.8%	60.8%	49.6%	57.8%	53.3%
Toddlers						
Number of children using any nonparental care (excludes K-8)	16,800	46,296	8,025	5,159	5,264	81,583
Percent of all children in any nonparental care (excludes K-8)	72.5%	74.7%	80.9%	74.0%	77.1%	74.9%
Number of children using any nonparental licensed care (excludes K-8)	13,400	37,000	7,000	4,600	4,500	66,500
Percent of all children in licensed care (excludes Head Start and Public Pre-K)	57.8%	59.6%	70.9%	66.3%	65.2%	61.0%
Preschool						
Number of children using any nonparental care (excludes K-8)	35,900	108,000	15,700	13,300	12,700	185,600
Percent of all children in any nonparental care (excludes K-8)	85.2%	85.7%	91.3%	87.7%	86.8%	86.3%
Number of children using any nonparental licensed care (excludes K-8)	26,900	81,400	11,900	11,100	10,200	141,500
Percent of all children in licensed care (excludes Head Start and Public Pre-K)	63.8%	64.6%	69.0%	73.1%	70.0%	65.8%
Percent in Licensed Care of All Children in Nonparental Care						
Infants						
Currently	35.9%	60.8%	46.7%	61.9%	57.3%	55.1%
Under legislative proposal	77.8%	72.8%	80.2%	75.3%	79.5%	75.2%
Toddlers						
Currently	45.3%	71.6%	63.7%	77.5%	67.0%	66.2%
Under legislative proposal	79.8%	79.8%	87.5%	89.6%	84.6%	81.5%
Preschool						
Currently	50.7%	67.4%	51.6%	74.2%	68.3%	63.7%
Under legislative proposal	74.8%	75.4%	75.6%	83.4%	80.7%	76.2%

Source: UMass Boston Early Ed CUSP (Cost and Usage Simulator Project) May 2024

Note: Numbers have been rounded; therefore, some totals may not add up.

About the **Early Education Leaders Institute**

The Early Education Leaders Institute at the University of Massachusetts Boston 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/earlyedinstitute.

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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 in 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