

Care for Our Commonwealth: The Cost of Universal, Affordable, High-Quality Early Care & Education Across Massachusetts

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Key Takeaways

- Massachusetts families depend on early care & education (ECE) to promote healthy child development and so parents can go to work knowing their children are safe. However, our ECE sector faces many systemic challenges. Care is often unaffordable and teachers are chronically underpaid. These concerns have been exacerbated by the COVID-19 pandemic.
- High-quality ECE—including strong curriculum and supportive teaching in classrooms, professional development, small class sizes, well-compensated teachers, and full-time schedules—has been widely linked to positive benefits for kids that can carry forward into elementary school and beyond. This includes exemplary programs in Massachusetts.
- Existing public programs, such as Head Start, state ECE subsidies, and the preschool programs offered by school districts meet some of the need, currently enrolling 91,000 children and spending \$1.27 billion in public funding annually.
- The full cost of high-quality ECE would be just over \$28,000 per child each year for ages 0-4 (infants, toddlers, and preschool children), nearly double the funding of existing programs.
- Universal high-quality ECE in Massachusetts, with affordable capped fees of no more than 7% of income and free for low-income families, would **cover a total of 288,000 kids with net new costs of \$5.03 billion.**
- Affordable high-quality ECE would particularly benefit families of color and low-income families who may be struggling with the high cost of care. Increases in teacher pay, benefits, and working conditions, necessary for high-quality ECE would also benefit teachers in the ECE field.
- Like the reform of K-12 school funding in Massachusetts, funding universal ECE could be phased in over several years, with initial priority for the most under-served communities.

Early Care and Education is Critical for Families

Across the Commonwealth, while adults work to provide for their families, they depend on reliable and nurturing learning environments for their children. For those parents with young children under 5, being able to work often depends on the early care and education (ECE) system and the thousands of ECE providers across our state. To meet their vital need for ECE services, many families today have to navigate an often unreliable, disconnected, and costly system of care.

For high-level details on the ECE system in Massachusetts, see the box below and Appendix I.¹ Despite the available options for families, demand for ECE across Massachusetts routinely outpaces the available slots for children, and the pandemic has made the situation more difficult. One out of six programs that closed during the COVID-19 pandemic had not reopened as of February 2021.² Even before the pandemic, over half of all people in Massachusetts lived in child care “deserts” where there are more than three children in the community for each available spot at an ECE center or family care home.³ Rural areas and low-income urban communities are more likely to be child care deserts, limiting work opportunities for adults—especially mothers—and developmental opportunities young children.

Snapshot: Early Care and Education in Massachusetts

- **354,000 kids under 5**
- **8,100 state licensed programs (pre-pandemic)**
 - **1/3 ECE centers, 2/3 family child care homes**
- **230,000 licensed ECE slots, half for children under 5**
- **31,000 children enrolled in public district preschool**
- **14,000 children in federally funded Head Start programs**

Not surprisingly, as many families struggle to access care, Massachusetts ECE costs have skyrocketed. For example, in 2019, Massachusetts ranked last among the 50 states in the affordability of infant care, with costs reaching nearly \$21,000 per year, an unaffordable rate for 95% of families.⁴ At this price, infant care consumes over 80% of a minimum wage salary in Massachusetts and ECE costs now exceed public college tuition.⁵ While parents seeking care are facing accessibility and affordability crises, the early care and education field faces significant challenges. Low wages and compensation that limit quality ECE services. Across the country, the early education field remains low paying, particularly for child care workers and those who work with the youngest children.⁶ In Massachusetts, frontline ECE teachers are low paid, including childcare workers who made only \$29,400 in yearly wages in 2019 and preschool teachers who

earned \$36,500.⁷ According to recent survey data, the ECE workforce in Massachusetts is 98% women, and people of color are also over-represented among ECE teachers and family child care providers.⁸ Unfortunately, people of color are under-represented in management roles, highlighting the need for equitable career pathways in the ECE field. Addressing workforce conditions is inextricably linked with improving the livelihoods of the many women working as teachers in our ECE classrooms, and particularly women of color.

Low wages contribute to significant gaps between what comparable educators earn working in ECE compared to K-12. In 2019, Massachusetts ECE teachers with a college degree earned one-third less than peers in K-12. In turn, one-in-six early educators are in poverty, nearly twice the state rate and vastly more than teachers overall.⁹

Insufficient wages and benefits hold back our ECE system from appropriately valuing the skills and expertise of our ECE teachers and ensuring the high standards of quality and professionalism that all stakeholders in our state require, including children, families, teachers, and businesses. According to the Boston Chamber of Commerce, the current system contributes to extensive turnover of nearly 30% among early educators.¹⁰ Our current approach is not creating viable pathways for early educators covering education, employment, professional development and compensation. Such pathways are necessary to ensure high-quality teaching and learning for children and families.

The Benefits of High-Quality Early Care and Education

The benefits of high-quality ECE services for young children, families, and the wider economy are widely documented. A strong body of research has connected high-quality ECE and positive impacts on children and families.¹¹ This is particularly true for low-income children, students of color, and English Language Learners who have benefited more from ECE initiatives. The table below lists key features of high-quality ECE referenced throughout the report.¹²

Features of High-Quality Early Care and Education
<ul style="list-style-type: none"> • <i>Ample educational materials and classroom space</i> • <i>Excellent teacher qualifications, professional development, salary, and benefits</i> • <i>Full-day full-year schedule for kids and families</i> • <i>Research-based curriculum</i> • <i>Small class sizes</i> • <i>Supportive and effective classroom practices</i>

Over 80 studies of ECE programs find that the benefits are on average large enough to raise reading and literacy outcomes so that low-income children and Black children in Kindergarten

are on pace with their peers, showing the potential to support greater equity of outcomes throughout education and beyond.¹³

Here in Massachusetts, well designed ECE initiatives have also boosted achievement for young children. This is true for several preschool programs in recent years that served 4-year-olds across the state. For several years, starting in 2009, Boston Public Schools (BPS) increased its ECE offerings free of charge for roughly 2,000 4-year-olds from diverse economic and racial backgrounds in district-run preschools. BPS used evidence-based curriculum for social skills, literacy, language, and math, that was aligned with teacher professional development and coaching.¹⁴ This effort increased academic performance enough to support equitable achievement, particularly in math. There were greater benefits for low-income, Hispanic/Latinx children, and indirect positive effects on broader skills such as memory and self-control.

Preschool expansion efforts in Boston set the stage for further improvement and expansion of services for 4-year-olds across Massachusetts. With four-year grant support from the federal government, starting in 2014, Massachusetts implemented the Preschool Expansion Grant (PEG) for children in five cities, including Boston, Holyoke, Lawrence, Lowell and Springfield. The focus of PEG was low-income children in the year before Kindergarten who had not previously attended ECE. PEG was run by licensed ECE providers in partnership with local school districts. All classrooms implemented the key quality features referenced above.¹⁵

Research evaluations identified significant benefits for PEG students compared to peers who didn't enroll. There were significant benefits from participating in PEG on early literacy and math achievement. The benefits significantly exceeded the amount necessary to boost the achievement of children of color and low-income children to eliminate disparities in Kindergarten.¹⁶ Studies of PEG also showed even greater benefits for children from families where English was not the primary language and those who had not previously attended ECE.¹⁷ Overall, these results show particularly high impact from PEG that exceeds the effectiveness of most ECE initiatives in research literature.

While these specific examples in Massachusetts are focused on preschool children, infant and toddler programs serving families and children ages 0-3 also have strong research evidence of success.¹⁸ While programs serving younger children have comparable effectiveness, there is not a simple path for an earlier start of care to necessarily increase benefits across the board. Instead, ECE services specifically designed for the youngest children and their families—with elements such as extremely small class sizes, tailored curriculum, and wraparound services—have shown significant positive impact on child development outcomes.

Improved and more accessible ECE also prevents economic harms to working families, business, and the economy. National research suggests that a lack of adequate child care contributes to average per-year losses of over \$3,300 in worker earnings and productivity and over \$1,100 in reduced revenue and higher labor costs for businesses.¹⁹ This research from the national

business organization ReadyNation estimated that child care challenges cost the U.S. economy \$57 billion each year, translating to an estimated \$1.59 billion cost annually for Massachusetts.²⁰

These types of challenges, which can be mitigated by increasing ECE access for families, also compound into negative effects over the long-term. Productivity and economic losses are driven by child care problems harming workers ability to participate in training, fulfill job duties or hours, advance in their careers and stay employed.²¹ This in turn can lower business productivity, stability, and output, harming the overall economy.

Existing Publicly Supported Early Care and Education Programs

While significant work lies ahead to build professional, high-quality, accessible, and affordable ECE across the Commonwealth, we have a significant foundation to build on in our state from existing public initiatives. These include programs with public support at the federal, state, and local levels. For full detail, see Appendix I below.

Together, the three major existing public programs (federally funded Head Start programs, state Department of Early Education and Care (EEC) subsidies, and school district preschool programs) account for \$1.27 billion in total support across Massachusetts for roughly 91,000 kids, many of whom are low-income and have special needs. This public enrollment figure is roughly one-third of the total licensed child care capacity in Massachusetts.²² Public funding is also around the same amount as the estimated \$1.3 billion in private ECE tuition and fees paid by Massachusetts families in 2020.²³

Existing Public Support for Early Care and Education	FY 2021 Funding Levels (\$ millions)
Head Start Programs (Federal Funds and State Matching)	\$173
Department of Early Education and Care Subsidies	\$703
Public Preschool in K-12 Funding System	\$391
TOTAL	\$1,267

The Cost of Serving Each Child in Early Care and Education

Results from high-performing ECE programs like PEG, and existing programs in the field give Massachusetts a foundation to make affordable high-quality ECE programs available to more children and families. It is vital to provide appropriate funding to support the quality features that promote results. Additionally, funding is essential to ease the cost burden on families, particularly with costs in Massachusetts exceeding all other states. One example where funding levels matched the cost of high-quality services in the Commonwealth was the PEG program,

which achieved high levels of ECE quality and promoted academic gains through spending \$19,500 per-child (see discussion above).²⁴

Looking at the cost of high-quality ECE more broadly, detailed analyses have calculated the necessary funding levels involved. Many studies have been comprehensive, including preschool students as well as infants and toddlers who require even more personalized support from ECE teachers and correspondingly higher funding levels. Additionally, some of these analyses allow national estimates to be broken down into specific figures for Massachusetts.

One comprehensive study estimated that providing a high-quality ECE system in Massachusetts would cost between \$33,000 and \$36,000 per child and cover between 220,000 and 293,000 children under age 5.²⁵ For the purposes of estimated statewide ECE costs in this report, we adapt specific Massachusetts estimates that analyzed the full cost of high-quality care for infants, toddlers, and preschool children.²⁶ This included all the critical features of high-quality ECE (see box above).

This study estimated that high-quality ECE would cost between \$20,000 and \$37,800 per child per year in Massachusetts (current dollars) depending on age group. This is a dramatic increase from funding levels in the state’s publicly-funded ECE programs today (see Appendix I and chart below). The state would have to double funding for subsidized programs in Massachusetts to match these high-quality levels.²⁷

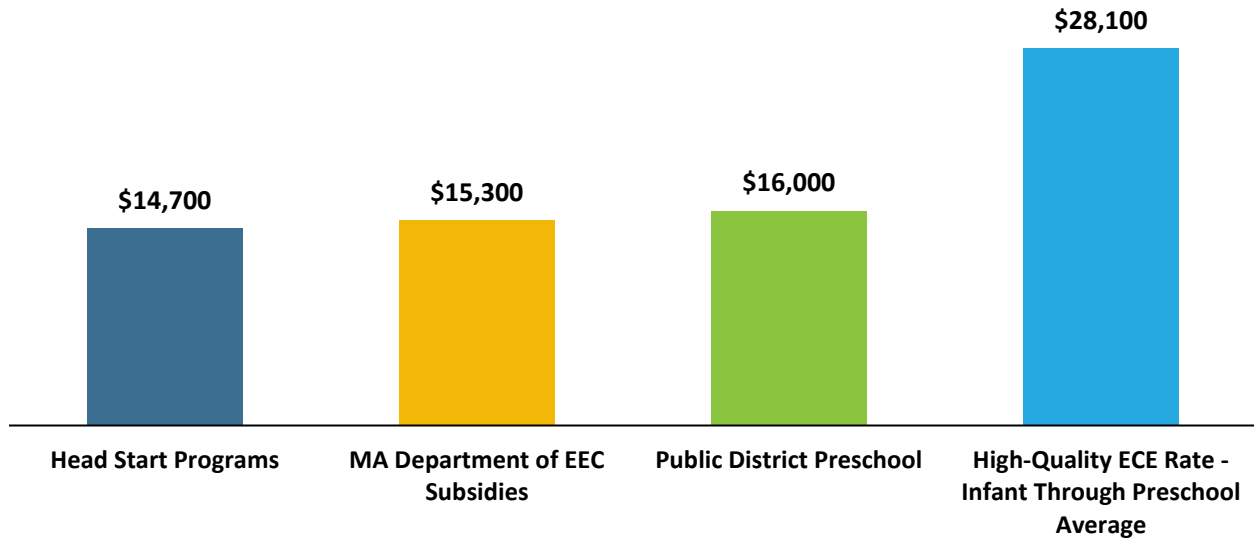
**Per Child Funding Necessary for High-Quality ECE
in Massachusetts, by Age Group**

Preschool	Toddler	Infant
\$20,000	\$26,400	\$37,800
Average - \$28,267		

Source: Center for American Progress, figures adjusted to FY 2021

Proposed High-Quality ECE Rates Vastly Exceed Funding For Existing Public Programs

Per-pupil funding (\$2021) public programs and Center for American Progress cost of quality study (all ages)



While these projected high-quality funding rates are helpful for overall cost estimates at the state level, they have some limitations. In general, they estimate costs for center-based programs operating on full-day full-year schedules.²⁸ This model may oversimplify cost structures because it uses only full-time care, does not differentiate rates between center-based care and family child care, nor does it separately account for the cost of non-standard hours. Some differentiation for the various settings and ways ECE is delivered will likely be necessary. However, ECE care in centers tends to be higher cost, so this estimate creates an upper boundary for estimating the cost of future programs.²⁹ Even so, parity in funding rates for providers across settings and hours could help a diverse range of providers reach the same vital quality measures we expect from full day/year center-based care to positively impact children.

Additionally, this model does not differentiate costs by region of the state as in current ECE policy. In market rate studies that are part of how Massachusetts currently meets federal regulations, rural regions and those outside of the greater Boston metro area systematically receive lower funding.³⁰ However, this is not a preferable way to support ECE providers in these regions, since they require similar elements for quality. Rural regions for example, may have higher costs in areas such as transportation and smaller economies of scale. This counteracts other areas like rent where costs are lower in rural regions. This strengthens the case for Massachusetts to move towards parity in funding at the levels necessary to ensure quality ECE (not simply existing market prices) while staying in compliance with federal regulations. One way to achieve this would be for Massachusetts to apply to the federal government to move from a

market rate study process (which ties public ECE to the existing flaws in the market) and use an alternate methodology focused on appropriately estimating the cost of quality ECE.³¹

Estimating the Cost of Universal, Affordable, High-Quality ECE Across Massachusetts

To estimate the costs of universal, affordable, high-quality ECE for Massachusetts, we took the assumed cost of the program (above), estimated both the number of children who would be in care, and the estimated cost of public subsidies necessary to keep the program affordable. MassBudget used U.S. Census data to estimate the population of children under 5, how many of these kids would likely use ECE based on other universal programs, and the maximum families would pay if fees were capped using the federal affordability standard of no more than 7% of income. This model also exempts the lowest-income families from fees. These calculations also considered the existing public funding for ECE programs. For further detail, see Appendix II.

Using these assumptions, this model for universal, affordable, and high-quality care for all children under 5 in Massachusetts has a total gross cost of \$7.56 billion per year. Expanding high-quality ECE would build on existing public funding of \$1.27 billion (see discussion above and Appendix I). Finally, family fees capped at 7% of total income, excluding earnings below 50% of the state median income, would also cover \$1.27 billion. Given existing fees already paid by families across the state, this model would not likely require family fees in aggregate to increase even as public ECE services are dramatically expanded. The model estimates \$5.03 billion in new public funding would be necessary for universal, high-quality ECE across Massachusetts.

Estimated Total Costs for Affordable High-Quality ECE Across Massachusetts

Children Served	Gross Cost	Existing Public Funding	Family Fees	Total Net Cost
287,600	\$7,563,000,000	\$1,267,000,000	\$1,270,000,000	\$5,026,000,000

Phasing-In Affordable and High-Quality ECE

The pathway to achieving the public investment necessary to ensure high-quality, affordable, ECE statewide will require significantly ramping up what the Commonwealth offers significantly over time. Universal high-quality care under this model is roughly four times the public funding available today.

This process could begin at a potentially favorable time for greater national ECE investment. Federal COVID-19 relief for Massachusetts provided over \$176 million for child care block grants and stabilization funds in 2020, and the recently passed American Rescue Plan is projected to provide an additional \$511 million in 2021.³² While the initial focus is to support ECE recovery

and stability, there may be opportunities to build on these positive measures. Further federal investments could reduce the cost for our state to reach a given ECE expansion goal.

When considering a gradual process to increase ECE investment over time, Massachusetts has useful experience in the history of public funding for K-12 schools. Both the original Education Reform Act of 1993 and the recent update, the 2019 Student Opportunity Act, were designed to build investments gradually over most of a decade, with a particular focus on under-resourced children and communities most in need of additional support.³³

An implementation plan for expanded ECE across Massachusetts should prioritize under-resourced and low-income families who are least able to access quality care and who are likely to reap the most benefits from new services. This imperative aligns with the need to expand ECE services over time in a focused manner in the hopes of reaching universal access, quality, and affordability in the years to come.

Universal, affordable, high-quality ECE would be transformative particularly for low-income children and families who are more likely to struggle to find affordable and high-quality care today. At almost no out-of-pocket cost, the adults would be able to go to work, knowing that their children would be getting the life-long benefits of high-quality ECE. The proposed universal structure would be incredibly progressive in terms of the amount of public dollars distributed to lower-income families (see table below).

Total Enrollment & Public Funding for Affordable High-Quality ECE by Income Level

Income Cutoff for Family of Four (statewide income percentile)	Children Under 5 (share of estimated enrollment)	Public Funding for High Quality ECE (share of total) \$ billions
\$58,000 and below (1st - 25th)	94,100 (33%)	\$2.46 (39%)
Up to \$82,000 (25th-50th)	46,100 (16%)	\$1.14 (18%)
Up to \$133,000 (50th-75th)	46,100 (16%)	\$1.34 (21%)
Over \$193,000 (Above 75th)	85,200 (30%)	\$1.35 (21%)
TOTAL	287,600	\$6.29B

This model for expanded ECE across Massachusetts would also provide greater support at lower costs to people of color across the state who due to structural barriers and historical legacies of racism are more likely to face poverty. The model shows that by investing more in under-

resourced children and capping costs to families, the Commonwealth could help address racial inequities driven by historical legacies of racism and discrimination that show up through wealth disparities and unequal access to opportunities.

Because Black and Hispanic/Latinx families are more likely to be lower income, the universal subsidy would provide Black families an extra \$94 million overall and an extra \$158 million for Hispanic/Latinx families overall. The additional benefits of high-quality, affordable ECE for families in the workforce and young people as they advance in life, could positively accrue at a particularly high level for families of color, and in turn promote broader equity in Massachusetts.

Total Enrollment & Public Funding for Affordable High-Quality ECE by Race

Race/Hispanic Origin	Children Under 5 - Estimated Enrollment (share of population)	Public Funding Needed for High-Quality ECE (\$ millions)	Share of Public Funding
American Indian/Native American	700 (0.2%)	\$16	0.3%
Asian	20,000 (7%)	\$415	7%
Black	27,700 (10%)	\$701	11%
Other-Multi-Race-Unknown	40,400 (14%)	\$948	15%
White	198,800 (69%)	\$4,213	67%
Hispanic/Latinx	57,400 (20%)	\$1,414	22%
Non-Hispanic/Latinx	230,200 (80%)	\$4,879	78%

Appendix I - Existing Publicly Supported ECE Programs

Head Start

The Head Start program is licensed by the Commonwealth and overseen and primarily funded by the federal government. Head Start provides educational, nutritional, and health services for children under 5 and their families. Head Start focuses on families in need of additional support such as those with low-incomes, participating in foster care, experiencing homelessness, or with other special needs.³⁴

Studies of Head Start preschool and family support programs have found solid evidence of positive impact on children. These findings suggest that Head Start helps children academically and is cost-effective, with both short and long-term benefits that last into elementary school and even beyond.³⁵ The effects of Head Start are similar to many high-quality preschool programs. The effects are also more profound for children of color. The benefits are particularly strong for young children who lack access to other ECE opportunities.³⁶

In Massachusetts, Head Start supports over 14,000 young children and families.³⁷ It operates through direct grants from the federal government to nearly 30 non-profit providers around Massachusetts.³⁸ These organizations must fund 20 percent of the program budget, using their own funds, in-kind contributions, and support from the state.³⁹ According to recent data, the federal government provided \$158 million to support Head Start in Massachusetts in 2019 (current dollars), with the Commonwealth providing an additional \$15 million in matching support as of Fiscal Year (FY) 2021.⁴⁰ Aside from in-kind support, the combined federal and state dollar total of \$173 million reflects per-pupil funding of roughly \$14,700.

Early Education and Care Subsidies

With significant funding support from the federal government, Massachusetts also operates public statewide early care and education services through the Department of Early Education and Care (EEC) for low-income families and those involved with the child welfare system (Department of Children and Families).

Massachusetts is currently allocating over \$900 million annually towards all ECE programs.⁴¹ State programs overseen by EEC cover a range of areas such as licensing and oversight, targeted improvement initiatives within the system, and directly subsidizing care for under-resourced families. According to figures from FY 2020, 68% of state EEC spending comes from federal support.⁴²

Because this report focuses on expanding access to high-quality ECE care, the most relevant EEC programs are the subsidies that directly support care for low-income children across the state. Subsidies are also the largest EEC programs with the highest levels of funding within EEC (covering roughly three-quarters of the total state EEC budget) and are supported by federal child care and transitional assistance (TANF) block grants.⁴³ Because the state designs these programs to maximize federal reimbursements, they rely on federal funding at an even higher rate (77% in FY 2020) than EEC overall.⁴⁴

The first ECE subsidy program, Income Eligible Child Care, helps low-income working families to pay for ECE services using an income-based sliding scale. Some children in this program are also school-age students receiving after school and out of school care. The second program, Supportive and TANF Child Care provides ECE to vulnerable children in the care of the Department of Children and Families and those enrolled in Temporary Aid to Needy Families (limited cash assistance and work support programs). This program also provides school-age

services and additional social supports tailored to families participating in limited cash assistance and child protective services.⁴⁵

Together these subsidy programs served over 56,000 young children across Massachusetts in 2020.⁴⁶ They also had waitlists of nearly 15,000 eligible children unable to access care. However, disruption from the COVID-19 pandemic has caused a drop in EEC caseload to an average of roughly 46,000 in FY 2021.⁴⁷ As it stands, Income Eligible and TANF/Supportive Child Care and an adjacent rate reserve account together have \$703 million in total funding in FY 2021, over three-quarters of all early education spending.⁴⁸ Given greater costs and lower caseloads this year, that translates to \$15,300 in per-pupil funding.

Public District Preschool

Most public schools across Massachusetts operate ECE services for children ages 3-4 years old. Local school districts typically operate these as half-day programs running through the school year.⁴⁹ Under federal special education law, districts are required to offer free developmentally appropriate ECE services for three and four year olds eligible for special education.⁵⁰ Districts are also encouraged to educate special education preschoolers alongside peers without disabilities.⁵¹ Classroom placements are limited for children not receiving special education services, however, and the primarily half-day, school-year schedule is not compatible with many working parents' needs.

There is federal funding to support special education services and the school districts and state also support these preschool programs through the Chapter 70 funding formula.⁵² In 2019-2020, school districts across the state served nearly 31,000 preschool students. In 2019-2020, statewide school spending across Massachusetts was around \$16,000 per student.⁵³ Since districts are not required to differentiate spending by grade through required financial reporting, this can be used as a general preschool through 12th grade spending figure. Using this figure, we estimate that public districts spent \$391 million on preschool in 2019-2020 (current dollars).

Appendix II – Methodology for the Cost of Affordable and High-Quality ECE Across Massachusetts

MassBudget adapted U.S. Census Bureau American Community Survey (ACS) 5-year Estimates from 2014-2018 that provide reliable views of children and families.⁵⁴ This survey provides key information including the number of children under 5 in Massachusetts who could benefit from ECE, as well as information on their race/ethnicity, family income, and employment. This ACS data estimates a total of 354,000 children under age 5. The young children under 5 are evenly split (roughly 70,000 each) between children aged less than 1 through age 4.

It is likely that not all families would choose to put all of their children in child care, even if affordable. In general, examples of universal publicly funded ECE, including in other advanced economies and the U.S have shown extremely high levels of take-up for preschool children (ages

3-4) where available, with lower but still robust participation for infants and toddlers (ages 0-2). For example, a study of public ECE expansion in Germany in the 1990s showed that 90 percent of children ages 3 and 4 participated.⁵⁵ A study of public ECE in Sweden also found that 90 percent of 3 and 4-year-olds participated in their generous public system, with a decline to roughly 60 percent participation for younger children ages 1 and 2.⁵⁶ Finally studies of universal ECE expansion in the Canadian province of Quebec in the late 1990s, showed that two-thirds of all children ages 0-4 participated in their program, with nearly 70% enrollment for single-parent families.⁵⁷ This enrollment data was not broken down by age, but is consistent with lower participation among families with infants and toddlers.

In the United States, there are limited examples of universal publicly-supported ECE expansion efforts. One exception is the United States military child care system where ECE has been a policy priority due to the national security needs for workforce readiness in the military. Military service members have hundreds of thousands of ECE aged children and to meet their needs, the military undertook major ECE reform and improvement efforts in the past several decades.⁵⁸ In general, these efforts have been highly effective. The steps and strategies involved were also applicable to broader ECE expansion efforts across the country. This includes the need to focus on the accessibility and quality of programs, while increasing funding to achieve these goals while limiting costs to families.

One key measure of success is the share of all military children able to access services through their child care system. As of 2016, the Department of Defense enrolled 78% of all families who wanted care for children ages 0-12 in high-quality ECE (with 97% meeting nationally accredited quality standards) for a total of over 180,000 children served throughout the military as of 2016.⁵⁹ This progress nearly met the long-term goals of the military ECE system of serving up to 80% of demand and 98% of programs being accredited.

Using examples from other advanced economies and the U.S. military child care system, we estimate that between 65% and 90% of young children would participate with higher involvement as the children grow older. This totals roughly 287,600 children.

Age	Take-Up Rate	Estimated Participating Children
Under 1	65%	44,200
1	75%	52,600
2	85%	59,400
3	90%	65,000
4	90%	66,500
Overall	81%	287,600

The last piece of our model determines what fees/co-pays families would contribute to the cost of high-quality ECE services, capping a family's contribution at no more than 7% of income. The U.S Department of Health and Human Services uses an affordability standard of families paying no more than 7% of their income, in order to protect family economic stability.⁶⁰ Importantly, this is separate from the cost of care, and also covers larger families with more children that may struggle to afford care. These federal standards also allow state agencies to waive fees for families facing poverty, in child protective systems, or on a case-by-case basis when necessary.

In line with these standards, and consistent with high-quality programs like Boston Public Schools preschool expansion and the statewide Preschool Expansion Grant, which were free of charge, we also waive fees for families with incomes below half of the Massachusetts state median income (\$57,800 in current dollars for a family of four).⁶¹ To avoid a benefit cutoff that would drastically reduce public ECE support for families just over this income threshold, the model applies family fees only to income above 50% of the state median for all families.

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