TRANSFORMING THE FINANCING OF EARLY CARE AND EDUCATION IN MINNESOTA

Report from Transforming Minnesota’s Early Childhood Workforce Project

Spring 2021
Transforming the Financing of Early Care and Education in Minnesota
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Transforming the Financing of Early Care and Education in Minnesota
Executive Summary

The financing of early care and education in Minnesota is broken. Early Care and Education costs more than many families can afford; child care businesses operate on razor-thin margins and the wages of the early childhood workforce are far from adequate. These deficits at the system level have resulted in opportunity gaps which means many of Minnesota’s children are not adequately prepared for kindergarten. A shortage of child care spaces with child care deserts in many parts of the state limit access for families who need it most. An unacceptable burden of poverty-level wages is born by the almost all-female early childhood workforce. In addition to not serving Minnesota families well, our system does not serve Minnesota’s business interests. Parents of young children, particularly mothers, struggle to fully participate in the labor market and businesses struggle to hire and retain parents of young children.

The Financing Team estimates that the additional costs of ensuring affordable access for all Minnesota families coupled with quality investments to support equitable wages for the early childhood workforce requires an additional $2.3 billion annually. This estimate does not include all of the items necessary for a truly comprehensive high-quality early care and education system. Given the well-documented returns on investment of high-quality early care and education, this is a smart investment that Minnesota, with support from the federal government, should make.

This report includes the recommendations from Transforming the Early Childhood Workforce Project to transform our broken system and is informed by the work of Transforming the Financing of Early Care and Education in Minnesota Team and the Moving the Needle on Compensation Team.

RECOMMENDATIONS

1. Ensure adequate and reliable funding so that all families have access to high-quality, affordable early care and education that meets their needs.
   1.1. Support the lowest-income families with high-quality early care and education that requires no family contribution.
   1.2. Ensure that other families have access to affordable, high-quality care by capping family contributions at an affordable amount.
   1.3. Gradually increase the family contribution rate relative to family income to avoid a benefits “cliff” where small increases in family income result in the loss of financial support.

2. Ensure adequate and reliable funding so that the early childhood workforce is qualified, diverse, supported and equitably compensated.
   2.1. Provide early childhood educators with equitable compensation that reflects their
importance in educating children and supporting the larger economy.

2.2. Support the establishment of an Early Care and Education Profession in Minnesota through the adoption of the Power to the Profession Framework for defining and advancing the field and align compensation to the framework through the use of wage scales and other mechanisms.

2.3. Support early childhood professionals in earning early childhood credits and degrees and invest in the institutes of higher education that confer credentials.

3. Reform financing so that early care and education is fully funded as a public good.

3.1. Align or change existing funding models around a larger strategy for ensuring accessible high-quality early care and education for all Minnesota’s families.

3.2. State financing mechanisms, together with federal contributions, should cover the actual cost of high-quality care and education.

3.3. Engage and educate the public regarding the importance of financing a high-quality early care and education system. This should include more clearly explaining the larger benefits of increasing compensation for the workforce, creation of a communication plan for the advocacy field and framing early care and education as a system designed to support all Minnesota families and our economy.

**Terminology for this Report**

A key step in developing a plan for supporting and stabilizing the early care and education system is the use of shared language. In this report, we use the following terms:

- **Child care**: We intentionally never use the term “daycare” as we are taking care of children not days. We use Early Care and Education (ECE) to describe the work that happens from birth to age 5—it is both care and education and happens in all early childhood settings.
- **Compensation**: Includes the salaries paid to the early childhood workforce or to the business revenue of family child care programs plus the benefits provided to them.
- **Early Childhood Workforce**: A broad term to describe the universe of adults who provide care and education to young children and includes Head Start, family child care programs, child care center programs, and public school-based preschools. It includes those who are directly caring for and educating children, such as lead teachers, assistant teachers, and directors.
- **Educator**: The people working in centers or home-based programs whose primary role is working directly with children through teaching and caring for them.
In 2016, Minnesota was asked to participate in the National Academies of Sciences, Engineering and Medicine [National Academies] “Innovation to Incubation” initiative to develop a Minnesota-specific plan to transform our early childhood workforce based on the consensus study report from the National Academies, Transforming the Workforce for Children Birth Through Age Eight: A Unifying Foundation, published in 2015.\(^1\) Minnesota received technical assistance from the National Academies’ staff and developed a ten-year plan to implement select recommendations chosen from the national report. This plan was created by Transforming Minnesota’s Early Childhood Workforce Leadership Team and informed by extensive community engagement. Over 1,000 people were engaged through conferences, presentations, surveys, conversations and focus groups. Through this engagement, a shared vision for Minnesota’s early childhood workforce was developed.


2. This group was initially known as the B8 Early Childhood Workforce Core Team. See Appendix A for a list of current team members.
After the publication of the *Transforming the Workforce* report, the National Academies convened a group of national experts to study how to finance a better early care and education system; one that was accessible, affordable for families and of high quality. In 2018, they issued a companion report, *Transforming the Financing of Early Care and Education*. In October of 2018, then Governor Mark Dayton’s Children’s Cabinet, together with state agencies and the Leadership Team, held a day-long convening with 40 state experts to talk about the financing recommendations and plans for action in Minnesota. That summer, a smaller team began meeting to specifically create a framework for understanding the costs of expanding access to and quality of the ECE system in Minnesota.

Two experts from Minnesota, Professor Liz Davis, an applied economist from the University of Minnesota, and Jerry Cutts, the President and CEO of First Children’s Finance, were members of the National Academies’ group and have since participated on Transforming the Financing of Early Care and Education in Minnesota Team. Additional team members include Jonathan May from Think Small, Professor Aaron Sojourner from the Carlson School at the University of Minnesota and Jamie Bonczyk, Executive Director of the Hopkins Early Learning Center. State agency staff from the Departments of Education

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and Human Services and Rob Grunewald from the Federal Reserve Bank of Minneapolis also participated to provide technical assistance.⁴

In 2018, the TEACH Early Childhood® National Center awarded Minnesota a grant to establish a state team to “Move the Needle on Compensation” and dig deep into the issues of early educator wages. This team was set-up as a subcommittee of the Leadership team. Their work builds on an earlier report completed by Governor Dayton’s Children’s Cabinet and supported by a grant from the National Governors Association entitled “Minnesota’s Workforce Compensation Advisory Group Summary Report and Recommendations.”⁵ The Moving the Needle on Compensation team has spent the past two years looking at other states, researching best practices, consulting with national experts and has concluded that Minnesota needs to implement the Power to the Profession framework and incorporate salary scales for early childhood educators that correspond with the levels of educators in the framework along with adequate financing to support access and critical early care and education infrastructure.

This report reflects the work done by the Financing Team, the Moving the Needle on Compensation Team, and the Leadership Team.

What do we know about the economics of early care and education in Minnesota?

There are plenty of reports documenting the problems of early care and education, most notably, the National Academies’ report on Transforming the Financing of Early Care and Education. These reports all have a consistent message: the system is broken. The ECE market is burdened with failures at many levels. Although these problems are complex and interwoven, there are several key issues.

Child care costs a lot at a time when parents can least afford it. Current government funding reaches only a fraction of the eligible families. Even middle-income families have difficulty covering the costs of high-quality care—the cost of infant care takes up more than 21 percent of median state income for a Minnesota family with children.⁶

Current financing is complex and not aligned. ECE financing includes several separate programs with different funding streams, constituencies, eligibility requirements, and quality standards.

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4. This group was initially known as the B8 Early Childhood Workforce Core Team. See Appendix A for a list of current team members.
Funding is not always linked to quality standards and does not reflect the true costs of quality. Many early care and education funding mechanisms in Minnesota allow for differential funding based on quality as measured by the state’s quality rating and improvement system (QRIS) ratings. Even at these higher levels, funding does not account for the cost of adequate support for educator wages and professional development and other quality investments. Also, providers that don’t meet QRIS ratings requirements for increased funding rates face challenges in covering the costs related to improving quality.

These problems of lack of affordability, funding complexity and underinvestment contribute to a shortage of affordable care, with serious implications for families with young children. Many parents, primarily mothers, are not able to work because of a lack of child care and therefore have less income for their families.

The lack of support for a stable and qualified early childhood workforce is problematic. The incomes of most educators are not sufficient to support their households. The workforce conditions also result in very high levels of turnover, which harms both workers and the children they serve. In 2018, the annual turnover rate was 14.4% for the “Child Day Care Services” industry compared to 9.1% economy wide in Minnesota. High turnover and stress from low wages decreases quality in early care and education programs.

These issues also have broader implications for the larger workforce and economy. Businesses frequently struggle to find enough workers to fill jobs and the lack of early care and education compounds these struggles. As workers move back towards in-person work and the economy recovers from COVID-19, the lack of access to affordable early care options will become even more apparent. An inadequate supply of child care can also discourage companies from locating or expanding in certain communities. Parents with young children, particularly mothers, are sometimes underemployed or unemployed due to inadequate supply of high-quality early care and education. Simply put, a strong and healthy early care and education system is an important ingredient to a strong and healthy economy.

GUIDING PRINCIPLES

Transforming the Financing of Minnesota’s Early Care and Education team began meeting in the summer of 2019 to specifically create a framework for understanding the costs of expanding access to and quality of the ECE system in Minnesota. The goal of the Financing Team is to develop a framework that is consistent with the recommendations from the National Academies of Sciences reports and Minnesota’s plans for transforming the early childhood workforce. At the first team meeting in the summer of 2019, the team agreed to a set of principles to guide their planning, in addition to the principles from the National Academies (found in Appendix C):

• Minnesota’s framework needs to be aspirational, comprehensive, and work for all of Minnesota’s children and families,
• Minnesota’s framework also needs to be pragmatic and take into considerations the economic, political, and social realities of Minnesota,
• High-quality early care and education is critical for children. A well-prepared workforce is a critical component of quality,
• Financing recommendations need to work for a mixed-delivery system where multiple settings are supported to meet family needs, and
• We need to understand how much money is currently spent and how and where it is spent.

While the National Academies’ reports focus on early care and education for children from birth through age eight, in Minnesota we chose to focus on financing issues for children from birth through Kindergarten entrance. We also wanted to make sure that we better understood financing and spending for infants and toddlers (birth through age 2) as well as for preschool aged children (generally children age 3 and 4).

We are also committed to advancing racial equity by ensuring that children of color and indigenous children have access to affordable, high-quality, culturally relevant early care and education. We are also committed to eliminating the systemic racism that has kept wages for early educators of color and indigenous educators working for pay that is less than their White counterparts. We are committed to centering racial equity; elevating the voices of Indigenous educators and educators of color; and continuous reflection and learning about our own implicit biases. A financing framework is not just about money—it reflects values and goals. There are deep gender and racial inequities that need to be rectified for the early childhood workforce. The
underpaid labor of women, including a significant number of women of color who are paid even less than their white counterparts, is supporting our economy.

A diverse early childhood workforce is an advantage in educating the state’s increasingly diverse child population. And we also have to address the systemic barriers that have kept the early childhood workforce from accessing the supports they need to advance their careers. These inequities are all interrelated, and we are working to address them comprehensively. Educators are the most important component of a high-quality early learning experience and we are focusing on supporting the early childhood workforce with the long-term goal of improving outcomes for children.

MINNESOTA’S MOVING THE NEEDLE ON COMPENSATION TEAM

Minnesota’s Moving the Needle on Compensation team also contributed important vision and direction. Their vision is that Minnesota will have a qualified, diverse, supported and equitably compensated early childhood workforce as a critical component to providing early care and education that supports Minnesota’s families, communities and industry. That vision led them to also develop guiding principles about the compensation elements that should be included in any solution:

• Fair and equitable wages that allow early childhood educators to support themselves and their families,
• Reasonable benefits including health insurance and paid time off,
• Work standards that acknowledge the needs of the profession including planning time, professional development opportunities, resources, and support,
• Compensation that is not dependent on the age of the children served nor the setting of the care but rather linked to credentials and expertise in line with the Power to the Profession designations and in parity with K-12 educators with similar credentials and years of experience.

Power to the Profession Framework

Power to the Profession is an initiative led by the National Association for the Education of Young Children (NAEYC) to define and develop the early childhood education profession. The framework includes key steps for professionalization of the ECE educator profession:

• Define three professional licensure designations with distinct roles and responsibilities. These designations are Early Childhood Educator I, Early Childhood Educator II and Early Childhood Educator III or ECE I, II and III. They correspond to a Child Development Associate credential, an associate degree and a bachelor’s degree.
• Align professional preparation pathways and specializations.
• Ensure adequate compensation that is comparable across care settings and to public school salaries for comparable qualifications, experience, and job responsibilities.

For more information see: www.powertotheprofession.org.
Most state early childhood workforce investments to date have focused on financial relief for providers and staff, which require up-front investment by these underfunded and under-compensated workers. These supports don’t change their ability to sustain their business or career, let alone continue to invest in career advancement and program quality. Our vision for this work reflects a shift from financial relief to compensation reform, which will change structural conditions for workers and incentives for quality investment in the long-term.

<table>
<thead>
<tr>
<th>Financial Relief</th>
<th>vs.</th>
<th>Compensation Reform</th>
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<tr>
<td>Financial relief strategies are interim or temporary solutions</td>
<td>True compensation reform is a long-term solution</td>
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Examples of financial relief include:
- Stipends
- Tax credits
- Bonuses (like REETAIN awards in Minnesota)

True compensation reform includes:
- A living wage
- Benefits
- Pay for non-contact time for planning and professional development
- Use of salary scales to ensure equitable compensation commensurate with credentials and experience
OUR RECOMMENDATIONS

System reform requires policy and practice changes, as well as expanded federal and state investments. We begin with outlining first steps for early care and education reform in Minnesota aimed at educating and stabilizing the workforce.

1. Ensure adequate and reliable funding so that all families have access to high-quality, affordable early care and education that meets their needs

“We ask the most of parents when they have the least.”
—Professor Aaron Sojourner, University of Minnesota

Families with young children are often at the beginning of their work lives and careers. And yet that is when we ask them to pay the most for the care and education of their children. Furthermore, society reaps substantial benefits from ensuring that children have access to high-quality early care and education, such as reduced costs to K-12 education and higher tax revenue. These recommendations reflect evidence that supporting children from low-income families produces the largest social benefits per child and that providing support so that a broader set of families can access care also produces large societal benefits.

Recommendations:

1.1. Support the lowest-income families with high-quality early care and education that requires no family contribution.

1.2. Ensure that other families have access to affordable, high-quality care by capping family contributions at an affordable amount.

1.3. Gradually increase the family contribution rate relative to family income to avoid a benefits “cliff” where small increases in family income result in the loss of financial support.

2. Ensure adequate and reliable funding so that the early childhood workforce is qualified, diverse, and equitably compensated

We are striving to improve outcomes for children by ensuring that Minnesota has a diverse, qualified, well-supported, and fairly compensated early care and education workforce. There are three crises that we are working to address through workforce policies and investment:

• **The Achievement Gap Crisis.** Minnesota has some of the worst achievement gaps, which stem from early care and education opportunity gaps;

• **The Child Care Shortage Crisis.** The shortage of quality early education changes opportunities for children and their families; and

• **The Inequitable Burden on the Early Childhood Workforce.** The almost all-women workforce, including large
numbers of women of color, bears the brunt of poverty-level wages so that parents can go to work and employers can hire workers.

Children who do not have high-quality early learning experiences often arrive at kindergarten not ready to succeed and we know from research that many of these children struggle throughout their K–12 years. A minimum of 34,000 Minnesotan children under age five from low-income homes are currently unable to access high-quality early education due to the shortage of access funds as well as the shortage of early childhood providers and programs. Note that this is a pre-pandemic estimate, and the shortage is likely higher as Minnesota’s economy re-opens.

The goal of Transforming Minnesota’s Early Childhood Workforce project is to develop and promote strategies to advance a diverse, qualified, well-supported and equitably compensated early childhood workforce that is able to support child development and Minnesota’s economy. We believe that the care and education of young children is a source of large social benefits, that teaching is a worthy profession, that the best interests of children should be paramount, that disparities need to be addressed, and that deep gender and racial inequities must be rectified.

The early care and education workforce serves children, families, businesses and our entire economy. Minnesota’s early childhood workforce includes over 45,000 individuals, comprised of Head Start teachers, family child care providers operating home-based small businesses, child care center staff, preschool teachers in public schools, special education teachers, and the family, friends and neighbors who help take care of young children. This workforce is almost exclusively women, including a significant proportion of women of color (estimated to be approximately 37% of the workforce nationally). Despite their importance, early childhood educators in Minnesota earn an average of only $11.44 per hour, work long hours, receive few benefits and struggle to meet their own families’ needs. As a result, over 30% of Minnesota early educators qualify for public assistance. Talented and experienced child care professionals are leaving the sector, and potential recruits are choosing other career paths. With low wages and benefits in the field, there is little incentive for early educators to invest in formal training and qualifications; it is estimated that only 10% of licensed family providers and 38% of center-based early educators have a child-related bachelor’s degree.

8. This estimate is based on the reported enrollment in public early childhood programs in the 2018 Legislative Auditor’s report, accounting for children served across multiple programs and assuming all children served by public programs are from low-income households. The Legislative Auditor’s report can be found here: https://www.auditor.leg.state.mn.us/ped/pedrep/earlychildhood.pdf.
10. Child Care Workforce in Minnesota: 2011 Statewide Study of Demographics, Training and Professional Development, Final Report, Wilder Research, August 2012. Available online at: https://www.wilder.org/sites/default/files/imports/ChildCare%20WorkforceInMinnesota_2011_8-12.pdf. Note that this data is over a decade old and needs to be updated in order to have more accurate information.
Recommendations:

2.1. Provide early childhood educators with equitable compensation that reflects their importance in educating children and supporting the larger economy.11

2.2. Support the establishment of an Early Care and Education Profession in Minnesota through the adoption of the Power to the Profession Framework for defining and advancing the field and align compensation to the framework through the use of wage scales and other mechanisms.

2.3. Support early childhood professionals in earning early childhood credits and degrees and invest in the institutes of higher education that confer credentials.

3. Reform financing so that early care and education is fully funded as a public good

Child care funding needs to be based on the true costs of quality care not on some fraction of the true costs. Minnesota recently increased its Child Care Assistance Program (CCAP) reimbursement rates to the 25th percentile of the 2018 market rates. This increase was long overdue and is a step in the right direction but it is far from what is needed to support the total cost of high-quality early care and education. The market rates these reimbursements are based off of do not reflect the true costs of providing care.

As a result of the COVID-19 pandemic, families who never struggled with accessing child care received a crash course in appreciating the impact of child care on their families and livelihoods. Minnesota needs to continue to raise awareness about the critical role that early care and education plays in supporting children, families, businesses, communities and the entire economy of Minnesota.

Recommendations:

3.1. Align or change existing funding models around a larger strategy for ensuring accessible high-quality early care and education for all Minnesota’s families.

3.2. State financing mechanisms, together with federal contributions, should cover the (actual or true) cost of high-quality care and education.

3.3. Engage and educate the public regarding the importance of financing a high-quality early care and education system. This should include more clearly explaining the larger benefits of increasing compensation for the workforce, creation of a communication plan for the advocacy field and framing early care and education as a system designed to support all Minnesota families and our economy.

This section provides a framework for understanding the costs associated with a high-quality, accessible early care and education system in Minnesota and reflects the guiding principles established by all of our teams.

**What We Estimated**

The creation of a high-quality early care and education system requires both systems development investments (“off-site costs”) and provider and practitioner-level investments (“on-site costs”). Our estimates focus on the on-site costs associated with quality and expansion and do not include the off-site costs associated with monitoring and systems development. These systems costs need to be based on current capacity within state agencies to improve and expand quality support and assessment systems.

Our approach also assumes a role for parental or other types of “Family, Friend, and Neighbor” care in serving families who chose not to participate in the formal ECE system. Systems level planning and investments should include educational supports for these caregivers. Our estimates assume that, even in a fully scaled and financially accessible system, some young children are cared for outside of the formal ECE system. These estimates also do not include other forms of supports for families with young children, like home visiting programs.

Estimates include our understanding that the system can’t be built out through any one of the current licensed settings (school-based, family-based, center-based). To ensure all settings in the system are supported, compensation for the same or similar positions should not be based on the setting or ages of the children served and should include parity with licensed educator pay across the state.

**ESTIMATING THE COST OF MEETING THE CURRENT NEED**

There are an estimated 345,000 children under five years of age in Minnesota, with 108,000 or 31 percent of these children living in households with incomes below 185 percent of the federal poverty level, 20 percent are in moderate-income households (up to 300 percent of FPL), and about half are in higher-income households.

Given the overlapping of existing program funding streams, it is difficult to identify the unique number of children who are currently served, at least partially, by an existing program or funding stream. What is known are the current market rates for care, or what early child

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13. As mentioned earlier in this report, the MN Office of Legislative Auditor attempted this estimate, but they found that there was insufficient data available across programs to estimate this.
care programs are able to charge under the current market conditions, and the current level of investment from federal and state sources.\textsuperscript{14}

Based on average market rates across settings (home-based family care and center-based care) as well as across the state rate regions, we estimate the costs associated with current levels and quality of care as $11,200 for children through age 2 and $9,700 for children age 3 and 4.\textsuperscript{15} This estimate assumes full-time, full-year care. We can then apply this average to the number of children under age 5 in Minnesota, accounting for how many families we would expect to engage in the formal early care and education system if current funding levels were available to all eligible families (Figure 1). We estimate that 60 percent of children through age 2 and 80 percent of children age 3 and 4 would engage in the formal system at current investment levels.\textsuperscript{16} The total costs by income group in Figure 1 is based on both differences in the eligibility for programs and the number of children in households at each income level.

\textbf{Figure 1. Total cost of full-time, full-year care at current quality levels ($\text{millions/year}$)}

<table>
<thead>
<tr>
<th>Family income relative to federal poverty line (%)</th>
<th>By child age</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>0-2 years</td>
<td>3-4 years</td>
</tr>
<tr>
<td>Low-income (below 185%)</td>
<td>$438</td>
<td>$336</td>
</tr>
<tr>
<td>Middle-income (185-300%)</td>
<td>$275</td>
<td>$212</td>
</tr>
<tr>
<td>Higher-income (above 300%)</td>
<td>$680</td>
<td>$523</td>
</tr>
<tr>
<td>\textbf{Total}</td>
<td>\textbf{$1,393$}</td>
<td>\textbf{$1,071$}</td>
</tr>
<tr>
<td>\textbf{Assumed participation in ECE programs}</td>
<td>60%</td>
<td>80%</td>
</tr>
</tbody>
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\textsuperscript{14} These estimates likely understate current investments, as early care and education businesses have access to other funding streams that are difficult to estimate, including direct school district spending on school-based preschool and federal Child and Adult Care Food Program (CACFP) reimbursements.

\textsuperscript{15} These are estimated using the 2018 Child Care Market Rate survey using median rates, weighted across infant, toddler, and preschool and across center and family child care settings based on the Child Care Aware of America’s 2019 State Child Care Facts in the State of Minnesota.

\textsuperscript{16} Details on the basis for this assumption can be found in the technical memo in Appendix D.
We compared this assessment of need at current quality levels to the current state and federal care investments. This estimate includes state investment in school-based preschool, state and federal investment in Head Start and Early Head Start, state and federal spending on Child Care Assistance Program, and state Early Learning Scholarships. It also includes an estimate of the portion of the Child and Dependent Care Tax Credit used on child care for children under age 5. The total of program investments and investments through child care tax credits cover 55 percent of the baseline costs of serving children under five in low-income families and 6 percent of the baseline costs of serving children in middle- and higher-income families. These investments are more heavily focused on serving children age 3 and 4, with 83 percent of costs covered with current investments for children age 3 and 4 in low-income households and 33 percent of costs for serving children from birth through age 2 in low-income households.

Although it makes sense to prioritize public dollars on children in low-income families, there are two issues with the current strategy. First, the dramatic change in public support eligibility at 185 percent of the federal poverty level, known as an eligibility “cliff”, means that families are often faced with difficult decisions between affording care and accepting work and wages that push them over the eligibility cliff. As with other means-tested public economic investment programs for low-income families, it is not uncommon for families to face fluctuations in income that move them above and below the eligibility threshold, creating an additional source of economic stress.

Second, this also assumes that families above the eligibility threshold are able to afford most of the cost of care. For example, a three-person family making $54,300 in gross income annually, 250 percent of the 2020 federal poverty

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<tr>
<td></td>
<td>0-2 years</td>
<td>3-4 years</td>
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<tr>
<td>Low-income (below 185%)</td>
<td>$146</td>
<td>$281</td>
</tr>
<tr>
<td>Middle-income (185-300%)</td>
<td>$8</td>
<td>$25</td>
</tr>
<tr>
<td>Higher-income (above 300%)</td>
<td>$32</td>
<td>$41</td>
</tr>
<tr>
<td>Total</td>
<td>$186</td>
<td>$346</td>
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level\textsuperscript{17}, the current average cost of care for one infant is almost 21 percent of a household’s annual income. Even this is optimistic, as these families would also need to find care at the average market rate.

Given these gaps in affordable and reliable access and the gap between the cost of quality and current market rates, the Financing Team prepared a series of estimates and policy options for the cost of closing these gaps outlined in the section that follows. Additional policy options are available in Appendix D.

**ESTIMATING THE COST OF ACCESS AND QUALITY**

In order to first estimate closing gaps in access, we prepared a policy option in which public investments would cover the current cost of care for low-income families who would likely benefit the most from early care and education access investments and public investments for middle- and higher-income households scaled to their household income. For the option presented here, the contribution rate for middle- and higher-income households is set at 7 percent of household income. This is a commonly used threshold for early care and education affordability and is based on guidance from the U.S. Department of Health and Human Services as the maximum affordable copayment amount\textsuperscript{18}.

The cost estimates contained in these policy options do not include the administrative costs associated with serving a larger number of children with public dollars and therefore may underestimate the total costs of closing gaps in early care and education access.

**Policy Option 1: Affordable Access**

Under this policy option, 68 percent of the costs of serving children in middle-income families and 32 percent of the costs of serving children in higher income families would be covered with public investments (Figure 3). A slightly higher share of costs for serving children age 2 or younger would be covered under this scenario because costs are higher for infants and toddlers than preschoolers.

For comparison for children from birth through age 2 and children age 3 and 4 under this policy option, 33 percent and 83 percent of the cost of care for children in low-income households are currently supported, respectively. Less than five percent of the cost of care for children from birth through age 2 and less than 12 percent of the cost of care for children age 3 and 4 in middle- and higher-income families are currently supported with public investments.

\textsuperscript{17} 2020 federal poverty guidelines can be found here: https://aspe.hhs.gov/2020-poverty-guidelines-computations.

\textsuperscript{18} Based on guidance from the U.S. Department of Health and Human Services, Administration for Child and Families, 81 Fed. Reg. 67440 (Sept. 30, 2016).
Figure 3. Policy Option 1: New public costs to hold quality constant and close access gaps by fully funding care for low-income households and setting contributions at no more than 7% of income for middle- and higher-income families ($ millions/year)

<table>
<thead>
<tr>
<th>Family income relative to federal poverty line (%)</th>
<th>By child age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2 years</td>
<td>3-4 years</td>
</tr>
<tr>
<td>Low-income (below 185%)</td>
<td>$292</td>
<td>$56</td>
</tr>
<tr>
<td>Middle-income (185-300%)</td>
<td>$183</td>
<td>$112</td>
</tr>
<tr>
<td>Higher-income (above 300%)</td>
<td>$208</td>
<td>$107</td>
</tr>
<tr>
<td>Total</td>
<td>$683</td>
<td>$275</td>
</tr>
</tbody>
</table>

Figure 4. Share of ECE costs supported by public investments under Policy Option 1 (universal access)
Policy Option 2: Affordable Access Coupled with Quality Investments to Support the Workforce

Next, we estimate the costs associated with increased quality investments in addition to expanding support to make care accessible to all families who want it. We estimate increases in demand by parents for care with these higher investments, resulting in an increase in expected participation for children through age 2 to 65 percent and an increase for children age 3 and 4 to 85 percent.

This policy option models only an increase in quality due to increases in wages for child care staff. This is done by applying the finding from the Minnesota Cost Modeling Report that total expenses at Minnesota child care centers increase by roughly 50 percent when wages for lead teachers are equal to the median wages for kindergarten teachers and all other staff wages are at the 75th percentile market rate. For lead teachers, this ranges from $51,032 in greater Minnesota to $62,555 in the Twin Cities metro area.20

We estimate that the total additional public costs associated with a quality investment to reach wage parity is $2.3 billion annually. As with Option 1, the cost of care for low-income families living below 185 percent of the federal poverty level would be covered through public investments, for a total additional public cost of $821 million annually, and the household costs of child care would be capped at no more than 7 percent of household income for all other households, for a total additional public cost of $1.48 billion annually.

This should be seen as a bare minimum increase, as these increases do not include benefits for educators and it does not include additional classroom costs of quality, like curriculum materials, supplies and toys, and food, beyond what is currently provided. We have included identification of these costs as a next step to follow this report.

20. Based on the proposed Minnesota ECE Professional Wage Scales highlighted in Minnesota Early Care and Education Wage Scale published in the March 2021 issue of Minnesota Economic Trends by the Minnesota Department of Employment and Economic Development (see Table 2), increasing prevailing ECE wages to the proposed salary scale would increase the total cost for ECE by about 40% in Minnesota.
Figure 5. Policy Option 2: New public costs to provide quality investments of a 50% increase in per-child costs and close access gaps by fully funding care for low-income households and setting contributions at no more than 7% of income for middle- and higher-income families ($ millions/year).

<table>
<thead>
<tr>
<th>Family income relative to federal poverty line (%)</th>
<th>By child age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2 years</td>
<td>3-4 years</td>
</tr>
<tr>
<td>Low-income (below 185%)</td>
<td>$565</td>
<td>$256</td>
</tr>
<tr>
<td>Middle-income (185-300%)</td>
<td>$349</td>
<td>$233</td>
</tr>
<tr>
<td>Higher-income (above 300%)</td>
<td>$555</td>
<td>$351</td>
</tr>
<tr>
<td>Total</td>
<td>$1,469</td>
<td>$840</td>
</tr>
<tr>
<td>Assumed participation in ECE programs</td>
<td>65%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Figure 6. Share of ECE costs supported by public investments under Policy Option 2 (universal access and quality investments)
The total annual public costs associated with the two policy options we proposed are in the table below. These serve to provide guideposts for what policymakers should expect in terms of annual costs associated with investing in an accessible early care and education system.

### Figure 7. Total investment by policy option and baseline costs ($ millions/year)

<table>
<thead>
<tr>
<th>Investment policy options</th>
<th>By child age</th>
<th>Total</th>
<th>Assumed participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2 years</td>
<td>3-4 years</td>
<td></td>
</tr>
<tr>
<td>Baseline Investment</td>
<td>$186</td>
<td>$346</td>
<td>$533</td>
</tr>
<tr>
<td>Policy Option 1: higher public support for current quality</td>
<td>$869</td>
<td>$621</td>
<td>$1,492</td>
</tr>
<tr>
<td>Policy Option 2: higher public support for higher quality</td>
<td>$1,655</td>
<td>$1,186</td>
<td>$2,838</td>
</tr>
</tbody>
</table>

**LIMITATIONS OF OUR APPROACH**

A few of the limitations of the approach used to develop the policy options laid out in the report have already been discussed. Those limitations, as well as other are summarized below:

- Our estimates assume no change in the distributions of children being cared for across different types of early care and education settings. This is unlikely to be true, as there were some shifts from family child care settings prior to the pandemic along with shifts towards family child care settings during the pandemic. These may shift differently with additional investments.
- The availability and quality of early care and education cannot occur without investments in coordinating systems (including better data systems), investments in postsecondary programs to increase the credentials of the early childhood workforce, investments in ongoing professional development and investments in facilities. These costs are not included in our estimates and should be considered as policymakers consider implementation of a universally accessible system.
- We are not making recommendations in Minnesota with regard to how best we can achieve state-level coordination and harmonization of funding streams and
mechanisms as recommended by the National Academies reports.

• Finally, our investments are not exact calculations of the costs of care and quality but serve as illustrative of the scale of costs associated with expanding early care and education opportunities to all families in Minnesota and ensure those working within the field are appropriately and sustainably compensated. Additional estimates should be conducted by state agencies before developing a formal plan.

• Neither of the policy options presented in this report explicitly aim to solve the eligibility “cliff” issue, where individuals and households lose access to public support with small changes in income. Any financing plans that build off of this work should consider more gradual incrementing of family co-payments by ramping up co-payment rate caps starting at no contribution for the lowest income families.

Additional details on our approach can be found in the attached technical memo found at Appendix D.

**HOW DO THESE ESTIMATES COMPARE WITH SIMILAR ESTIMATES?**

Although there are many policy proposals for expanded subsidies to support low-income households in accessing early child care options, few consider barriers to access and most do not consider the costs associated with stabilizing and supporting the workforce. We compared our results to the two estimates below that align with the values that guided out work.

**Transforming the Financing of Early Care and Education**

*Transforming the Financing of Early Care and Education* report’s illustrative estimate of the cost of full implementation of a high-quality early care and education system nationally results in a recommended investment of 0.75 percent of the U.S. gross domestic product. This dynamic estimate of costs means that a total national investment of $140 billion would be required, including $58.2 billion in family contributions and $81.7 billion in public contributions. Given that Minnesota represents roughly 1.7 percent of the U.S. population, this would require roughly $2.4 billion in spending, split between $1.4 billion in public sources and just under one billion in family contributions, within the state. This is less than the $2.8 billion in total public investments estimated through our analysis but given that the National Academies estimate represents a minimum national investment amount and assumes that conditions within the early care and education field in Minnesota are the same as national conditions, our estimates still appear reasonable.

“If the costs of the recommended financing structure exceed that which policy makers are willing allocate, then the potential results...”

are either a failure to act or an allocation of funding inadequate to achieve the committee’s primary objectives of high-quality ECE services with a well-compensated workforce that are affordable for all families.”
—Transforming the Financing of Early Care and Education

Some of the assumptions applied in the National Academies report include a national shift towards higher cost, center-based care and increases in ECE utilization. In response to increased investments and limitations of family contributions ranging from 7 to 14 percent of household income based on housing income levels, this model estimates increases in hours of care utilization of as much as 25 percent for low-income families, 15 percent for middle income families, and 10 percent for high-income families.

**Economic Policy Institute**

An estimate of the cost of a universally accessible, high-quality early care and education system produced by the Economic Policy Institute (EPI) is much higher than either our estimates or those derived from the National Academies report. This estimate states that $31,000 to $34,000 per child should be spent annually, resulting in a total cost of $6.7 to $9.1 billion per year. The large range for the total costs relative to the per child costs accounts for uncertainty about the ages and number of children who would ultimately participate in the fully scaled system and the settings that they would be served in (home-based vs. center based). This estimate is similar to others that focus primarily on supporting low-income families.

The EPI estimate is based on key values for an ECE system. These include, among other specific values related to the labor standards for educators, that funding levels should ensure that Minnesota families are not financially overburdened while not coming at the expense of ECE educators. The model sets compensations for early childhood educators with a bachelor’s degree at $66,601, assistant teachers at $39,961, and center-based administrators at $81,155. It also accounts for benefit packages, including health insurance and retirement contributions, at an additional 25 percent of annual wages for all positions. These are more generous workforce supports than the minimum that our estimates recommend, but it does represent ideal workforce conditions in a mature ECE system. This estimate does not discuss how costs of care would be allocated between families and public agencies, but even if more than half of these costs could be supported by families, it would be a much higher estimate than ours.

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Conclusion

Creating an early care and education system in Minnesota that works for everyone -- young children, their families, their educators, and the businesses that fuel our economy -- will require a significant on-going investment from local and federal governments. Minnesota has significantly underinvested in our early childhood system for several decades. This underinvestment has been compounded by the COVID-19 pandemic. The pandemic has highlighted the precarious nature of child care as a business and the profoundly broken economic model in place across the United States. The early childhood system is currently subsidized by the early childhood workforce, most of whom are women, including significant numbers of women of color.

In this difficult time, child development has not paused, and supporting children, families, and early educators of all kinds is as important as ever. Early care educators continue to do the important work of building the brain architecture of the next generation, supporting social and emotional learning and providing a strong foundation for academic and life success for our youngest children. So many of our children were already experiencing trauma and toxic stress and the disruptions to routines, new levels of family stress and anxiety, and changes in caring adults caused by COVID-19 are going to be hard on many of our young ones. Quality early care and education will be more important than ever.

Rebuilding our economy starts with creating conditions for early care and education that allow for accessible care and education for all families. It also means ensuring that the available care and education is high-quality and delivered by qualified, diverse, supported and equitably compensated educators. Minnesota needs an effective financing infrastructure with strategic investments in order to build a system that is adequate, equitable and sustainable. Just as we as a society have chosen to invest in other public goods such as our parks, libraries, food and agricultural infrastructure (e.g. farm subsidies), and K-12 education (e.g. per pupil funding), we need an early care and education financing structure that supports access for all families as well as institutional supports to early care and education providers. Based on our estimates, it would require a minimum of $2.3 billion in additional public investments annually to support early care and education classrooms in providing enough care and ensuring that care is high quality. Without this level of investment, Minnesota’s early care and education system will continue to leave families without adequate options for their young children.

Next Steps

Sufficient funding to meet the day-to-day operational needs for early care and education providers is only one piece of the puzzle to reimagine a stable and effective ECE system. Although not comprehensive, the following are next steps...
that should be considered as Minnesota moves towards this reimagined system.

- **Estimate the costs associated with state investments in infrastructure and coordination of programs to enable the scaled system presented in this report.** Provider-level costs are by no means the only costs associated with an accessible and affordable ECE system. The costs of coordination and infrastructure investments like data systems that track all investments need to be identified within and across state agencies to be effective. Many of these investments have been identified several times before and they are not issues unique to Minnesota, but they pose real barriers to meeting ECE systems goals.

- **Estimate the costs of increasing credentials of the field.** There are several public tools for estimating the costs associated with ensuring current and future educators have access to adequate training and education, including Child Trends’ Early Childhood Workforce Qualifications Calculator and National Institute for Early Education Research’s (NIEER) CEELO project Cost of Quality tools. Both tools are most effective when they can rely on comprehensive data from state agencies and higher education institutions. Minnesota’s institutes of higher education will also need additional support so that they can meet the needs of future educators.

- **Estimate the other costs of classroom quality beyond educator wages.** Our estimates do not include benefits for educators (health insurance, retirement, paid time off, paid planning time, etc.) and it does not include additional classroom costs of quality, like curriculum materials, supplies and toys, and food, beyond what is currently provided.

- **Engage state agencies in Power to the Profession process.** An important step in moving the needle on systems-wide quality is having both a shared understanding of quality across agencies and refining agency-level policies to reflect those understandings. Adopting elements of the Power to the Profession framework within agencies will help move the needle adequately supporting and recognizing the ECE educator profession.

- **Identify the need for adjustments to systems cost projections for future related labor market changes and family support investments.** Changes to minimum wages and expansions of paid family leave, both important policy approaches for supporting low-income families and educators, were not considered in our estimates.

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APPENDIX A: SUPPORTING TEAMS AND THEIR MEMBERS

Transforming the Financing of Early Care and Education Team Members

Jamie Bonczyk, Executive Director, Hopkins Early Learning Center
Jerry Cutts, CEO of First Children’s Finance and member of Transforming the Early Care and Education workgroup at the National Academy of Medicine
Professor Liz Davis, Applied Economist, University of Minnesota and also a member of the National Academies’ workgroup
Rob Grunewald, Federal Reserve Bank of Minneapolis
Debbie Hewitt, Early Childhood Supervisor, Minnesota Department of Education
Jonathan May, Vice President of Innovation and Development, Think Small
Lyn Rhodes, Child Care Strategic Planning Specialist, Minnesota Department of Human Services
Professor Aaron Sojourner, Labor Economist, University of Minnesota

TEACH Early Childhood® National Center Moving the Needle on Compensation Team Members

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Cyndi Cunningham, Public Policy Chair, Minnesota Child Care Provider Information Network and owner
Debbie Hewitt, Early Childhood Supervisor, Minnesota Department of Education
Nancy Jost, Early Childhood Director, West Central Initiative
Kelly Kazeck, Preschool Development Grant Lead and Workforce Specialist, Department of Education
Cisa Keller, Senior Vice President of Early Childhood Quality Development at Think Small
Nikole Logan, Voices and Choices for Children Steering Committee Member
Denise Mayotte, Executive Director, The Sheltering Arms Foundation
Ann McCully, Executive Director, Child Care Aware of Minnesota
Scott Parker, Minnesota Department of Human Services
Transforming the Financing of Early Care and Education in Minnesota

Suzanne Pearl, Minnesota Director, First Children’s Finance
Val Peterson, Director of Financial Supports, Child Care Aware of Minnesota
Phyllis Sloan, Executive Director, La Creche Child Care

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Team Members

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Karen DeVos, Little Learners/MnAEYC-MnSACA
Nick Henderson, Social Service Program Advisor, Minnesota Department of Human Services
Debbie Hewitt, Early Learning Services Supervisor, Minnesota Department of Education
Nancy Jost, Early Childhood Director, West Central Initiative
Kelley Kazeck, Minnesota Department of Education, Preschool Development Grant and Workforce Specialist
Cisa Keller, Senior Vice President of Early Childhood Quality Development, Think Small
Nikole Logan, Voices and Choices for Children Steering Committee Member
Ann McCully, Executive Director, Child Care Aware of Minnesota
Scott Parker, Child Development Supervisor, Minnesota Department of Human Services
Milton Rodriguez, TriValley Opportunity Council Migrant and Seasonal Head Start
Debbie Schierbeck, Child Development Faculty, Hennepin Technical College
Michelle Vaught, Rulemaking Specialist, Professional Educator Licensing and Standards Board

Staffing Support and Technical Assistance

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Barb Merrill, Consultant at TEACH Early Childhood® National Center
Zina Noel, Early Childhood Research Associate, Transforming Minnesota’s Early Childhood Workforce
Lisa Rau, Early Childhood Research Associate, Transforming Minnesota’s Early Childhood Workforce
APPENDIX B: NATIONAL ACADEMIES RECOMMENDATIONS REGARDING TRANSFORMING THE FINANCING OF EARLY CARE AND EDUCATION

An Effective Financing System

1. Federal and state governments should establish consistent standards for high-quality across all ECE programs. Receipt of funding should be linked to attaining and maintaining these quality standards. State and federal financing mechanisms should ensure that providers receive payments that are sufficient to cover the total cost of high-quality ECE.

2. Access to affordable, high-quality ECE for all children and families, that is not contingent on the characteristics of their parents.
   a. ECE programs and financing mechanisms (with the exception of employer-based programs) should not set eligibility standards that require parental employment, job training, education, or other activities.
   b. Federal and state governments should set uniform family payment standards that increase progressively across income groups and are applied if the ECE program requires a family contribution (payment).
   c. The share of total ECE system costs that are not covered by family payments should be covered by a combination of institutional support to providers who meet quality standards and assistance directly to families that is based on uniform income eligibility standards.

3. In states that have demonstrated a readiness to implement a financing structure that advances principles for a high-quality ECE system and includes adequate funding, state governments or other state-level entities should act as coordinators for the various federal and state financing mechanisms that support ECE, with the exception of federal and state tax preferences that flow directly to families.

Sharing the Cost for High-Quality Early Care and Education

4. To provide adequate, equitable, and sustainable funding for a unified, high-quality system of ECE for all children from birth to kindergarten entry, federal and state governments should increase funding levels and revise tax preferences to ensure adequate funding.

5. Family payments for families at the lowest income level should be reduced to zero, and if a family contribution is required by a program, that contribution, as a share of family income, should progressively increase as income rises.
Planning for the Transition to High Quality

6. A coalition of public and private funders should support the development and implementation of multi-level strategic business plans to help guide transitions towards a reformed financing structure for high-quality ECE.

Financing Workforce Transformation

7. The ECE workforce should be provided with financial assistance to increase practitioners’ knowledge and competencies and to achieve required qualifications through higher-education programs, credentialing programs, and other forms of professional learning. The incumbent ECE workforce should bear no cost for increasing practitioners’ knowledge base, competencies, and qualifications, and the entering workforce should be assisted to limit costs to a reasonable proportion of postgraduate earnings, with a goal of maintaining and further promoting diversity in the pipeline of ECE professionals.

7a. Existing grant-based resources should be leveraged, and states and localities, along with colleges and universities, should work together to provide additional resources and supports to the incumbent workforce as practitioners further their qualifications as professionals in the ECE field.

7b. States and the federal government should provide financial and other appropriate supports to limit to a reasonable proportion of expected postgraduate earnings any tuition and fee expenses that are incurred by prospective ECE professionals and are not covered by existing financial aid programs.

8. States and the federal government should provide grants to institutions and systems of post-secondary education to develop faculty and ECE programs and to align ECE curricula with the science of child development and early learning and with principles of high-quality professional practice. Federal funding should be leveraged through grants that provide incentives to states, colleges, and universities to ensure higher-education programs are of high quality and aligned with workforce needs, including evaluating and monitoring student outcomes, curricula, and processes.
Assessing Progress Toward Quality

9. The federal and state governments, as well as other funders, should provide sustained funding for research and evaluation on early childhood education, particularly during the transition period to ensure efforts to improve the ECE system are resulting in positive outcomes for children and in the recruitment and retention of a highly qualified and diverse workforce.

10. The federal government should align its data collection requirements across all federal ECE funding streams to collect comprehensive information about the entire ECE sector and sustain investments in regular, national, data collection efforts from state and nationally representative samples that track changes in the ECE landscape over time, to better understand the experiences of ECE programs, the ECE workforce, and the developmental outcomes of children who participate in ECE programs.
APPENDIX C: NATIONAL ACADEMIES PRINCIPLES FOR ASSESSING EARLY CARE AND EDUCATION FUNDING

The National Academies’ consensus study report, Transforming the Financing of Early Care and Education, identifies six principles and corresponding criteria for assessing early care and education financing mechanisms:

1. High-quality early care and education requires a diverse, competent, effective, well-compensated, and professionally supported workforce across the various roles of ECE professionals.
2. High-quality early care and education requires that all children and families have equitable access to affordable services across all ethnic, racial, socioeconomic, and ability statuses as well as across geographic regions.
3. High-quality early care and education requires financing that is adequate, equitable, and sustainable, with incentives for quality. Moreover, it requires financing that is efficient, easy to navigate, easy to administer, and transparent.
4. High-quality early care and education requires a variety of high-quality service delivery options that are financially sustainable.
5. High-quality early care and education requires adequate financing for high-quality facilities.
6. High-quality early care and education requires systems for ongoing accountability, including learning from feedback, evaluation, and continuous improvement.

These principles are meant to ensure that any recommendations regarding financing support a highly qualified workforce, ensure affordable and equitable access for families and promote high-quality across settings.

APPENDIX D: EARLY CARE AND EDUCATION FINANCING
POLICY OPTIONS TECHNICAL MEMO

Analysis of the Cost to Expand Minnesota’s Investment in Early Care and Education
Rob Grunewald and Aaron Sojourner
March 2020

This memo develops estimates of the new public cost of expanding Minnesota’s investment in early care and education (ECE). Though the numbers are exact, all of the budget projections should be understood as approximations. We develop estimates for a menu of options that apply eligibility to different age groups and family income-to-poverty ratio groups and compares spending shares by government and families. This provides a framework for understanding the new public investment required for alternative eligibility combinations, family co-payment policies, and ECE costs per child, as a proxy for quality. The analysis proceeds by estimating:

- number of Minnesota children under age 5 by family income and age group,
- cost of providing ECE for those children using costs per child similar to current prices and assumptions about participation rates,
- new public costs of various policy options accounting for the current level of public investments, including if low-income families did not face payments and moderate- and higher-income families covered costs up to 7% of their income with government funding covering the difference, and
- how increasing ECE quality changes the estimates.2

How many Minnesota children, by age and family income?
Minnesota has about 345,000 children under age 5. About 31 percent of these young children live in families with low income, another 20 percent of young children are in moderate-income families, and about half are in higher-income families. Some families have lower income levels due in part to parents using their time to care for young children and spending less time earning.

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1 rob.grunewald@mpls.frb.org and asojourn@umn.edu: the views expressed here are those of the authors and not necessarily those of the University of Minnesota, Federal Reserve Bank of Minneapolis or the Federal Reserve System.

2 These estimates don’t include the cost of system level supports, such as scholarships for ECE workers to attain more education, professional development and coaching, or the cost to build or renovate ECE facilities. This framework doesn’t incorporate recommendations on how to spend ECE funding and presumes new public funding would support a variety of program types, including public school preschool, private preschool, Head Start and Early Head Start, child care centers, and family child care homes.

3 Low-income families are those with total income not exceeding 185 percent of the federal poverty line. Income in this range makes them income-eligible for many state and federal programs including reduced-price meals at school and Minnesota Early Learning Scholarships. For a family of four, the poverty line is $26,200 annually, 185 percent of that is $48,470, and 300 percent is $78,600.
Table 1: Counts of Minnesota young children by age and family income group

<table>
<thead>
<tr>
<th>Family income relative to poverty line</th>
<th>0-2 years</th>
<th>3-4 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income: up to 185%</td>
<td>64,996</td>
<td>43,330</td>
<td>108,326</td>
</tr>
<tr>
<td>Moderate-income: 185-300%</td>
<td>40,893</td>
<td>27,262</td>
<td>68,155</td>
</tr>
<tr>
<td>Higher-income: above 300%</td>
<td>100,979</td>
<td>67,319</td>
<td>168,298</td>
</tr>
<tr>
<td>Total</td>
<td>206,868</td>
<td>137,911</td>
<td>344,779</td>
</tr>
</tbody>
</table>

How much does ECE cost?

By combining information about Minnesota child care services by center- and home-based providers, we estimate a baseline cost for care per child-year, full-day, of about $11,200 for each participating child age 0-2 years and $9,704 for those age 3-4 years. This averages to about $10,600 per child-year across each fully-participating child’s first five years.⁴

Table 2: Baseline costs of care per participating child-year

<table>
<thead>
<tr>
<th>Cost per child</th>
<th>Age 0-2</th>
<th>Age 3-4</th>
<th>Age 0-5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$11,223</td>
<td>$9,704</td>
<td>$10,615</td>
</tr>
</tbody>
</table>

For comparison, the State of Minnesota annually expends about this amount per child for the 13 years between ages 5 and 17 through our K-12 schools. Unlike K-12, ECE participation is voluntary and we would expect only a portion of families would choose to participate. Furthermore, care of younger children requires more individualized attention than care of older children. For example, Minnesota requires one adult for every four infants. In K-12, each adult’s time can be divided among many more children. In addition, many ECE programs are offered for the full-year, not just during the school year. However, teachers at ECE programs are currently paid much less on average than teachers in K-12 schools, contributing to higher turnover and lower quality care.

Total cost to provide free early care to all Minnesota parents

We assume a 60 percent participation rate (full-time, full-year) for children ages 0-2 years and 80 percent for children ages 3-4 years. Combining participation rates, number of children, and costs implies the following total costs of ECE for Minnesota children by age and income group.

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⁴ See Results of the 2018 Child Care Market Rate Survey for child care market rates by program type, price cluster, and child age. Market rates vary by geography and approximate the cost of providing care, but don’t necessarily represent the actual cost.
Table 3: Total cost of baseline ECE by child age and family income group ($ millions/year)*

<table>
<thead>
<tr>
<th>Family income relative to poverty line</th>
<th>0-2 years</th>
<th>3-4 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income: up to 185%</td>
<td>$438</td>
<td>$336</td>
<td>$774</td>
</tr>
<tr>
<td>Moderate-income: 185-300%</td>
<td>$275</td>
<td>$212</td>
<td>$487</td>
</tr>
<tr>
<td>Higher-income: above 300%</td>
<td>$680</td>
<td>$523</td>
<td>$1,203</td>
</tr>
<tr>
<td>Total</td>
<td>$1,393</td>
<td>$1,071</td>
<td>$2,464</td>
</tr>
</tbody>
</table>

Providing care for 60 percent of Minnesota 0-2 year olds in low-income families at current prices would cost $438 million per year. Care for 60 percent of all Minnesota 0-2 year olds would cost about $1.4 billion annually.

**Current public investment in early care per child**
The public currently invests an estimated $1,545 per young Minnesota child per year in ECE across all state and federal programs (see Table 4). Investment is concentrated among children in low-income families who are 3-4 years old, averaging $6,474 per child-year in this group. There is much less public investment in Minnesota children from low-income families in their first three years of life, averaging just $2,243 per child-year. Public expenditures for low-income families include programs targeted to low-income families, such as Head Start and Early Head Start, Early Learning Scholarships, and child care assistance. Public contributions also include estimates of how much these families receive in state and federal dependent care tax credits for children under age 5 and the portion of public preschool funding that serves children from low-income families.

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5 The Committee for Economic Development report, *Child Care in State Economies 2019 Update*, estimates that Minnesota child care revenue totaled $1,052 million in 2017. This does not include federal and state funding for preschool and Head Start, which is about $270 million (includes half of Early Learning Scholarship funding). Our estimates suggest that offering free ECE to all Minnesota children under age 5 would increase demand for ECE.

6 This is likely a low estimate because data limitations exclude some forms of investment. An underestimate here will lead to an overestimate of the costs of expanding care. In particular, for school-based prekindergarten programs, only state funding is included but not local school district or federal Title-I funding. The technical appendix describes these issues in more detail.
Table 4: Current public expenditure & tax credits per child-year by age and family income group

<table>
<thead>
<tr>
<th>Family income relative to poverty line</th>
<th>0-2 years</th>
<th>3-4 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low: up to 185%</td>
<td>$2,243</td>
<td>$6,474</td>
<td>$3,936</td>
</tr>
<tr>
<td>Moderate: 185-300%</td>
<td>$200</td>
<td>$912</td>
<td>$485</td>
</tr>
<tr>
<td>Higher: above 300%</td>
<td>$320</td>
<td>$609</td>
<td>$436</td>
</tr>
<tr>
<td>Total</td>
<td>$901</td>
<td>$2,511</td>
<td>$1,545</td>
</tr>
</tbody>
</table>

Public contributions for moderate-income and higher-income families listed in Table 4 reflect estimates of how much these families receive in state and federal dependent care tax credits for children under age 5 and the portion of public preschool funding that serves children from moderate- and higher-income families. Other programs do not focus on these children. Again, the comparison to K-12 spending is instructive. The state spends about $10,000 per child-year for the 13 years between ages 5 and 17 but only about $900 per child-year in the first 3 years of life and only about $2,500 per child-year during ages 3 and 4.

Relative to baseline costs in Table 3, current public investment in low-income families covers an estimated 33% of costs for children age 0-2 and 83% of costs for children age 3-4. The public share of funding for children in moderate-income and higher-income families is relatively low, particularly for children age 0-2.

It's appropriate that funding for low-income children is larger than moderate- and higher-income children because research suggests that public investment has a stronger impact on children’s experiences and development if they are from lower-income families than from higher-income
families. However, the sharp reduction in public funding at 185% of poverty—a so-called “benefits cliff”—can create unintended consequences, such as an incentive to avoid earning more income to maintain eligibility. Furthermore, while societal benefits from ECE investments decrease as family income rises, they likely don’t drop sharply at any threshold, but rather decrease gradually.

In the policy options below, we estimate the cost of publicly funding ECE fully for low-income families below 185% of poverty and capping the family contribution at 7% of income for families above 185% of poverty. This isn’t the only strategy to provide gradually decreasing financial supports relative to income for moderate- and higher income families, but one that has received attention since the U.S. Department of Health and Human Services provided guidance that family copayments shouldn’t exceed 7% of family income in the CCDF child care subsidy program. This option reduces the benefits cliff at 185% of poverty relative to current policy but still leaves a large cliff. A more gradual phase-in up to the 7% copayment is discussed below.

**Policy options**

We estimate new public costs as the total cost of care less current public investment. We start by assuming baseline costs, then assume higher costs to enable higher quality. For these policy options we assume a family participation rate of 60% for children age 0-2 and 80% for children age 3-4.

**Option A: No co-pay for low-income families and moderate- and higher-income families pay no more than 7% of family income**

This option would first expand eligibility for full-day, full-year programs without a required co-payment to all low-income children at current market prices. Across all ages, new costs would total $348 million per year, with $56 million for 3-4 year olds and $292 million for 0-2 year olds. This implies about $3,200 in new, annual public cost per low-income Minnesota child.

<table>
<thead>
<tr>
<th>Low-income families</th>
<th>By child age</th>
<th>0-2 years</th>
<th>3-4 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total new public cost ($millions)</td>
<td>$292</td>
<td>$56</td>
<td>$348</td>
<td></td>
</tr>
<tr>
<td>New public cost per child</td>
<td>$4,490</td>
<td>$1,289</td>
<td>$3,210</td>
<td></td>
</tr>
</tbody>
</table>

In addition, each moderate- and higher-income family pays no more than up to 7% of their income for care. These new public cost estimates come from the total cost of care for participants in each group less 7% of family income for families in that group and less current public expenditures for that group. The new public cost of $296 million annually implies about $4,300 in new, annual public cost per moderate-income Minnesota child. For higher-income families, the new public cost of $315 million annually averages $1,900 per higher-income Minnesota child.
In this policy option, the government share of investment increases to 100% for low-income families, between 62% and 67% for moderate-income families, and between 24% and 31% for higher income families.

Avoiding a benefit-cliff: Rather than an abrupt shift from no family payment below 185% income-to-poverty ratio (IPR) to a maximum payment of 7% of income above, a more-complex policy option would be to require family payment rates that increase gradually with family income. For instance, families 100%-150% IPR could have a maximum payment of 2% of income with escalating percentages like, 150%-200% PR pay no more than 4%, 200-250% IPR pay no more than 6%, and above 250% IPR would pay no more than 7%. We didn’t calculate these options, but it can be done.

Option B: Same policy as Option A, but government pays 1.5x baseline costs
This section offers flexibility to change the average cost for children age 0-2 and age 3-4. These estimates account for the cost of providing higher quality ECE, particularly as more information becomes available about the cost of quality in Minnesota. As an example, the estimates below use the same exercise as above but assume that government pays 50% more than the costs in

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7 Policymakers can also choose to continue to increase the family contribution cap above 7% as family income increases. The Transforming the Financing of Early Care and Education report (see page 187) provides an example of increasing the family contribution cap with income to a maximum of 15%.
Table 2. As quality increases we expect higher participation rates: 65% for age 0-2 and 85% for ages 3-4 and hold family pay rates steady.

This option would first expand eligibility for full-day, full-year programs without a required co-payment to all low-income children. Across all ages, new costs would total $821 million per year, with $256 million for 3-4 year olds and $565 million for 0-2 year olds. This implies about $7,600 in new, annual public cost per low-income Minnesota child.

<table>
<thead>
<tr>
<th>Low-income families</th>
<th>By child age</th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2 years</td>
<td>3-4 years</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Total new public cost ($millions)</td>
<td>$565</td>
<td>$256</td>
<td>$821</td>
<td></td>
</tr>
<tr>
<td>New public cost per child</td>
<td>$8,699</td>
<td>$5,899</td>
<td>$7,579</td>
<td></td>
</tr>
</tbody>
</table>

In addition, each moderate- and higher-income family pays care costs up to 7% of their income but no more. The new public cost of $582 million annually implies about $8,500 in new, annual public cost per moderate-income Minnesota child. For higher-income families, the new public cost of $906 million annually averages $5,400 per higher-income Minnesota child.

<table>
<thead>
<tr>
<th></th>
<th>By child age</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0-2 years</td>
<td>3-4 years</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Total new public cost ($millions)</td>
<td>$349</td>
<td>$233</td>
<td>$582</td>
<td></td>
</tr>
<tr>
<td>Moderate-income</td>
<td>$555</td>
<td>$351</td>
<td>$906</td>
<td></td>
</tr>
<tr>
<td>Higher-income</td>
<td>$555</td>
<td>$351</td>
<td>$906</td>
<td></td>
</tr>
</tbody>
</table>

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8 According to the child care cost model developed in the Minnesota Cost Modeling Report (August 2020), total expenses at Minnesota child care centers increase by about 50% when wages are set to the 75th percentile of wages for each position and with lead teacher salaries set equal to the median wage for a kindergarten teacher. Based on the proposed Minnesota ECE Professional Wage Scales highlighted in Minnesota Early Care and Education Wage Scale published in the March 2021 issue of Minnesota Economic Trends by the Minnesota Department of Employment and Economic Development (see Table 2), increasing prevailing ECE wages to the proposed salary scales would increase the total cost for ECE by about 40% in Minnesota.
In this policy option, the government share of investment increases to 100% for low-income families, between 77% and 80% for moderate-income families, and between 47% and 53% for higher-income families.

See the appendix for the same two policy options above using a 10% cap on family contribution.

**Technical appendix**

**Child counts**
Child counts come from the 2013-2017 American Community Survey 5-year Estimates and IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org). ACS data show the number of Minnesota children by poverty level. Micro data from IPUMS show family income, number of children, and poverty level. See how these data are used in the Family contribution cap at 7% and 10% section below.

**Current investment**
Public investment includes Minnesota district preschool funding (School Readiness, Voluntary Pre-K, and School Readiness Plus), state and federal funding for Head Start and Early Head Start, state and federal funding for Child Care Assistance Program, and Early Learning Scholarships). Head Start, CCAP and ELS are targeted to children in low-income families. Minnesota district preschool funding is targeted to classrooms with a relatively high share of low-income children, but these classrooms also include some children from moderate- and higher-income families. Data from the Minnesota Department of Education show that 59 percent of children in Voluntary Pre-K/School Readiness Plus are below 185 percent of Federal Poverty Line. We assume that 50 percent of children reached by School Readiness are below 185 percent of FPL.
Tax benefits from the Child and Dependent Care Tax Credit and the Dependent Care Assistance Program are estimated for both federal and state tax credits. Based on House Research Department: The Minnesota and Federal Dependent Care Tax Credits and Child and Dependent Care Tax Benefits: How They Work and Who Receives Them we estimate that 80% of total credits reflect payments for child care for children under age 5. We estimate that the state credits benefit a larger share of low-income families and federal credits benefit a larger share of higher-income families.

Current investment does not include school district revenue allocated to fund preschool and does not include federal Title 1 funding for preschool.

**Baseline costs**
Baseline costs for child care centers and family child care are reflected in annualized prices for child care centers and family child care programs as published in Results of the 2018 Child Care Market Rate Survey. Market rates vary by geography and approximate the cost of providing care, but don’t necessarily represent the actual cost. Prices for children age 0-2 are a weighted average of infant and toddler prices and prices for children age 0-5 are weighted across infants, toddlers, and preschoolers. Costs for Head Start are provided by the Minnesota Head Start Association, and costs for MN District Preschool are estimated using expenditure/number of enrolled children.

We compute baseline costs by weighting center-based providers and family child care providers by the share of child care capacity in Minnesota, 58 percent and 42 percent, respectively. See Child Care Aware of America’s Minnesota Fact Sheet.

**Participation rates**
Participation rates for children age 0-2 and age 3-4 are based on Early Care and Education Usage and Households’ Out-of-Pocket Costs: Tabulations from the National Survey of Early Care and Education, Child Care Use in Minnesota: Report of the 2009 Statewide Household Child Care Survey, and state preschool profiles in the National Institute for Early Education Research’s The State of Preschool 2018. We considered results from the national survey low for Minnesota since labor force participation rates among families with young children are relatively high in Minnesota. The NIEER report highlights some states that offer universal preschool for 4-year-old or 3- and 4-year-old children which provide information about family take-up when offered a free program.

Results from across these sources show that family use of ECE for children age 0-2 is lower than for children age 3-4. We use a 60% participation rate for families with children age 0-2 and an 80% participation rate for families with children age 3-4.

For the second policy option participation rates for both age 0-2 and age 3-4 are increased to 65% and 85%, respectively. Based on Chaparro, Sojourner, and Wiswall (2020), increases in quality lead to increases in participation. We estimate that doubling the reimbursement rates, a
signal for program quality, would increase participation rates about 5 percentage points for each age group.

**Family contribution cap at 7% and 10%**

In the scenarios above the family contribution is capped at 7% of family income and for the scenarios in the next section the family contribution is capped at 10% of family income. For moderate (185% to 300% FPL) and higher income families (over 300% FPL), total family income is divided by the number of children under age 5 which provides the amount of family income available per child.

We compute the maximum income-per-child that would qualify for a subsidy as the base cost of care divided by the contribution cap. For instance, with a base cost of $10,615, a maximum contribution of 7%, and one child, their contribution would cover the full cost if and only if their income exceeds $151,642. A moderate- or higher-income family with one child and income below that level would qualify for a subsidy equal to the difference between the cost of care and 7% of their income.

Using micro-data from the American Community Survey for Minnesota families with young children, we compute the share of moderate- and higher-income families that would qualify for any subsidy and the average income of qualifying families for each contribution cap. Using these, we can compute the average private contribution amount in each income group.

**Additional policy options with family contribution limit at 10% for moderate- and higher-income families**

We start by assuming baseline costs. For this policy option we assume a family participation rate of 60% for children age 0-2 and 80% for children age 3-4 and cap the family contribution at 10% of family income. The new public cost of $229 million annually implies about $3,400 in new, annual public cost per moderate-income child. For higher-income families, the new public cost of $126 million annually averages $750 per higher-income child.

<table>
<thead>
<tr>
<th></th>
<th>0-2 years</th>
<th>3-4 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By child age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total new public cost ($millions)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate-income</td>
<td>$148</td>
<td>$81</td>
<td>$229</td>
</tr>
<tr>
<td>Higher-income</td>
<td>$97</td>
<td>$29</td>
<td>$126</td>
</tr>
</tbody>
</table>

9 The benefit is relatively generous for moderate- and many higher-income families with two or more children. Even at $151,642, a family could enroll a second young child in ECE for free. In addition, with a family income contribution cap, families would likely have less—and perhaps no incentive—to consider price levels when selecting child care.
In this policy option, the government share of investment increases to between 47% and 54% for moderate-income families, and between 9% and 14% for higher income families.

**Same policy as above, but government pays 1.5x baseline costs**

These estimates account for the cost of providing higher quality ECE, particularly as more information becomes available about the cost of quality in Minnesota. As an example, the estimates below use the same exercise as above but assume that government pays 50% more than the costs in Table 2. As quality increases we expect higher participation rates: 65% for age 0-2 and 85% for ages 3-4 and hold family pay rates steady.

These new public cost estimates come from the total cost of care for participants in each group less 10% of family income for families in that group and less current public expenditures for that group. The new public cost of $509 million annually implies about $7,500 in new, annual public cost per moderate-income child. For higher-income families, the new public cost of $597 million annually averages $3,500 per higher-income child.

<table>
<thead>
<tr>
<th>By child age</th>
<th>Total new public cost ($millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2 years</td>
</tr>
<tr>
<td>Moderate-income</td>
<td>$310</td>
</tr>
<tr>
<td>Higher-income</td>
<td>$383</td>
</tr>
</tbody>
</table>

10 According to the child care cost model developed in the Minnesota Cost Modeling Report (August 2020), total expenses at Minnesota child care centers increase by about 50% when wages are set to the 75th percentile of wages for each position and with lead teacher salaries set equal to the median wage for a kindergarten teacher. Based on the proposed Minnesota ECE Professional Wage Scales highlighted in Minnesota Early Care and Education Wage Scale published in the March 2021 issue of Minnesota Economic Trends by the Minnesota Department of Employment and Economic Development (see Table 2), increasing prevailing ECE wages to the proposed salary scales would increase the total cost for ECE by about 40% in Minnesota.
In this policy option, the government share of investment increases to between 67% and 71% for moderate-income families, and between 31% and 38% for higher income families.