Expanding Child Care in Arizona

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Executive Summary

Child care is a critical workforce issue. Access to child care helps parents participate in the labor market, be more productive at work, go to school, or train for a job, and build the family's economic security. At the same time, quality child care helps keep children safe and has the potential to provide lifelong benefits for learning, behavior, and both physical and mental health. With an understanding of the importance of child care to Arizona's growing economy, the purpose of this report is to provide (1) a current-state analysis of child care, including analysis of gaps in access to high-quality, affordable child care, (2) an estimate of projected child care needs in the next 10 years, and (3) recommendations for meeting those needs. Interest in understanding current and projected child care needs was prompted in part, by the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act of 2022, as Arizona is a leading semiconductor hub and expects significant growth in the industry because of CHIPS. The report, however, covers impacts and needs related to child care across industries.

Key Findings

Access to high-quality, affordable child care is out of reach for many Arizonans, as it is for many Americans nationwide. Access for those Arizonans who need care for infants or toddlers, who work nontraditional or extended hours, who live in rural areas, and who need care for children with special needs is particularly challenging, and in many cases care options are simply not available. Nationally and in Arizona, despite their crucial contribution, the child care workforce earns low wages. In Arizona, the average kindergarten teacher salary is about twice the average early childhood educator salary. Given the high cost of quality child care and the fact that most providers rely on tuition as the main or only revenue source, many child care providers lose money (or work many hours for free) if they serve parents who cannot pay tuition rates that cover the full cost of care.

Two additional factors make access to high-quality, affordable child in Arizona particularly challenging. First, Arizona's child care licensing standards for ratios and group sizes do not meet any national recommended standards, and allow more children to be cared for by fewer adults compared with most other states' standards.[1] Second, there have been no ongoing state general fund appropriations to child care for more than a decade. As a result, the child care industry in Arizona is relying primarily on fees paid by parents and limited federal funding to support the ever-increasing costs of providing quality child care. Moving forward, to ensure that high-quality

[1] As an example, the recommended child-to-staff ratio for four-year-olds is 10:1 in Caring for Our Children Basics (CFOCB) Health and Safety Foundations for Early Care and Education and 15:1 in Arizona's licensing regulations. Although the use of the CFOCB standards is not federally required, according to the U.S. Department of Health and Human Services, CFOCB represents the minimum health and safety standards experts believe should be in place where children are cared for outside of their homes.

child care is affordable, more funding for child care from other sources, both public and private, will be necessary.

Our analysis of the projected future child care demand and supply revealed that depending on the demographic projections and anticipated economic growth, the need for child care could grow by as much 32% over the next 10 years. Our mid-range estimate is that the need for child care for children 0-5 will increase by 20%.[2] Given current insufficient supply (a 25% gap between current supply and demand), even a small increase in need could increase prices, worsen the financial burden on families, and exacerbate shortages.

Recommendations to Increase Access to Affordable, Quality Child Care

Our study relied on projections of future child care needs, document reviews, and interviews with a wide range of employers, community partners, and parents. Based on our findings we present potential strategies for investing more resources into child care in Arizona to expand supply, increase access, ensure affordability, improve reliability, and raise quality. We first focus on strategies that would not rely on new state funding, but we also note several ideas for public-private partnerships, based largely on what other states have implemented. Additional details on each strategy are presented in the main report.

- Encourage employers to offer child care subsidies to their employees *and* support supply-building efforts in their local communities. Without additional supply, offering employee subsidies would only strain existing supply and increase prices for other families in the area.
- Create a privately managed charitable fund to pool resources from employers to support expansion of child care supply in Arizona. A nonprofit or other organization that may provide funds to for-profit entities could manage this fund, allowing business contributors to take a tax deduction. (Employers would not get specific slots for their own employees through such a fund.)
- Create a local impact investment fund that would allow employers to reserve child care slots for their employees in exchange for investments. The fund could generate a small return while also supporting child care supply building. This type of fund would likely be a public-private partnership.
- Support school districts to provide additional early childhood education and before- and afterschool care by convening district leaders to (1) share strategies they have used to fund child care, (2) explore how to braid subsidies and school district funds more flexibly to cover full-day care for subsidy-eligible students in district preK programs, and (3) consider expansion of programs such as Bezos Academy if they are successful in their current locations.
- Recognize and support the critical role that municipalities play in expanding the supply of child care by connecting city and county government leaders interested in expanding child care supply in their areas with employers who share this goal.

[2] The low-range estimate of 6% assumes much lower base population growth.

- Take steps to allow for more investment in facilities that can host child care, such as (1) funding facility inventory studies in local communities to take stock of spaces that can be renovated and converted for child care, and then (2) developing partnerships with employers and/or child care leaders in local communities to fund the construction of new child care facilities.
- Support child care providers' business skills through specialized training and resources.
- Financially support child care providers with paired requirements that they increase compensation, helping to reduce workforce attrition and increase child care quality.
- Create a formal stay-at-home parent network that connects working parents with stay-at-home parents who can provide child care.
- Consider tax incentives to support child care affordability, access, and quality**.** States with governments across the political spectrum have successfully used state tax deductions or credits to encourage child care providers to increase the quality of care, to motivate employers to offer on- or near-site child care for their employees to increase supply, and/or to incentivize employer or individual donors to donate to early childhood programs or scholarships.
- Pilot a cost-sharing program among employers, employees, and a third party (state or local government or philanthropy), similar to what states such as Michigan have implemented.
- Consider new sources of revenue to support child care services at the state level.
- Consider other public-private partnerships that have been successful in other states.
- Consider nonfinancial strategies to reduce barriers for licensing and quality improvements for child care providers.

Overall, in the long term, a sustainable and high-quality child care industry will include strong partnerships between employers, families, local communities, and public investments.

Introduction

Child care is a two-generation issue, supporting the workforce of today and helping to build the workforce of tomorrow. Access to child care helps parents participate in the labor market, be more productive at work, and build the family's economic security. At the same time, quality child care helps keep children safe and fosters child development at the most critical stage of their growth (Belfield, 2023; Bipartisan Policy Center, n.d.; Bishop & Lieberman, 2023; U.S. Chamber of Commerce Foundation, 2023).

A recent study by the U.S. Chamber of Commerce Foundation (2023a) revealed that state economies across the country lost between $165 million (Alaska) and $9.39 billion (Texas) annually due to insufficient child care. In Arizona, insufficient access to child care contributes to employee absenteeism and turnover, resulting in lost earnings, productivity, and state revenue, according to results from one recent survey (Bishop & Lieberman, 2023; Belfield, 2023). Aggregated across all 474,000 parents of children birth to age 5 in Arizona, the estimated annual income losses total $3 billion in foregone earnings, $958 million in reduced business output, and $725 million in the state's revenue from income and sales taxes, for a total of nearly $4.7 billion (Bishop & Lieberman, 2023; Belfield, 2023). Similarly, a 2023 U.S. Chamber of Commerce Foundation survey in Arizona found that 71% of parents of children 5 years of age reported missing work due to child care issues in the prior 3 months. This report estimates the direct cost to Arizona's employers at $829 million a year, in part reflecting the need to provide overtime pay to other employees and to hire temporary workers. It is important to note that these studies do not include the economic impacts of insufficient child care for school-age children, and therefore the impacts are likely far greater than what these studies estimated.

Roadmap to This Report

We present the current-state analysis of child care, an estimate of projected child care needs in the next 10 years, and recommendations for meeting those needs by

- describing the current landscape of child care in Arizona,
- summarizing how employers in Arizona currently support child care for their employees,
- providing estimates of the future demand and supply of child care in Arizona,
- acknowledging the estimated funding to meet the demand for child care, and
- presenting strategies and recommendations to meet Arizona's child care needs.

During the pandemic, American Recovery Plan Act (ARPA) funds provided extra support to both parents and child care providers. However, ARPA funds were a one-time investment, and on September 30, 2023, the Stabilization funding within ARPA ended (Administration for Children and Families, 2023). Some states, including Arizona, have found ways to extend these funds temporarily; however, in effect, this has just pushed back the funding cliff. Other states, such as

Massachusetts, are using state money to replace APRA funds (in Massachusetts, through the Commonwealth Cares for Children (C3) Grant). Other states are implementing other strategies by investing money from their state budgets, such as raising reimbursement rates or investing in workforce compensation initiatives as a way to address child care shortages (Center for American Progress, 2024). With the ending of these Stabilization funds, some estimates suggest that nationally up to 3.2 million children could lose their child care, and more than 70,000 child care programs could close (The Century Foundation, 2023). Given that infant and toddler care tends to be the most costly to provide and hardest for parents to reliably find, the loss of stabilization funds may most dramatically impact cost of care for this age group (Bishop, 2023).

Other federal legislation has recognized the need for additional investments in child care. Congress passed the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act of 2022 to incentivize the manufacturing of semiconductors in the United States. In doing so, the federal government appropriated $52.7 billion to incentivize and develop the United States' domestic semiconductor and manufacturing capabilities and develop the workforce necessary for larger scale semiconductor manufacturing. The CHIPS and Science Act of 2022 is expected to create thousands of new jobs in manufacturing and construction in Arizona. To meet the need for these workers in Arizona, companies will need to diversify the workforce, including adding younger workers and women. The Act requires that companies applying for $150 million or more in CHIPS grants submit plans to provide access to child care for their manufacturing and construction workers, and strongly encourages all applicants to include child care plans. In doing so, the Act acknowledges that supportive services such as child care are critical to hiring, training, and retraining the workforce needed for America's manufacturing infrastructure, but also provides an opportunity to develop child care plans that could work across industries. The Act requires that child care plans address four key principles:

- Accessibility: at a convenient location with hours that meet workers' needs
- Affordability: costs are within reach for low- and medium-income households
- Reliability: provides workers with confidence that they will not need to miss work for unexpected child care issues
- High quality: provides a safe and healthy environment that families can trust and that nurtures the healthy growth and development of children

With the growing Arizona economy, the ARPA funding cliff, and the child care requirements in the CHIPS Act as catalysts, the Arizona Commerce Authority contracted with the American institutes for Research® (AIR®) to provide:

- a current-state analysis of child care, including analysis of gaps in access to high-quality, affordable child care
- an estimate of projected child care needs in the next 10 years, and

- recommendations for meeting those needs.

Report Methodology

To develop this report, AIR reviewed existing reports on child care in Arizona and collected input from a wide variety of informants, including the following:

- Government entities
- Unions and trade organizations
- Child care providers
- School districts
- Employers
- Parents
- Nonprofits and foundations
- Higher education institutions that train child care workers

To estimate current and projected supply and demand for child care in the next 10 years, AIR analyzed American Community Survey, state demographic projection, state child care licensing, state child care subsidy utilization, and state employment pipeline data. See Appendix A for a list of participants who provided input for this report.

Current Landscape of Child Care in Arizona

By one estimate, there are 288,000 children under age 6 with all available parents in the workforce (The Annie E. Casey Foundation, Kids Count Data Center, 2023). This is likely an underestimate of the need for child care in Arizona, because it does not include families that need child care so that parents can attend school or job training programs or the estimated 406,000 children aged 6–12 with all available parents in the workforce that may need child care to cover the hours when they are not in school and their parents are working (i.e., before and after school and during the summer) (The Annie E. Casey Foundation, Kids Count Data Center, 2024).

As of 2020, there were an estimated 234,270 licensed child care slots in the state, estimated based on licensed capacity (Bipartisan Policy Center, n.d.). However, this number is likely an overestimate, as recent surveys of child care providers in Arizona indicate that many child care providers do not serve the maximum capacity that they are licensed to serve (Arizona Early Childhood Alliance, n.d.). The reasons for not serving the maximum licensed capacity vary by provider, but focus group data suggest that difficulty finding staff is one primary reason for the gap. This is a challenge nationwide. The Bipartisan Policy Center (n.d.) estimates that in Arizona there is a 25% gap between the potential need for care and the supply of child care slots, or an estimated 76,690 children that need child care but whose families cannot reasonably access formal child care.[3] Similarly, for every school-age child enrolled in an afterschool program, three more would enroll if an afterschool program were available to them (Afterschool Alliance,

[3] The Bipartisan Policy Center's estimates of potential need are based on the number of children aged birth through 5 with all available parents in the labor force. Therefore, these estimates do not include school-age children who need care when they are not in school but their parents are working such as before and after school and during the summer.

2023).[4] Nearly half of Arizonans live in an area where there are more than three children for every licensed child care spot (Malik et al., 2018). Access to child care is especially limited for families with infants and toddlers, families that need care during nontraditional hours, families that live in rural areas, and families with children with special needs (Bipartisan Policy Center, n.d.; Health Management Associates, 2022; Malik et al., 2018).

These estimates also do not capture unlicensed care. In Arizona, home-based child care providers can legally care for up to four children, for compensation, without a child care license (Arizona Department of Economic Security Child Care Administration, 1994). And many parents prefer informal care (i.e., unlicensed care) because of its convenience, flexibility, and sense of trust and safety (Smith & Owens, 2023). The state does not have a way to collect data on the number of unlicensed home-based child care providers, making a direct measurement of the number of children served by unlicensed child care providers infeasible. Arizona does have information on unlicensed child care providers that provide child care to children who receive federal child care subsidies. Therefore, reports of the number of child care providers and the number of child care slots in the state may underestimate the actual supply, as the data are limited to licensed child care providers and unlicensed providers that provide care for children who receive child care subsidies.

Infant and Toddler Care

In Arizona, about half[5] of child care centers provide infant care (Health Management Associates, 2022). This is similar to percentage of centers nationally that serve infants (approximately 41%) (National Survey of Early Care and Education, 2021). Although a greater share of licensed home-based providers report serving infants than center-based providers do, licensed home-based providers contribute far fewer child slots to the overall supply of licensed child care in Arizona than center-based providers do (Health Management Associates, 2022). Parents, child care providers, and other interview participants underscored the need for infant and toddler care and its limited availability. Almost all child care providers reported long wait lists for infants and toddlers. Interviewees shared that limited access to infant and toddler care means that some families are forced to make difficult decisions about taking time out of the workforce to care for their children. Although parent preferences for the type of infant care varied, study participants reported that when families struggle to find infant or toddler care in licensed programs they often turn to unlicensed family, friend, or neighbor care. However, in

[4] As an example, demand for the federally funded 21st Century Learning Centers program is so great that 2 out of every 5 applications were not funded during the most recent competition (Afterschool Alliance, 2023). The 21st Century Learning Centers program serves Arizona students attending high-poverty, low-performing schools, with afterschool and summer learning programs (Afterschool Alliance, 2023). The primary purpose of the program is to support children's academic achievement rather than to provide child care for school-age children so their parents can work.

[5] Depending on the region of the state, approximately 33-53% of child care centers provide infant care (Health Management Associates, 2022).

some regions of the state, even these options are limited, forcing parents to make career sacrifices, such as taking time out of the labor force. As noted previously, insufficient access to child care can have cascading effects on employers and the state's economy.

Care During Nontraditional Hours or Extended Hours

Nationally only 2% of child care centers and 16% of family child care homes provide child care overnight (CCEEPRA Research Translation, 2023). Arizona also has a very limited supply of care for extended hours (more than 12 hours per day) or during nontraditional hours, such as late night, overnight, or weekend care. For example, fewer than 5% of center-based providers report providing any of these options. Although licensed home-based providers are somewhat more likely to offer these options than licensed center-based providers, fewer than half of the licensed home-based providers in most regions of Arizona provide these options (Health Management Associates, 2022). Study participants reported that extended and nontraditional care are critical, particularly to serve workers in fields such as health care and construction. Overall, according to interviewees, parents with atypical work hours, such as those in the health care or construction fields, face significant challenges finding child care that meets the needs of their work schedules, forcing parents to cut back on work hours, forgo promotions to more demanding roles, or leave the workforce entirely. In Tucson, the Erik Hite Foundation Child Care program opened in 2011 to provide care for the children of first responders and offers extended and flexible hours to meet the needs of first responders' work schedules. According to the child care program's website, the program offers parents affordable fees, as much as 30–35% less than other area child care centers. The Erik Hite Foundation provides funding to the child care program so that they can offer these affordable fees. Some interviewees pointed to the Erik Hite center as an example that may be able to be replicated in other areas to serve parents from other industries that have needs for extended and nontraditional care hours.

Child Care in Rural Arizona

Nationally, in rural areas, children younger than 5 make up 24% of children in need of child care services. However, 55% of these children live in an area that has no child care providers or has more than three children in the community for every available child care slot. This is in contrast to suburban and urban areas, where children younger than 5 make up 77% of the population in need of child care but only 33% live in areas with such shortages (NACRHHS, 2023). According to another report, rural communities nationwide face an estimated 35% gap between the need for child care and the supply of licensed child care slots. Whereas, urban communities nationwide face a 29% gap (Bipartisan Policy Center, n.d.). Similarly, rural communities in Arizona are more underserved than are urban communities in the state, with rural communities facing an estimated 37% gap between the need for child care and the supply of licensed child care slots, in comparison to urban communities that face a 23% gap (Bipartisan Policy Center,

n.d.). Interviewees reinforced the lack of child care in rural Arizona, reporting that families in some rural parts of the state have little to no access to child care beyond the also limited spaces with unlicensed family, friend, or neighbor care. These participants also shared that in rural areas, the lack of infrastructure (such as public transportation) and funding for building or modifying spaces suitable for child care posed challenges for increasing the supply of child care.

Child Care for Children With Special Needs

Nationally, parents of children with disabilities experience at least some difficulty in finding care (Center for American Progress, 2020). In Arizona, although more than 75% of child care centers report that they have the capacity to serve children with special needs (Health Management Associates, 2022), the center-based providers that we spoke with noted that they often had trouble accommodating children with special needs due to the intensity of the needs and staffing constraints.

Affordability

Child care is unaffordable for many families in the United States. According to a recent report, drawing on data from 47 states, childcare prices for a single child ranges between 8% and 19.3% of median family income (Landivar et al., 2023). According to the U.S. Department of Health and Human Services, for child care to be affordable, it should cost no more than 7% of a family's income regardless of the number of children in the family (2015). In Arizona, according to one report, the cost of care for a single child can be double this—14% based on median family income for a family of four (Child Care Aware of America, 2022). Moreover, when compared with other household expenses such as housing, child care often has the highest price tag for families (Child Care Aware of America, 2022).

Although Arizona provides subsidies to families with low incomes to help make child care more affordable (through pass-through funds from the federal Child Care and Development Block Grant and required state matching funds), fewer than one third of eligible children are served by these subsidies, due primarily to limited funding for the subsidies (Bishop & Lieberman, 2023). In interviews and focus groups for this study, we heard about challenges that many families face in affording child care. Although some parents receive federally or state supported child care subsidies or other forms of public assistance to pay for care, the end of American Rescue Plan Act (ARPA) funds means that the total number of families receiving child care subsidies or the amount of the subsidy will need to be reduced as early as the summer of 2024.

Other programs, such as the Arizona High Quality Early Learning Grant, used ARPA funding to support wraparound care for Head Start and state preschool families by allowing enrolled children to have full day child care by adding wraparound supports (i.e., afternoon child care) to their half day Head Start or preschool program. At the conclusion of the grant (June 2024),

families will have to search for child care arrangements to replace the wraparound supports provided by the grant. In addition, many parents who do not qualify for subsidies or these other subsidized programs also struggle—particularly those whose earnings are just above income eligibility cutoffs.

Quality

The birth-to-5 age range is a sensitive and critical period for brain development (Shonkoff & Phillips, 2000). Research indicates that high-quality early child care programs such as those that provide children with stable, responsive, nurturing relationships and rich learning experiences in the earliest years have the potential to provide lifelong benefits for learning, behavior, and both physical and mental health (National Scientific Council on the Developing Child, 2004). One of the hallmarks of high-quality child care is low child-to-adult ratios and group or class size limits that allow teachers to provide these positive, responsive, and enriching adult-child interactions. Arizona's child care licensing standards for ratios and groups sizes allow more children to be cared for by fewer adults compared with most other states' standards and federal recommendations (Meek et al., 2023). For example, the recommended child-to-staff ratio for four-year-olds is 10:1 in Caring for Our Children Basics (CFOCB) Health and Safety Foundations for Early Care and Education and 15:1 in Arizona's licensing regulations. Although the use of the CFOCB standards is not federally required, according to the U.S. Department of Health and Human Services, CFOCB represents the minimum health and safety standards experts believe should be in place where children are cared for outside of their homes.

Arizona efforts to improve its child care include quality initiatives administered by First Things First and the Arizona Department of Education. First Things First administers Arizona's quality rating and improvement system, Quality First, working with licensed child care providers to increase child care quality. However, Quality First is unable to enroll all providers who want to participate due to limited resources. ARPA funds allowed Quality First to enroll additional providers, but when funding ends in June 2024, most of those additional providers will have to be disenrolled from the program. The Arizona Department of Education oversees the federally funded Preschool Development Grant and the High Quality Early Learning grant program funded by ARPA. These federal grant programs give providers in high-need communities resources to improve quality by improving educator wages, family engagement, and inclusion of children with disabilities. However, both of these funding streams are currently time-limited, meaning these funding streams will run out unless the federal government decides to extend funding.

Currently there are 53 states and communities with quality rating and improvement systems (QRIS) (QRIS Resource Guide). A study investigating participation in QRIS across states revealed that between 2% and 93% of child care centers participate in voluntary QRIS systems, and

between 1% and 80% of family child care providers participate in voluntary QRIS systems, depending on the state (National Center on Early Childhood Quality Assurance, 2020).Because states have unique approaches to developing QRIS ratings, it is difficult to compare the percentage of participating providers considered high quality across states. Although Arizona has made efforts to invest in and improve child care quality in Arizona, in 2023, only 36% of licensed programs participated in the Quality First program in Arizona. And 68% of participating programs met the Quality First definition of high quality, a star rating of three or above on a five-point scale (Meek et al., 2023). Many interview participants acknowledged the importance of high-quality child care. However, these participants also raised concerns about access to high-quality child care. Parents expressed concern about excessive screen time, a lack of developmentally appropriate activities, and what they believed to be substandard curriculum in the child care programs that their children attended. However, parents indicated they could not afford higher quality programs, even if they were available. According to First Things First's sustainable cost model, costs for 5-star center-based care for infants is 34% higher than for non-quality first centers.

Child Care Workforce

Another key factor in quality in child care programs is the qualifications and stability of the workforce. Despite their crucial contribution, early childhood educators earn quite low wages, given the market pressures on child care businesses. In 2019, the median wage for child care workers in Arizona was $11.97 (similar to the national median of $11.65), and the median wage for a preschool teacher was $13.87. By comparison, the median wage for a kindergarten teacher–a professional position that also teaches young children–in Arizona was $25.67 (Center for the Study of Child Care Employment, 2020). On average, early childhood teachers in Arizona with a bachelor's degree are paid 21.1% less than K–8 teachers. Early childhood educators in Arizona (and nationwide) are much more likely to experience poverty, with the poverty rate for early childhood educators in the state at 20.5%, compared with 10.8% for all workers (Center for the Study of Child Care Employment, 2020).

Likely as a result of these low wages, turnover rates among early childhood educators are high. The National Survey of Early Care and Education (NSCEC) revealed that 30% of child care centers had high turnover rates. A center was considered to have high turnover if more than 20% of the staff who worked with children left the center in the 12 months prior to survey administration. Characteristics of child care centers that had high turnover include: being a for-profit center (either independent or part of a franchise/chain), centers serving at least one child ages 0-3 or 3-5, and being a center that served at least one child with a subsidy. Additionally, child care centers that did not provide health insurance and retirement benefits or professional development benefits also had higher rates of turnover (Amadon, Lin, & Padilla, 2023). These

high turnover rates directly impact child care providers' abilities to serve the needs of children and families. When surveyed in February 2022, two-thirds of providers reported a staffing shortage that affected their ability to serve families. Of the providers that report a staffing shortage, 37% of these providers had a longer waiting list than providers without a staffing shortage, and 52% of the providers with a staffing shortage were forced to serve fewer children (NAEYC, 2022).

The retention and recruitment of skilled early childhood educators is critical to maintaining high-quality programs, and achieving this necessitates offering competitive wages. To foster a stable and proficient early childhood workforce and elevate the overall quality of child care, prioritizing improved compensation is imperative.

Arizona efforts to build, support, and expand the early childhood workforce include the Arizona Early Childhood Educator Apprenticeship Pathway Program. This program is a registered apprenticeship program, recognized by the Department of Labor, which pays new staff to train in early childhood classrooms while they are mentored by more senior teachers. This program involves four community colleges and currently has 24 child care programs and more than 72 apprentices enrolled. This two- year program combines classroom instruction with on-the-job training. At the end of the program, students earn a Federal Child Care Development Specialist credential. Every apprentice is assigned an on-site mentor (journey worker), and sites who host apprentices receive Wage Enhancement Grants from the Department of Economic Security. These grants support the apprentice's pathway, wages, and paid professional development. Unfortunately, although this program is subsidized by the Department of Economic Security and Department of Education, it is funded by COVID relief dollars, and future funding is uncertain.

Challenges With the Current Child Care Industry

Child care providers in Arizona and nationally struggle to make ends meet due to their need to keep costs low because their potential revenue (from parents) is constrained by families' ability to pay. Businesses often survive by paying very low wages and relying on many donated hours and materials. In this environment, many child care providers have left the profession; the Bureau of Labor Statistics estimates a 45% decline in the number of workers in child care from 2019 to 2023. In addition, because taking care of children comes with substantial liability, child care providers also bear increasing insurance costs, which also increase the cost of care. According to one source, nationally, a typical annual increase today could be 15–25%, up from 6–9% a few years ago. And some insurance companies are leaving the child care market entirely (CCIG, 2024). Study participants also shared their concerns about rising insurance costs and spoke of child care providers being dropped by their long-term insurers.

Feedback from interview participants reinforced these market failures as significant in Arizona. Child care providers shared that they would like to increase staff wages, yet they were hesitant because this would likely increase parent tuition costs and potentially threaten their ability to remain in business. Center directors described significant challenges in recruiting and retaining qualified staff, given low compensation.

Our research demonstrates that there is a need for stronger public and private investment in Arizona's child care industry. Feedback gathered from parents, child care providers, employers, and others highlight major challenges with the state's current child care industry—limited access to quality care and high costs. Arizona's growing economy, including anticipated expansion of the semiconductor industry from CHIPS Act investments, presents an opportunity for employers to partner with state and local governments to develop child care options that build on the existing child care infrastructure to provide services that meet families' needs and ensure quality wages and working conditions for the child care workforce.

Current Landscape of Employer-Provided Child Care Benefits

This study's interviews with employers revealed mixed perspectives on the importance of child care for their workforces. Employers who employ a high percentage of parents expressed the importance of reliable child care. However, other employers, who currently rely on an older workforce, were less concerned, noting that needs or concerns about child care were not frequently expressed among their current workforce. Unions and trade organizations reported that although some employers may be aware of their employees' child care needs, very few currently recognize those needs and provide child care benefits to help address the needs. Mayors and chamber of commerce leaders, on the other hand, were more likely to see how access to affordable, quality care would ultimately impact all employers, as an economic boom in one sector would require recruiting employees to staff all the new schools, hospitals, and other service industries needed to accommodate semiconductor and other manufacturing and technical industry growth.

Currently, there are three common models of employer support for child care: (a) on-site or near-site child care operated by the employer or a contractor, (b) off-site care provider sponsorship, and (c) cash assistance for care. Employers seeking to support access to high-quality, affordable child care will likely want to consider these strategies as well as other innovative strategies to provide for the diverse needs of the expanding workforce.

Employers interviewed for this study, including employers in the semiconductor, construction, hospitality, and health care industries, reported providing one or more of the following child care benefits to their employees:

- Dependent care flexible spending accounts

- Assistance with navigating child care options
- Discounted child care at selected community-based sites (off-site care sponsorship)
- Back-up child care offered through a contracted child care provider
- Cash assistance to reduce the cost of child care
- Onsite child care operated by a contractor

Across employers interviewed for this study, the most common forms of employer-based child care benefits broadly are **dependent care flexible spending accounts** and **assistance with navigating child care options**. Although these benefits are helpful to parents, they don't directly address the most pressing challenges of access and affordability. Dependent care flexible spending accounts operate similarly to a savings account and allow employees to set aside up to $5,000, depending on their salary, on a pre-tax basis to pay for qualified dependent care expenses. Assistance with navigating child care options is another common form of employer-based child care benefit among study participants. Employers who offer this benefit may provide free access to child care referral agencies (e.g., https://www.care.com/) or other resources that connect parents with care in their communities.

Other commonly reported child care benefits are **discounted child care** at selected community-based sites and **backup child care**. Discounted child care is often called off-site care provider sponsorship. For this benefit, employers provide a direct payment to the child care program or programs and then those child care programs provide discounted rates to the employees seeking care. Discounted rates can vary, but interview participants reported discounts in the 10–20% range. Some employers reported that they offer backup child care through an external provider that connects parents with backup care options. Typically, employers provide their staff with a certain number of days of backup care to use as needed. The external provider then helps connect parents with center-based or in-home care when the need arises.

Other forms of employer-provided child care benefits, such as providing **cash assistance to reduce the cost of care** and **on-site or near-site child care,** are less common.[6] Typically, cash assistance is in the form of a direct payment to staff to apply to the child care of their choice. For on-site child care, in most of these cases, the employer contracts with an external child care provider to offer child care onsite.

Despite the fact that cash assistance and on-site child care were less frequently reported offerings among study participants, they were the most commonly reported child care benefits that employers were considering as options for the future. Although onsite child care may be convenient for many parents, interview participants raised some questions to consider. First,

[6] Of the employers interviewed for this study, only one employer in the health care industry was offering on-site child care.

some employee settings may not be appropriate for child care centers, due to health and safety concerns (e.g., toxicity in some manufacturing workplaces). In these cases, employers might consider near-site, instead of onsite, locations for child care services. Interviewees also shared that it will be important to assess parent interest and preference for the location of care—as some may prefer a program that is closer to their home or their partner's workplace.

Projecting Future Child Care Demand and Supply in 10 Years (2034)

This project leveraged existing state and federal data sources to estimate the potential demand for child care in Arizona in 2034. We used the state's own demographic projections to create a baseline projection of demand in 10 years for children ages 0–5 and 6–12. These demographic projections should take into account the status quo trajectory in Arizona economic growth, absent new stimulus such as the CHIPS act. We calculated this baseline projection by taking the state's status quo expectation of the number of children in Arizona in 2034 based on population growth and migration and then estimating the proportion of these children living in households in which all of the adults are working (based on census data). We then estimated the potential impact of additional economic expansion on Arizona's child care market—that above and beyond economic growth expected under status quo conditions. Because they are long-term estimates based on imperfect data, we present a "high," "medium," and "low" estimate of demand in 10 years, which should be compared both with baseline projections and with the 2024 status quo.

Description of Methodology for Demand Projections

We used state demographic projections and American Community Survey data to produce baseline estimates of the demand for child care for 2024 and 2034. "Demand" was defined as children living in households in which all adults were employed. It thus represents total potential demand for child care rather than simply children likely to be in licensed out-of-home care. As the total number of children currently in formal care is unknown, taking the broadest possible definition of demand makes it possible to estimate *changes* in demand using total population counts. State data on potential new large-scale business expansion were used to generate high, medium, and low estimates of newly created jobs by 2034. It should be noted that the high estimates represent a very dramatic increase in economic activity, since in this scenario Arizona would win *every* large potential project, which would be unprecedented. However, this high estimate does set an upper bound on possible growth above baseline expectations. We then used national and Arizona-specific averages on family characteristics (virtually identical) to project marginal increases in the number of children needing child care in two groups: children 0–5 and children 6–12. These estimates were created at the county level

in order to determine the total demand for child care in 10 years, as well as the percentage change from 2024. For more details on how these estimates were generated see Appendix B.

Projected Estimates of New Workers Expected in the State

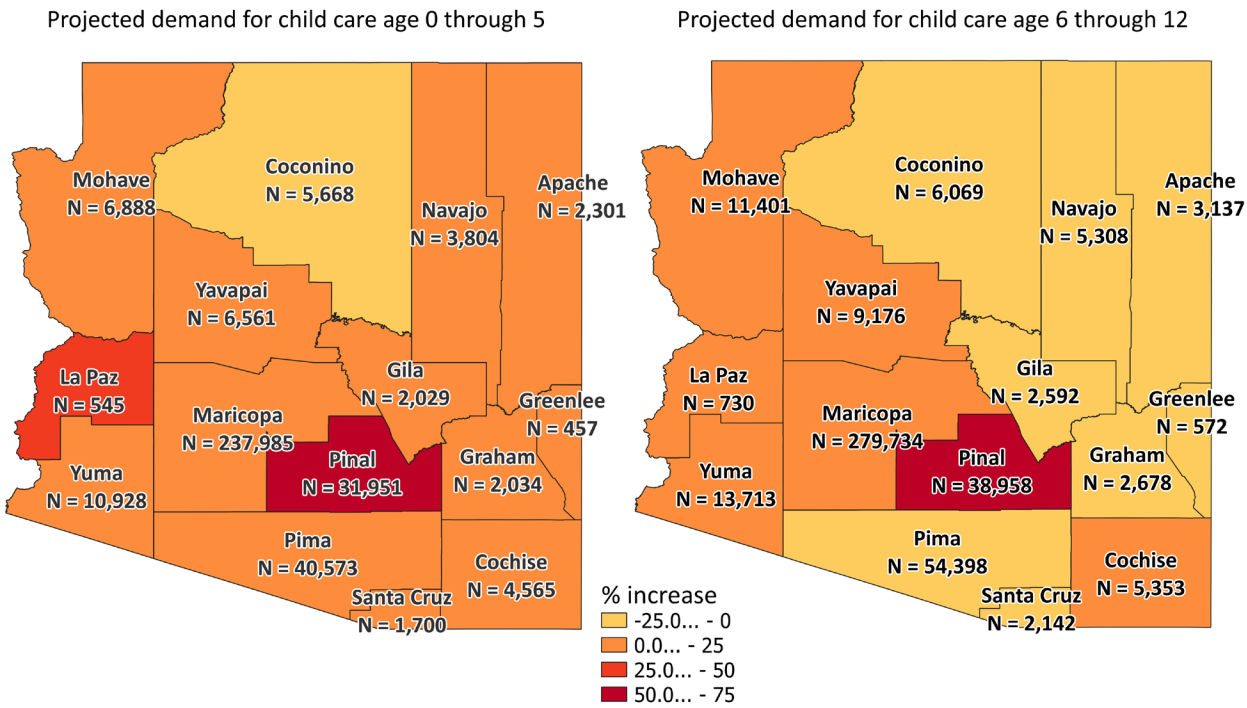
Our estimate of additional demand for child care assumes that all new employment generated by CHIPS and other industries considering locating or expanding in Arizona (from ACA-provided data on potential and won agreements) would represent a net increase in new workers to Arizona's labor force, either through migration into the state or by employing people presently outside the labor force. This population increase is on top of status quo expectations of population trends due to births, deaths, and migration (including expected migration from increased economic activity). To the extent that new employment results from workers switching jobs, there would be no net increase in child care demand, but under this scenario there would also be accompanying shortages in industries that are losing workers. We used the state's approximate historical "win rate" of 40% for potential projects (according to ACA), and created a high, medium, and low estimate of the total number of new jobs. Potential expansions were grouped by the number of expected job gains, so that the high estimate included the 100th to 60th percentile of potential jobs (i.e., the projects with the largest number of new jobs), the medium estimate included the 70th to 30th percentiles, and the low estimate included the 40th to 1st percentile. These projections were then added to the number of jobs produced by new industries that had recently committed to expanding in Arizona. The types of new industries were then grouped into economic sectors based on classifications from the Bureau of Labor Statistics. For each sector, we also added an additional jobs multiplier based on estimates from the Economic Policy Institute (Bivens, 2019). Using this method, we estimate that Arizona will add between 66,000 (low estimate) and 244,000 (high estimate) additional jobs, with a medium estimate of 84,000 additional jobs.

Projected Estimates of Demand for Child Care in 2034

Using the state's medium estimate of the total number of children in 2034, we found that when combined with additional increases in employment due to the CHIPS Act and other economic development initiatives, the total number of children aged 0–5 needing child care services will grow from approximately 298,000 to 358,000 over the next 10 years (a 20% increase). The impact of CHIPS, other pipeline jobs, and additional jobs due to multiplier effects is fairly modest, contributing only 10% of the total increase in demand. The baseline growth rate is expected to be 18%. The increase in need for child care for 6–12-year-olds is much lower, growing from 411,000 in 2024 to 436,000 in 2034 (a 6% increase). The difference is largely due to the much lower number of children aged 6–12 projected by state demographers (although a recent report by the U.S. Census suggests that children aged 0–5 may have been undercounted in the 2020 census, which could depress the age 6–12 estimates). There was a sharp decline in

the birth rate during and after COVID-19, which state projections assume will rebound in upcoming years. Under baseline projections we estimated only a 3% increase in demand for child care for 6–12-year-olds, with an additional 3% due to economic expansion. It should be kept in mind that these results are quite tentative, with a wide margin of error. Using low- and high-count estimates of state population growth and jobs won rather than medium estimates yields quite different results. For children aged 0–5, the estimated demand in 10 years ranges from a low of 337,000 to a high of 394,000—which represents statewide increases of between 13% and 32%. Exhibit 1 shows the total expected demand for child care in 2034 using the medium estimate, color coded by the percentage increase. These maps demonstrate that the greatest growth in demand is likely to be in Pinal County.

Exhibit 1. Estimated Demand for Child Care in 2034, Children Ages 0–5 and 6–12



Current Estimates of Child Care Supply

To generate county-level estimates of the supply of child care, we combined DHS data on the licensed capacity of all child care providers in the state with DES data on unlicensed home-based providers who receive state child care subsidies. Because the state licensing data do not specifically track the number of slots by age, we created a rough approximation of child care supply for the 0–5 and 6–12 population of children by including all of the providers authorized to serve each age group under either licensing or state subsidy guidelines. These are likely to be overestimates, because a child care provider that served children 0–12 would see *all* of its slots counted towards each group. (In other words, a provider authorized to serve 50 children aged

0–12 would have its 50 slots applied both to the 0–5 licensed capacity and the 6–12 licensed capacity.) Given these limitations, we estimated approximately 254,000 licensed and/or unlicensed subsidy-receiving child care slots for the 0–5 population and 222,000 slots for the 6–12 population.

When compared with current and future estimates of the number of children needing child care, these figures suggest that even a small increase in demand for child care could pose quite serious problems for an already strained child care market. Our approximation of the licensed capacity of child care providers serving children 0–5 indicates that under present conditions there is a significant shortage in available slots. The estimated 254,000 licensed 0–5 slots in Arizona in 2024 is 15% lower than estimated demand. The remaining children in need of care are likely being served through informal systems (unlicensed, unregulated, friends and family child care arrangements), although the paucity of data makes it difficult to be sure, and it is unknown what arrangements these families might choose were more licensed options available to them. The gap in available child care is likely to grow over the next 10 years unless there is a substantial expansion in available slots. If licensed capacity remains the same, then in 10 years' time there would be at least 100,000 more children aged 0–5 than available licensed and subsidy slots. And this is likely a significant undercount, given the fact that many providers serve fewer children than state licensing allows (Smith et al., 2020) and the fact that this figure does not include services for school-aged children. It is questionable whether the informal child care sector would be able assume the burden of serving such a large increase in the number of children, and it is likely that some additional families would choose licensed care were it accessible to them.

The Potential Impact of Large Manufacturing Plants on Specific Communities

Thus far we have focused on the aggregate county-level effects of marginal increases in economic expansion on Arizona's child care market. However, county-level effects can mask salient within-county differences. Planning for emerging child care needs has to keep the local context in view. Parents tend to prefer child care close to their home or place of employment (Rose & Elicker, 2008), which necessitates attention to community-level child care markets.

Ideally we would be able to model specific local child care markets using neighborhood and/or census block data. Unfortunately, public data sources contain very limited information on child care supply, demand, or prices at this level of granularity. Estimates of local child care supply usually rely on licensed capacity, but these numbers may be quite different from the real number of available child care slots. For example, according to one recent report, given widespread staffing shortages in the child care and education fields, providers may lack the staff necessary to reach their theoretical capacity, and many providers have reported substantial difficulty in finding staff willing to work for the wages they can pay (and lack of

benefits they are able to offer). Licensed capacity data also neglect the number of unlicensed child care slots available through informal family, friend, and neighbor care. This is a particular problem when considering shift work, as centers are usually unlikely to provide nontraditional hour (NTH) care, which means that the type of child care provider most likely to serve children during nights and weekends is the least likely to be captured in public data sources. Similarly, estimates of local demand have a high degree of error, undercutting their utility in precisely measuring the number of children who need care in particular neighborhoods. For example, ACS census block estimates on the number of children in need of care often have very high margins of error. A local estimate of 100 children who potentially need child care with a 50% margin of error would mean that local planners would be unsure whether they needed 150 slots or only 50. Similar problems confront estimates of prices, since even market rate studies with reasonably high response rates (30%–40%) may have very incomplete data at the local level. In short, local estimates of child care markets can be quite faulty, and stakeholders should treat them only as rough guides rather than perfectly accurate predictions.

Given the limitations of the data, one of our key recommendations is that community members (e.g., political leaders, city planners, businesses) should collaborate in designing local plans to meet new child care needs. One of the essential components of such plans should be gathering robust local data from providers, families, and providers on the real-world availability, cost, and need for child care. Only then will they be able to develop a comprehensive and accurate strategy for strengthening local child care markets.

In lieu of a detailed exploration of the impact of economic expansion on specific communities (or the specific impact of new manufacturing plants), we propose a set of considerations for community leaders in two general types of communities: (a) sites where there are current manufacturing facilities that may be expanded in established communities, and (b) lightly populated "greenfield" sites on the fringes of metropolitan areas where fabs and other large manufacturing developments could be constructed wholly new. With respect to the first scenario, which for the sake of convenience we will dub "expansion sites," the increase in manufacturing jobs (whether direct or via suppliers) will have the potential for a local surge in demand for child care. This shock to the local child care market will likely be magnified by so-called "multiplier jobs"—i.e., additional demand generated through second order effects on economic activity through the provision of goods and services to manufacturing workers. Durable manufacturing typically has a fairly high economic multiplier, and so this growth in employment could be associated with a significant increase in the number of workers with children and hence the need for child care services.

As urban planners are quite aware, sudden surges in economic activity and attendant general population growth can lead to short-term run-ups in the prices of goods and services as supply

struggles to keep up with demand. This is likely to be a particular concern in the case of child care because there is already significant supply constraint due to low profitability for child care providers and low wages for child care workers. This shortage may not directly affect CHIPS-related industries if their workers are generally higher paid, or they contract with existing child care providers, or provide subsidies to their workers to make it easier to pay for child care. Contracting with providers and demand subsidies in the absence of an expansion of supply would be very likely to price other families out of the market and exacerbate the local increase in prices. An additional difficulty is that the higher wages paid by newly expanded manufacturing could actually reduce the number of child care slots by attracting child care workers to the new, better-paid employment at expanded fabs (and other businesses as they bid to attract workers in a suddenly tightened labor market).

The problem of ensuring an adequate supply of child care is likely to be far greater in greenfield sites (the second scenario). The local shock of new employment on the local supply would be more intense because the ratio of new to current employment would so much greater: rather than a 10–20% increase in the number of local jobs, a fringe community could see an increase by orders of magnitude. Housing, schools, and supporting service industries, for example, would all basically have to be created from scratch. The labor force would see massive local expansion and would either have to reach the new facility via commuting or through a jump in housing construction (which in many parts of the country is already constrained due to high mortgage rates and decades of slow construction).

These problems would be considerably exacerbated for the child care sector. This is a particular problem in companies where there is shift work, because nontraditional hour care (i.e., outside 9–5) typically relies on licensed home-based programs and/or unlicensed or informal friend, family, and neighbor care. Child care centers very rarely provide before- or after-hours care. But greenfield sites by definition do not have a dense network of local, home-based caregivers. Further, even 9–5 child care providers could find it difficult to attract an adequate supply of child care workers because of a shortage of local housing stock and opportunities for better pay in other industries (including in the new fabs or other manufacturing opportunities). Expecting child care workers to commute to the new community would be problematic, because commuting time should be interpreted as an implicit reduction in compensation compared with jobs closer to home. Wages would need to be higher in the new communities to compensate for the required driving time from existing residential areas. For example, a 1-hour commute for an employee who otherwise would earn $10 per hour for an 8-hour shift would necessitate an additional dollar per hour for it to be worth the same as the job they already have. This is the case for all workers, but it's a particular problem in child care because there is already a shortage of child care workers.

Estimated Funding Needed to Meet Projected Demand

To create a rough estimate of the total cost of providing child care to children aged 0–5 in Arizona from all sources (e.g., parents, employers, state, federal, nonprofit), we relied on the First Things First (FTF) Cost of Quality Study (n.d.). This study used a variety of data sources to determine the costs associated with providing high-quality care to children and fostering a sustainable child care market. The FTF study generated cost estimates by star rating, provider type, and child age. We created a blended rate for all 0–5 children that averaged the FTF-estimated costs across child ages (assuming equal numbers of children at each age). The state's 3-star rating was used as a benchmark for quality care.

Based on these assumptions, we determined that the average cost was $1,151 per month for center-based care and $1,282 per month for home-based care. Because the true distribution of children across types of care is unknown, we used the 2019 National Study of Early Care and Education (NSECE) household data on the percentage of children who received care at any point during the week either at centers or in homes (combining relative and nonrelative care). In addition, because children often receive multiple types of care, that total exceeds 100%, we reweighted those proportions so that 51.6% of total time would be in centers and 48.4% in homes. **This yields an average monthly cost across provider types of $1,214 per child per month, or $14,572 per year.** At this average cost, families would pay about 17% of their income, based on the median family income of Arizona households with children (using the Kids Count estimate—based on Census data—of $84,600); this is more than twice the U.S. Department of Health and Humans Services-suggested standard for affordability of 7%. The burden on families would of course be even higher with more than one child in need of care. Existing market rates for child care fall far below the rate required to sustain this (3-star rating) level of quality. Using the results of Arizona's 2022 Market Rate Survey (which vary by region and type of provider), median market rates range between 40% and 80% of the benchmark for quality for centers (depending on region of the state), and 39% to 56% of the benchmark for home-based providers.

When multiplied by our estimates of the number of children who need care (all children aged 0–5 in households with all adults working), these rough estimates suggest a total annual state cost to provide quality child care of around $4.3 billion in 2024, growing to approximately $5.2 billion in 2034 (under our medium scenario). This is a maximum cost; actual costs will depend on the number of children whose families want formal care for them.

It should also be noted that this is only a cost estimate for children aged 0–5. Estimating costs for school-aged children is even more complicated (given questions about the need for care

after school and during the summer, for example), but would significantly increase total costs to provide quality care. Assuming that for school-aged children the full monthly cost during the summer (3 months) and 25% of the cost during the school year (9 months) - representing 2 hours out of an 8 hour day – results in a very rough estimate of $4 billion in 2024 and $4.3 billion in 2034 (based on our medium estimates).

Potential Strategies and Recommendations

Much of the total cost of the system estimated in the prior section will be borne by families. To ensure that quality child care is affordable, however, more money from other sources is needed. In this section, we discuss potential strategies for investing more resources into child care in Arizona to expand supply, increase access, ensure affordability, improve reliability, and raise quality. These strategies are based on this study's research which included projections of future child care needs, document reviews, and interviews with a wide range of employers, community partners, and parents. Recognizing that there have been no ongoing state general fund appropriations to child care for more than a decade (Meek et al., 2023), we first focus on strategies that would not rely on new state funding, but we also note several ideas for public-private partnerships based largely on what other states—particularly those with CHIPS Act funding recipients—have effectively implemented. Expanding the supply of child care will require engagement by a number of partners in Arizona (potential partners in these collective efforts are noted in bolded text).

1. **Encourage employers to invest more in child care for their own employees and concurrently contribute to supply building in their greater communities.** If child care is to be stable and reliable with the many expected new jobs in Arizona, employers have a role to play. The U.S. Department of Commerce recommends that employers layer child care benefits, establishing on-site care where there is a clear need, contributing to the expansion of off-site child care facilities, and offering stipends for family child care and informal care for nontraditional hours. The Department of Commerce also suggests that employers contribute to community-led approaches, such as supporting a network of family child care and other home-based providers (Smith, Low, Stoneman, & Krawczyk, 2023). In New York, Micron—whose preliminary CHIPS grant award was announced in late April 2024—has worked with state and local leaders to plan for new child care needs. Micron has joined the statewide Child Care Availability Task Force, is planning to offer child care subsidies for its workforce, is working on a plan to expand child care supply, and has committed to adding funding to the Early Childhood Career Pathways Program that provides supports and training to those interested in starting home-based child care businesses (Woods & Kashen, 2024).

In Arizona, we recommend the following next steps:

a. **Employers** could contribute to a pooled fund to build the supply of child care in the broader community. Businesses could take a tax deduction for these donations and then advertise their role in building more child care access for both their employees and community members. The **Arizona Commerce Authority** could play a role in ensuring the fund is established and known to employers (including its benefits) as they begin expansion.

b. **Employers** expanding in Arizona could contract with a high-quality child care provider to offer *new* child care slots at a center (sometimes purchased or built by the employer) near their workplace. (Understanding the chemicals and equipment used in many manufacturing efforts, we recognize that a near-site rather than directly on-site child care center may be more appropriate for some industries—better for children's health and safety but still convenient for parent employees.) When new employers are in "greenfield" areas, where there is little current infrastructure and no current child care supply, building or contracting for new child care near the work sites may make sense, with the facilities either directly operated by or leased to a third party. Employers can also partner with other employers to establish near-site centers with a workforce with similar care needs (e.g., similar shifts or overnight hours); sharing the use of the center may help sustain it if there is a reduction in one employer's workforce. Employers—particularly those receiving CHIPS grants—should consider including the construction of such a site, nearby to manufacturing job locations, in the work site or fab's building plans from the start.

c. If **employers** plan to offer subsidies for their employers, they should both offer sufficient amounts *and* require that those subsidies be used only for programs meeting certain quality standards (e.g., 3-star rating on Arizona's quality rating system through First Things First), to incentivize providers to raise quality standards to serve those employees, which will be a large share of the market in a given area.[7] We suggest employers survey their current and prospective employees to determine an amount that would make a difference for them, but feedback from several parents in this study's focus groups suggests this amount would be well over $500 per month. The most effective and equitable solution would be to tie subsidy levels to the 7% affordability standard. To do this simply, employers could calculate 7% of their average employee net salary, then provide a per-child stipend equal to the difference between that monthly amount and the monthly market rate (for one child in full time care) in their area. A more complicated but more equitable arrangement would use a similar formula on a

[7] We recognize that increases in the number of providers participating in the Quality First rating system will additionally tax the capacity of First Things First, whose resources have been steadily decreasing as tobacco tax revenue decreases.

sliding scale, so that employees earning lower wages would receive larger child care subsidies, and some higher earners would not be eligible for subsidies if the prevailing market rate was less than 7% of their net salary.

Most importantly, we caution that offering subsidies to employees *should be paired with efforts to increase supply of child care slots at the same time* (such as providing for new near-site child care and/or contributing to a pooled fund to build supply in the areas, as described above). Without additional supply, offering employee subsidies or other demand-side benefits will only stretch existing supply and increase prices substantially for other families in the area. In the long term, lack of child care for other residents will result in lower quality of life for all area employees, in the form of fewer or less affordable services in the community.

d. **Employers** could also support child care quality and supply-building efforts in their local communities by adding financial support to efforts that are already proving successful, including:

   i. First Things First's Quality First scholarships for high-quality early childhood education for families. This program has been effective in making high-quality child care accessible and affordable for more families, but FTF's efforts have been limited by declining revenue from the tobacco tax that funds it.

   ii. The Arizona Early Childhood Educator Apprenticeship Pathway Program, administered through the Department of Economic Security (DES), is a 2-year program that combines classroom instruction with on-the-job training and mentorship for staff interested in working in early childhood education. The program helps support the dire need for new staff to work in child care programs. According to our interviews, staffing challenges are one of the largest factors limiting current child care providers' ability to expand. This program has been effective at supporting those interested in entering the child care field, but funding was primarily through the time-limited ARPA.

   iii. Local efforts to support child care supply and quality, such as Pima County's Pima Early Education Program scholarships (PEEPs) program, also provide scholarships to families and supports to providers to provide higher quality care. PEEPs currently assists up to 1,365 children from income-eligible families to attend preschool at 187 locations in the county. The program also is increasing the capacity of high-quality providers as well as the number of preschools that accept DES child-care subsidies, by providing technical assistance directly to providers to help them improve quality. As another local investment, the city of Tempe has funded a high quality early childhood education program to serve hundreds of 3–4-year-olds in that community.

2. **Create a privately managed charitable fund to pool resources from employers to support diverse activities to expand child care supply in Arizona communities.** Such a fund could be set up for contributions by employers—including but not exclusively semiconductor manufacturers—to make a collective impact on the supply of child care. It will be critical that the fund supply operating capital for child care providers so they can raise wages and improve their financial stability through more comfortable margins. One of Arizona's 16 Community Development Financial Institutions (CDFIs) or another **nonprofit organization that is permitted to provide funds to for-profit entities** could manage this fund, allowing business contributors to take a tax deduction. Employers would not be able to reserve specific slots for their own employees through such a fund, but specific corporate donor requests, such as increasing child care supply in particular geographic areas, could be accommodated. Furthermore, one interviewee for this study pointed out that employers would be able to take credit for larger impacts on child care for both their employees and the community at large.

   One general fund (or separate general funds set up for different geographic regions) would allow for maximum flexibility for funds to address the most pressing needs at any given time. With a goal of building child care supply, the fund might start by providing grants for new construction of child care facilities, retrofitting existing spaces that can be used for child care (including houses of worship, which may offer space in rural areas unavailable elsewhere in the community), or expansion of existing facilities. Later efforts might focus on low-interest loans or credit enhancements for child care providers (e.g., providing capital to secure lower interest rates for borrowers of private funds) to support their child care supply building efforts. The manager of the fund would not actually own real estate, but rather provide capital for others to invest in building, owning, or renting, much like CDFIs traditionally provide for housing. A revolving loan fund might have its resources quickly reduced in its early years of loan making, until those early loans begin to be paid back. Thus, one informant for this study recommended that "businesses need to commit multiple years of capital … ideally for 10 years or more."

   As another option, some employers have expressed an interest in a for-profit fund that is structured to allow them to reserve specific slots for their own employees. Other investors may be interested in making a return on their investment while supporting child care supply building (though the return on this investment would necessarily be smaller than other private market funds the investor might choose). Such a fund—often referred to as local impact investing—could be set up through an "impact investment" organization, to allow investors to gain a small return while also supporting increased child care supply in the community. This type of fund would likely be a public-private partnership. Impact investors are often able to offer returns for private investors while making impacts in communities

when they have "risk mitigation" funds from government or foundation partners. Such organizations also look for projects with financial viability; given the challenges the market has had in expanding child care access (particularly for lower income families), it is unclear whether they would choose to invest in new child care businesses.

3. **To recruit additional workers for child care programs, the state can invest in supporting child care providers directly so that they can pay higher wages, to reduce turnover and increase quality and reliability of care.** Child care cannot be sustainably supported by market forces alone, and until there is a sustainable system with collective investment, including from public sources, wages will not rise (and thus the supply of teachers will not increase) without artificial support. Direct support for all child care providers, such as through extending stabilization funds originally from ARPA with state funds, can help provide this sustainability. Such funds should be paired with requirements and accountability for paying higher minimum wages to staff.

   As another incentive to attract workers into the child care field, the state could also consider renewing funding for the Education Workforce Scholarship Program, which provided subsidies for child care for parents working in child care and public education.

4. **Support school districts to provide additional early childhood education and before- and afterschool care.** The Arizona Department of Education (ADE) has issued guidance to Arizona school districts about funding sources that districts can use to support early childhood education in their schools. This study revealed several school districts that have used federal funds such as the Individuals with Disabilities Education Act (IDEA) or Title I, or their own local funds to provide prekindergarten (preK) programs for their students. Many charge parent fees for the program. One district told us that it is prioritizing local funds to offer discounted, on-site child care for children of staff 0–3 years old. In addition to the funding resource guide, **ADE or another state entity** could also convene school districts together to share strategies they have used to fund preschool and child care with each other. Without charging families full tuition, many districts can only afford to offer families part-day preK, and one challenge raised in interviews was the difficulty of coordinating with DES to allow subsidies to pay for care for children for the second half of the day. Interviews with school districts revealed that DES subsidies will only pay for full-day care. Thus, we also recommend that **DES and ADE** work together to explore how to braid subsidies and school district funds more flexibly to cover full-day care for subsidy-eligible students in district preK programs. Programs such as **Bezos Academy,** currently starting up in Mesa as a partnership with Mesa Public Schools, may be an option; if the program is well-received in Mesa, other districts may consider a similar partnership if appropriate in their communities. Bezos Academy seeks to work in communities with large gaps between the number of children (particularly in high-need families) and the number of preK slots available.

Many school districts also offer before- and afterschool care, but during interviews, they described how their capacity is limited by staffing challenges, DHS licensing requirements (if tuition is charged), and grant restrictions. In 2023, Governor Katie Hobbs instructed DHS and DES to broaden the types of afterschool, summer, and enrichment programs eligible for licensure by creating a separate child care license for "out-of-school time" programs, to streamline the process for these programs to meet quality standards laid out in the Child Care and Development Block Grant and thus accept child care subsidies. Until these new licensing standards are in place, when convening districts to discuss strategies for supporting preK, discussions could include strategies to support and expand before- and afterschool care as well.

5. **Recognize and support the critical role that municipalities play in expanding the supply of child care.** Municipalities have played and must continue to play a large role in planning for child care needs, given their understanding of the unique strengths and needs of their communities. For example, in 2008, when the Bakken oil boom struck western North Dakota, there was only one child care provider in Watford City. When the population grew fivefold, the single child care center in town, already at capacity, was flooded with applicants. Then-Mayor Brent Sanford, along with the county's economic development leader and the director of the city's one existing child care program, reached out to the business community, the local school district, and the state to build a new child care facility. With a combination of city funds and employer contributions, and supported by a low-interest loan from the Bank of North Dakota, they financed the construction of a new facility serving 211 children (The Council of State Governments, October 13, 2022; interview with Brent Sanford).

   Mayor Watson of Austin, Texas, also recently led an effort for the City Council to invest in additional child care for that city, through a particular partnership with NXP Semiconductors. This effort invested $157,000 from its general funds in child care. Chapter 380 of the state's Local Government Code authorizes municipalities to offer loans and grants of city funds at little or no cost to promote local government development. The Austin City Council agreed to redirect funds initially intended for workforce development toward child care. The city will pay NXP $157,000 for child care services, $158,000 to encourage hiring of economically disadvantaged workers, and $79,000 to encourage sustainable business practices. Half of the city's contribution to child care will be through contracts between providers and the health department, and NXP will use its share to provide child care for its employees through Workforce Solutions. The idea is to not only benefit the city and NXP employees but also to help neighborhoods directly around the facility. The city estimates it will eventually recoup 10 times its initial investment in child care through the collection of new property taxes from residents moving in.

Arizona cities have also been investing in early care and education efforts. In Tucson, the county government has partnered with United Way of Southern Arizona to create the PEEPs program, which funds both scholarships for families and supports for providers to increase the availability of and participation in high-quality child care. The city of Page, Arizona, has reached out to LISC to begin considering local investments in their child care supply. And after conducting a needs assessment, the city of Tempe funded a pilot early childhood education program to serve 360 3–4-year-olds. **Employers** and **municipal leaders** should work together to develop local child care supply building plans.

Going forward, **the state** can play a critical role in convening and connecting city and county government leaders interested in expanding child care supply in their areas with employers who share this goal, particularly for their own employees. State facilitation of these discussions will build momentum for creating partnerships, which can ultimately be quite fruitful, as they have been in Tucson, North Dakota, and elsewhere. The Mayor's Education Roundtable has also convened mayors to focus on early education, an effort that can continue in order to allow city leaders to share strategies with each other. **State leaders should also connect with Executives Partnering to Invest in Children (EPIC)**, an organization in Colorado that has pulled together employers into a collaborative that has connected employers with similar child care interests, provided technical assistance for employer-based child care design labs, and advocated for effective public-private partnerships and policies at the state level. More information from the interviews with the mayor of Austin, the former lieutenant governor of North Dakota, and the executive director of EPIC can be found in Appendix C.

THE ROLE OF PHILANTHROPY

Philanthropic organizations rarely fund long-term operational costs of programs typically thought of as government-supported services, unless they fund a short-term demonstration project of a new or innovative model they hope the government will then scale.
Furthermore, in Arizona, philanthropy also lacks the capacity to fund large efforts such as child care at scale. At least three interviewees in the study noted that philanthropy in the state does not have the capacity to make a big impact on the child care challenge. For example, the Arizona Community Foundation distributed $94.7 million in 2023, and the Virginia G. Piper Charitable Trust distributed $156.6 million in the 2022 fiscal year, across all of their priorities.

The Bezos Day One Fund, which supports and runs Bezos Academies, may be the exception to this. Bezos Academies aim to expand in Arizona in the coming years in areas with substantial unmet need and appropriate facilities.

Overall, however, the best role for philanthropy in helping to expand the supply of child care in Arizona may be to support capital costs or research costs to prepare for new investments.

6. **Take steps to allow for more investment in facilities that can host child care.** One major factor limiting the supply of child care in Arizona is the lack of appropriate facilities, or the lack of centralized knowledge or coordination about where new sites might appropriately be situated. Though **philanthropy** does not have the capacity to substantially fund the operation of new child care centers in the state (see sidebar), they *can* fund some first critical steps, such as:
    a. Funding facility inventory studies in local communities to take stock of spaces that can be renovated and converted into child care spaces, and
    b. Partnering with employers and/or child care leaders in local communities to fund the construction of new child care facilities.
7. **Support child care providers' business skills. Existing local or state small business support organizations or programs** could expand their current general supports for small businesses to create a program of training and supports specifically for child care providers. Such training could focus on improving their capacity to make wise business choices, and accounting for expenses and taxes in ways that provide them with more resources and flexibility.
8. **Create a formalized stay-at-home parent network** that connects working parents with stay-at-home parents who are interested in providing, and are able to provide, care for other children. Though no official counts are available, we know informal care in Arizona is widespread and is a significant part of how families meet their child care needs. Creating a formalized network would make it easier for families to make such arrangements and would have the side benefit of providing more information on these unlicensed care providers to DHS so that more supports might be provided in the future. We offer two cautions about this strategy, however: first, the safety and quality of such unregulated environments is unknown and likely widely varied, so although this strategy might add a small quantity of supply of child care, it does not address or ensure quality. Second, we estimate that the proportion of households with children younger than 6 and one stay-at-home parent is only about 5% nationwide (and likely similar in Arizona), and many of these current stay-at-home parents may choose to return to the workforce as the number of job opportunities and workforce needs in the state expand.
9. **Consider tax incentives** to support child care affordability, access, and quality**.** States with governments across the political spectrum have successfully used state tax deductions or credits to encourage child care providers to get additional training to increase the quality of care, to motivate employers to offer on- or near-site child care for their employees to increase supply, and/or to incentivize employer or individual donors to donate to early childhood programs or scholarships. Appendix E summarizes the tax incentives that other

states have used successfully that Arizona may wish to consider. Local governments might also consider such tax incentives. **Philanthropy** could play a role in funding a study to more closely analyze the likely outcomes and financial implications of different tax incentives (see sidebar).

10. **Pilot a Tri-Share program.** Cost-sharing among employers, employees, and a third party (state or local government or philanthropy) is an increasingly popular strategy for expanding access to child care. The idea is to incentivize employers to contribute to their employees' child care expenses. Currently, the largest operating program is Michigan's Tri-Share, with similar programs underway or being piloted in Kansas, North Carolina, North Dakota, and Wisconsin. Michigan's Tri-Share program aims to make child care more affordable for employees who earn too much to qualify for state- and federally subsidized child care, but too little to purchase care at market rates. Employers, eligible employees, and the state split the cost of child care equally. In Michigan, with a state investment of $3.4 million in 2024, Tri-Share has now spread to 59 of the state's 83 counties, with 187 employers and 430 employees participating and 624 children served. There are plans to extend the program to 10,000 children within 5 years. A broad range of employers participate in Tri-Share, including large manufacturers, hospitals, local insurance companies, the University of Michigan, and child care providers themselves. Employees participating in Tri-Share save an average of $5,568 per year on child care expenses (Michigan Women's Commission, 2022). To determine if this public-private partnership is appropriate for Arizona, and to build investment in child care among more employers, the program could be piloted in a county where the newest demand is expected among workers with lower (but not subsidy-eligible) earnings. Shannon Garrett, Chief Strategy Officer of the Michigan Women's Commission, which oversees Tri-Share in Michigan, noted during the interview for this study that Tri-Share's "biggest success is really bringing business to the table in a way that is realistic and tangible for them." More information on Michigan's Tri-Share program is available on the state's website.
11. **Consider new sources of revenue to support child care services at the state level.** Some states have used lotteries, "sin taxes" (such as taxes on sweetened beverages or marijuana), or even digital advertising (as in Maryland) to fund child care and early childhood programs. Sources of revenue that other states have used to fund early childhood care and education are described in detail in Appendix E.
12. **Consider other public-private partnerships that have been successful in other states with CHIPS Act employers.** The Oregon state legislature passed HB 4098 in March 2024; the bill provides additional funding to an existing child care capacity-building program to expand supply in areas of the state where CHIPS grantees will be growing. The bill also makes it easier for workers in the construction industry to use the state's child care assistance

program. The Arizona legislature could consider similar investments, given the number of companies expanding in the state. However, making an additional group of parents eligible for subsidies without increasing the total funding for subsidies will reduce the number of subsidies available for the already-eligible families.

Oregon has also used a portion of its federal state highway funds to fund the Apprentice-Related Child Care (ARCC) program, which provides child care vouchers (up to $2,500 per child per month) for workers in construction company apprenticeship programs. The Oregon Department of Transportation (ODOT) signed an agreement with the Oregon Bureau of Labor and Industries (BOLI) to manage this program.

13. **Implement nonfinancial strategies to reduce barriers for licensing and quality improvement.** Even without any new state funding, there are several ways **state agencies** can make licensing and quality improvement easier for child care providers. In our study, several interviewees noted ways that agency requirements (including those from DES, DHS, First Things First, and ADE—all separate agencies but with some oversight over early care and education) are not coordinated or are unclear. To expand the supply of child care in Arizona, it will be important to improve the licensing process, minimizing burden on providers. Interviewees requested clearer language explaining processes and decisions from DES, financial supports to cover licensing fees, flexibility in licensing regulations to allow providers to more easily adjust hours of operation to meet families' needs, and additional supports to help providers navigate the licensing process. Interviewees also acknowledged that caseloads for Bureau of Child Care Licensing inspectors are too high to allow them to be responsive. Overall, a small working group of leaders from each agency working with child care providers could commit to convening regularly to review regulations and identify ways to streamline them.

High-quality child care the United States is crucial to support economic development, but it fails as a market. Families largely cannot afford to pay the true costs of high-quality care, but providers can only charge what families can pay to stay in business. As a result, child care businesses scrape by, relying on donated hours and materials and low staff wages. And yet, there are substantial spillover effects to employers and others in society of providing children with a high-quality early educational experience—what economists call "positive externalities." These dynamics are just as true in Arizona. In the long term, a sustainable and high-quality child care system will include strong partnerships between employers, families, and public investments.

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Appendix A. Number of Interviews or Focus Groups Conducted by Respondent Type

Respondent type	Number of interviews/focus groups conducted
Semiconductor employers	4 interviews
Construction employers	2 interviews
Other employers (e.g., hospitality, health care, manufacturing)	4 interviews
Unions and trade organizations	4 interviews
Child care providers • Licensed center-based • Licensed home-based • Unlicensed family friend and neighbor child care • Tribal child care • Other (e.g., Bezos Academy, Head Start)	3 focus groups, 2 interviews 2 focus groups 1 focus group 2 interviews 2 interviews
Parents	3 focus groups
Nonprofits and foundations, such as • First Things First • Arizona Early Childhood Education Association • Arizona State University Children's Equity Project • Local Initiatives Support Corporation (LISC) Phoenix • Bipartisan Policy Center • Pima County Administrator's Office United Way of Tucson and Southern Arizona • 4th Trimester Arizona • Child and Family Resources • Arizona Community Foundation	15 interviews
Government entities • Arizona Governor's Office • Arizona Department of Employment Security (DES) • Arizona Department of Health Services (DHS) • Maricopa Association of Governments (MAG) • Arizona Department of Education (ADE) • Arizona Commerce Authority (ACA)	6 interviews
Arizona school districts	6 interviews

Respondent type	Number of interviews/focus groups conducted
• Kingman School District • Mesa Public Schools • Phoenix Elementary School District • Avondale Elementary School District • Cartwright School District #83 • Tucson Unified School District	
Colleges and universities that train the child care workforce • Central Arizona College	1 interview[a]
Experts in other states • Mayor of Austin, Texas • Executives Partnering to Invest in Children (EPIC) in Colorado • Former Lieutenant Governor of North Dakota • Michigan Tri-Share Child Care	4 interviews
Other • My Silicon Compass • Arizona Chamber of Commerce • Pima Joint Technical Education District	3 interviews
Total number of interviews/focus groups	64

[a] We contacted other colleges and universities that train the child care workforce, but they did not respond to our requests for an interview.

Appendix B. Methodology for Projecting Demand and Supply for Child Care in 10 Years (2034)

We used extant data sources on state population projections, employment, and household characteristics to produce low, medium, and high counts of demand for child care in 2034. As discussed in the body of the report, these estimates should be treated with caution, and may have substantial margins of error. In particular, the state's projections of children 0-5 in 2034 assumes a recovery in birth rates to historical norms.

The following key data sources were used to produce the estimates:

- Arizona Office of Economic Opportunity (OEO) state demographic projections, 2022–2060. Low, medium, and high projections are available by specific age and by county.
- American Community Survey 1-year 2022 national data file.
- ACA-provided data on newly won and potential projects, which included specific job estimates.

Estimating the Number of Children Needing Care Under Status Quo Projections

Baseline 2024 and 2034 child population projections in Arizona were drawn from the OEO county files, with separate low, medium, and high series estimates. Children ages 0–5 were aggregated into one category, and children ages 6–12 in the second category. ACS 1-year Public Use Micro-Area (PUMA) data were used to estimate the percentage of children in need of child care in each Arizona county. For large-population counties like Maricopa with multiple PUMAs, all of the PUMAs were combined to the county level. Counties with small populations are grouped by the ACS into a single PUMA, and so in these instances all counties within the PUMA were assigned the same proportions (i.e., it was assumed that all counties within the PUMA had the same distribution). All children in a household with a single working parent or two working parents were treated as potentially in demand for child care, while households with a single unemployed parent or one parent employed and one unemployed were treated as not in need of child care. These data were based on the ACS ESP variable (employment status of parents) for children, using the ESP values 1, 5, and 7 assigned as parents whose children would be in need of child care. The person weight variable PWGTP was used in the analysis, using standard ACS weighting techniques. These analyses were conducted separately to produce an estimate for children ages 0–5 and children ages 6–12.

The baseline number of children in need of child care in 2024 and 2034 was estimated by applying the 2022 ACS proportions of children in need of care in each county to the 2024 and 2034 projections, which assumes that the county-level workforce and family characteristics

related to child care will remain constant over time. We produced separate estimates based on the low, medium, and high state data series.

Estimating the Impact of Higher Economic Growth on Employment

To estimate the number of new workers added as a result of CHIPS and other new economic expansion sought by the state, we relied on ACA data on recently won projects and potential projects from companies considering locating or expanding their profile in Arizona. According to ACA, the state usually won approximately 40% of potential projects in its pipeline. Our approach was to combine all of the projected job gains for all projects that had already been won, and then to produce a high, medium, and low estimate of potential job gain through new projects. To determine which 40% of projects are likely to be won, and hence the number of jobs, we grouped the highest-value projects (in terms of number of jobs) to produce a high estimate, the 40% of projects producing the fewest number of jobs in the low estimate, and the 40% of projects in the middle of the distribution for a medium estimate (projects could therefore appear in more than one category). The high estimate was based on the 100th to 40th percentile of projects with the highest total number of jobs, the low estimate the 40th percentile and below, and the medium estimate the 70th through 30th percentile. The jobs from won projects were then added to each of these scenarios. The total numbers of new jobs from these statewide aggregates were then applied to the appropriate county in which these jobs would be placed.

Next, we applied industry employment multipliers to each of the establishments (won and potential) using the Economic Policy Institute estimates of employment multipliers, which required matching establishment type in ACA data to EPI categories (based on BLS industry groups). These multipliers were used to estimate the number of total indirect jobs associated with each new establishment, which were then added to the high, medium, and low scenarios to produce final high, medium, and low job estimates. This model assumes that all potential and indirect jobs would be fully realized by 2034.

Estimating Net Increases in Need for Child Care Due to Employment Growth

We next made the assumption that all new jobs (under each of the three scenarios) would represent a net new addition to the total number of children with parents in Arizona's labor force. This implicitly assumes that all of the new employment would be drawn either from migrants into the state or parents previously out of the labor force. To the extent that workers at new or expanded establishments are already working, their children would not be children newly in need of care, which would thus push the estimates closer to the state baseline. The estimates are therefore a high count and may be biased upwards. We also assumed that the family characteristics would reflect the number of children in each age group (0–5, 6–12) using national rather than state or county averages. We also assumed that family characteristics

would reflect all employed families in any kind of work, not those working in the relevant industry group. This is based partly on our assumption that there would be in-migration from other states, and also because of commitments to workforce diversification (such as CHIPS mandates). For the number of children per worker, we used the national 1-year ACS variables "AGEP" (age), "OC" (flag "own child" of reference person) and "ESR" (employment status of the reference person), where workers were defined as: ESR in 1–2, 4–5 and AGEP in 18–55. These proportions were then applied to our high, medium, and low estimates of the number of new jobs in 2034 to create an estimate of all additional children above baseline. We next used the national ACS data of typical family arrangements of households with children (the ESP variable values 1, 5, and 7) to estimate the proportion of these children that would need child care. This fixed proportion was then applied to our high, medium, and low estimates of the number of additional children due to new employment, resulting in our final high, medium, and low estimates of the number of children in need of child care above the state baseline. These values were added to the matching state baseline estimate of the number of children in need of care (high population estimates + high estimate of number of new children in need of care, etc.) to produce an aggregate total of the number of children 0–5 and 6–12 in need of care in each county in 2034.

Summary of Methods

- Baseline projection: State demographic estimates on number of children in 2034 (low, medium, high estimates) * percentage of children in single-working-parent or two-working-parent household
- Direct employment increase (all drawn from unemployed or migration)
  - Number of new projects already won
  - Number of jobs from anticipated projects
    - High estimate: 40% of projects with largest number of expected jobs
    - Medium estimate: 40% of projects in the middle range of number of jobs (70th–30th percentile)
    - Low estimate: 40% of projects with lowest number of expected jobs
- Indirect and induced employment increase
  - Each won or anticipated project job * EPI sector-based employment multiplier
- Total new households: direct employment + indirect/induced employment (high, medium, and low estimates)
- Total number of new children: total number of new households * proportion of employed adults in households with children

- Number of new children in need of child care: total number of new children (high, medium, low estimates) * proportion of children in households with all adults working (single working parent or two working parents)
- Total estimated potential demand of child care: Baseline projections + number of new children in need of child care

Appendix C. Child Care as a Workforce Issue: Lessons From Leaders in Other States

Based on a literature review, we identified three leaders who seem to have been particularly effective in other states in raising awareness of child care as a workforce issue and in promoting activities to expand access to child care. We then conducted interviews with all three leaders to determine how they built coalitions to establish new investments in child care, how they involved employers, and what other constituencies they think are most important to include in private-public partnerships to expand child care. Interestingly, of the three interviewees, two are current or former mayors. The third leads an organization of CEOs eager to offer their business voice to support policies to invest in child care. In the following table, we summarize these leaders' reflections and suggestions. Unless otherwise indicated, the material comes from their interview responses.

Leader	Keys to championing child care as a workforce issue
Nicole Riehl, Executive Director, Executives Partnering to Invest in Children (EPIC), Colorado	**Offer "the Business Voice"** EPIC was started 15 years ago by a group of business leaders and corporate executives who wanted to be the "business voice" for child care. These were CEOS primarily from industries that had nothing to do with child care or early education but saw the economic imperative to leverage their influence and their power to raise attention and awareness around the importance of access to those services for their employees. Initially EPIC focused on building public awareness on the value of early childhood education and family friendly policies. EPIC is currently composed of nearly 70 top executives from a broad range of for-profit and nonprofit businesses, such as home-building, telecommunications, Children's Hospital of Colorado, oil and gas, wealth management, and accounting firms. The collaborative also includes leaders from the state's chamber of commerce and from economic development entities. **Engage in Policy Work** ***Supporting the Child Care Contribution Tax Credit*** EPIC helped establish the Colorado Child Care Contribution Tax Credit, a 50% tax credit for donations up to $200,000, which has raised $60 million annually for the child care sector. EPIC has continued to support that tax credit and its legislative reauthorization throughout the years. ***Reducing Child Care Occupancy Expenses*** EPIC also supports policies that reduce occupancy and space expenses for child care. The organization actively explores strategies to alleviate commercial property taxes for child care, and to reduce debt service and/or other expenses child care providers may be carrying for their capital space.

Leader	Keys to championing child care as a workforce issue
	Supporting Universal Preschool EPIC supported the enactment and design of Universal Preschool in Colorado. "While we recognized it was important to bring that revenue in," said Riehl, "we also really leaned in heavily on the design of Universal Preschool because we felt very strongly it needed to be effective and efficient, but it also needed to make sure that it supported a wide range of choice for families." Thus, Universal Preschool in Colorado uses a mixed delivery system: Eligible providers include school districts, family child care, and community-based and faith-based providers. In the first year of the program, the participation rate was 60%, and it had now risen to 65%. "That's obviously a dream participation rate," says Riehl. ***Modifying the Federal Employer Child Care Tax Credit*** EPIC is working at the federal level to change the federal tax credit for child care supported by employers from an income tax to a payroll tax so that nonprofit businesses and government entities can also use it. **Conduct Onsite and Near-Site Child Care Design Labs** In 2011, EPIC launched the Employer-Based Childcare Design Lab and supported an accompanying state grant program. Each round of the child care labs includes 10 employers, with a waiting list of employers who want to participate. EPIC provides technical assistance, tools, resources, templates, and other services to go from concept to completion on developing onsite or near-site child care in the employers' communities. Most of the projects involve partnerships with other employers, largely small and mid-size employers in rural frontier and resort regions of the state. "So, lots of myth busting there," according to Riehl. "You don't have to be Amazon or Microchip or these big companies to actually do something meaningful for child care in your community." **Build Public-Private Partnerships** EPIC helped a community hospital develop a child care center that serves both its staff and the surrounding community. To operate the new center, the partnership chose an existing local child care provider. This provider had been wanting to expand her center for years but had lacked access to financial resources to do so. **Work With Schools** EPIC partners with schools on developing new child care services. Schools have two important contributions: First, they often operate preschool in communities, and they typically own tax-exempt land that they can bring to the table. In addition, Riehl sees schools as well connected with their local communities and local employers. **Spread the Word** EPIC has had about 17 states inquire about its Design Lab specifically, and at least 10 to 12 states ask about membership and how they could develop something like EPIC. Riehl explained, "I do think it's important for the business community to lead on this initiative and to really make sure you have credible organizations like the state economic development and chamber organizations involved in that effort."

Leader	Keys to championing child care as a workforce issue
Brent Sanford, former Mayor of Watford City, North Dakota, and former Lieutenant Governor of North Dakota	When the Bakken oil boom struck in western North Dakota in 2008, the population of Watford City, then 1,744, quickly began to quintuple. The city's mayor realized the town needed to expand its infrastructure, including child care. **Understand the Role of Child Care in Building the City's Future** Even though most of the oil workers were expected to be men, the city's leaders didn't want the town to turn into a tent city or "man camp." To attract families to move to the city, the city would need to expand the school system, the hospital, and the retail and recreational facilities. To enable family members of the oil workers to fill those new jobs, they would have to expand child care. Watford City's single existing child care center, Wiggles & Giggles, was flooded with applicants. **Create a Public-Private Partnership** Mayor Sanford, accompanied by the county's economic development leader and the director of the one existing child care program, reached out to the business community, the local school district, and the state to find a solution to the dramatic new demand for child care. They identified land for an apartment complex for teachers and first responders and for a new child care facility across from the school. "You have to figure out who cares about child care," says Sanford, and invite them all to participate. The mayor played the role of champion, while the county had more access to funds to help finance child care facilities. With a mix of public funds and business donations, they financed the construction of the Wolf Pup Day Care center, serving 211 children, and later a second child care facility (The Council of State Governments, October 13, 2022). The center was set up as a nonprofit, with the mayor serving as board chair and other members including the county economic developer and the school superintendent. The first donations for the center came from the oil companies and then other employers. The mayor himself hosted fundraisers, which he said sometimes raised as much as $50,000 per night. **Raise the Capital for New Infrastructure** A key component of the city's efforts was obtaining a low-interest loan from the Bank of North Dakota for the construction of the center, which cost nearly $5 million to build. "You couldn't expect a young business owner to borrow that amount of money," according to Sanford. A certified public accountant, Sanford realized that the profit margins for child care were severely limited by the necessarily protective staff-child ratios and the amount families could afford to pay. For the second child care center constructed, the city did not need to obtain a bank loan because the county provided the money for the construction. **Work Collaboratively** Sanford emphasized the importance of collaborative partners to expand child care access. Sanford explains, "City government had to step in, but it was a team effort to build those pieces of community infrastructure you need for people" to attract and retain new employees and their families. The Wolf Pup center board is composed of city, county, school, and economic development leaders, along with an executive director who reports to them. Sanford emphasizes the importance of finding a dedicated executive director. "Without Tessa Moberg [in that position], I doubt that Watford City

Leader	Keys to championing child care as a workforce issue
	would have three [child care] facilities and 500 slots today," he says, adding that "many municipal economic development-sponsored child care centers end up being managed by the local economic developer...which is not a sustainable model."
Mayor Kirk Watson, City of Austin, Texas	Austin, Texas, was the second fastest growing metropolitan region in the nation in 2022, adding 50,000 residents since 2021, according to new Census estimates. Mayor Watson is proud of the growth, but also concerned about its impact on the town's existing residents. He is especially concerned about the impact of growth on the cost of child care, which, as he frequently points out, is the highest family expense after housing. A city's goal should "not all be about generating more W2s," he insists. "Our great success has allowed us, or should force us, to evolve the economic paradigm. … It's a win-win if you build … the value of child care into that model" to support both new people moving into the city and "the people who are already here and want to stay here." **Ensure That New Child Care Investments Benefit Existing Residents** Mayor Watson led an effort by the City Council to invest $157,000 from its general fund in child care. Chapter 380 of the state's Local Government Code authorizes municipalities to offer loans and grants of city funds at little or no cost to promote local government development. The Austin City Council agreed to redirect funds initially intended for workforce development toward child care. The city will pay NXP Semiconductors $157,000 for child care services, $158,000 to encourage hiring of economically disadvantaged workers, and $79,000 to encourage sustainable business practices. Half of the city's contribution to child care will be through contracts between providers and the health department, and NXP will use its share to provide child care for its employees through Workforce Solutions. The idea is to not only benefit the city and NXP employees but also to help neighborhoods directly around the facility. The city will eventually recoup 10 times its initial investment in child care through the collection of new property taxes from residents moving in. **Frame Child Care as a Workforce Development Issue** "I want every decision to be filtered, all economic development to be filtered, through child care," Mayor Watson explained. Some early care and education leaders, he adds, do not approve of the way he frames the issue, preferring that he promote it as a child development and school readiness issue alone. While he supports the importance of quality child care, he thinks it is equally critical to consider the issue through a business development lens. **Support a Property Tax Exemption for Child Care Providers** Austin recently approved a property tax exemption for child care providers. An argument can be made that child care supports school readiness, and that it should qualify for the same tax exemptions as do other educational institutions, such as schools and colleges. Mayor Watson sees the potential of the exemption as he speaks with employers interested in tax incentives to expand their businesses in the city. He asks them: "What if you were to build, in this huge square footage you're going to [construct], a child care facility that you then lease to a third party so that it's a big enough facility for more than just your workers—then you get a tax abatement on that portion?"

Appendix D. Tax Incentives Used in Other States to Support Child Care

There are several types of state child care tax incentives—employer child care tax credits to promote onsite or contracted child care, child care contribution tax credits to incentivize individual or corporate donations to child care, child care teacher/director tax credits to promote and reward staff educational improvement, tax credits to reward teacher and director educational improvement, dependent care tax credits to offset household child care expenditures, and property tax exemptions to reduce child care provider expenses. In 2020, there were at least 18 states with some type of employer child care tax credit, and 25 with dependent care tax credits (Conference Board, March 23 update). Many of these tax credits have been amended multiple times, and based on our own literature review, some employer tax credits and property tax exemptions have only recently been enacted. In the table below, we review several established child care tax incentives as well as new measures that seem most relevant to Arizona. A complete review and analysis of all state child care tax credit measures and their utilization and effectiveness would help inform future state policy, but it would require a separate study devoted to that topic.

Selected state child care tax incentives			
State	**Credit type**	**Description**	**Purpose/impact**
Colorado (initially established in 1990 for enterprise zones; expanded statewide in 1998)	**Child Care Contribution Tax Credit**	The tax credit allows individuals and businesses a 50% tax credit up to $100,000 for contributions to qualified child care providers and organizations.	The goal is to incentivize taxpayers to contribute financial support to child care that could impact quality, availability, and affordability. The tax credit raises $60 million in donations annually.
Iowa (enacted 2022, amended 2023)	**Employer Child Care Tax Credit**	The tax credit allows Iowa employers to deduct from their income taxes up to $150,000 for the acquisition, construction, or operation of an onsite center or for contracting with an off-site center. The state caps the claims at $2 million. To qualify, an employer must submit documentation of having applied for the equivalent federal employer-provided child care tax credit.	The goal is to encourage employers to establish or operate their own child care facilities or to contract with existing providers to provide child care for their employees.

Selected state child care tax incentives			
State	**Credit type**	**Description**	**Purpose/impact**
Kansas (enacted mid-2022)	**Employer Child Care Tax Credit**	The tax credit allows Kansas businesses to apply to deduct from their state income taxes 30% of the child care expenses (capped at $30,000) they incur to operate a child care facility primarily used for their own employees, 30% of the cost of helping employees pay for child care (also capped at $30,000), and 30% of the cost (capped at $30,000) of helping employees find child care, such as through child care resource and referral. Businesses can apply to deduct 50% of the total amount spent on establishing a child care facility primarily used by employees' dependents, capped at $45,000; plus 50% of the total amount spent establishing and operating a child care facility in conjunction with other businesses and organizations, capped at $45,000.	The tax credit is designed to help businesses of any size contribute to a range of child care initiatives that could impact access, affordability, and quality.
Louisiana (first enacted in 2007)	**School Readiness Tax Credits**	Five School Readiness Tax Credits: • The **Teacher and Director Tax Credit** is provided to teachers and directors; $2,046 to $4,090 for teachers, depending on educational attainment. • The **Provider Tax Credit** offers credits to providers based on quality ratings and percentage of children enrolled from foster care or who are using the Child Care Assistance Program Subsidy Program; $750 to $1500 per child depending on the provider's quality rating. • The **Family Tax Credit** is provided to families based on their child care expenses, their state and federal child care tax credit, and the quality rating of their center. • The **Business Tax Credit** is provided to businesses that have made donations to child care center expenses based on quality of the	The tax incentive package is designed to promote quality and school readiness. After the enactment of the credits, there was an increase in teachers receiving their level I certification, and an increase in teachers receiving more advanced certifications. The Teacher and Director Tax Credit was the most successful part of the five different tax incentives (Stoney et al., 2016).

Selected state child care tax incentives			
State	**Credit type**	**Description**	**Purpose/impact**
		program as measured by the quality rating system; credit of 5%–20% of their donations, depending on quality rating. • The **Child Care Resource and Referral Tax Credit** is provided to businesses matched to the amount they donate to child care resource and referral; up to $5,000.	
North Dakota (2021)	**Child Care Assistance Program Tax Credit**	This tax credit allows cities and counties to exempt property used and property improvements for child care from property tax for owned and rented properties.	The goal is to encourage businesses to provide high quality care for their employees.
Pennsylvania (2001)	**Pennsylvania Educational Improvement Tax Credit**	This tax credit allows eligible businesses to deduct donations to a Scholarship Organization, Educational Improvement Organization, or a Pre-Kindergarten Scholarship Organization. Businesses may be eligible to receive a tax credit of 100% of the first $10,000 they contribute to preK scholarships, and up to 90% of their remaining contributions greater than $10,000, with a maximum credit of $200,000 per employer per year.	The goal is to promote business donations to support access to and affordability of quality preschool and educational programs for other age groups.
Texas (enacted 2023; effective January 2024)	**Child Care Provider Tax Property Tax Exemption**	The legislation allows but does not require cities and counties to exempt child care providers from 50% to 100% of the appraised value of the property used for child care. Licensed family child care homes as well as centers may be eligible.	The primary goal is to promote access by helping child care providers stay in business. The exemption is also designed to encourage providers to participate in the quality rating system and to serve children eligible for publicly subsidized care.

Appendix E. Revenue Sources Other States and Municipalities Have Drawn on to Support Early Care and Education

States, cities, and other localities use a variety of strategies to bolster funding for child care in their jurisdictions. The most popular strategy to support child care is taxation. These tax strategies range from additional taxes (e.g., digital media tax, increase in local tax, earmarking a portion of existing taxes) to tax incentives (e.g., tax breaks for providers and employers who offer child care support). In addition to tax strategies, some states are also piloting new public programs that aim to split the cost of child care between the state, employers, and employees. A few states use other strategies, such as Land Trust Funds and public-private initiatives such as social impact bonds, to augment early childhood program financing. This appendix describes and quantifies the most up-to-date information available about each financing strategy (summarized in Exhibit E1).[8]

Exhibit E1. Innovative Financing Strategies Included in This Review

Innovation category	Description
Additional taxes	New sources of taxes that states have levied. Examples include "sin taxes," sales taxes, payroll taxes, digital advertising taxes, and property taxes.
Tax incentives	Types of tax credits or incentives that states have implemented to help fund their subsidy systems. Examples include tax credits for child care workers or tax breaks for corporate donations to state child care funds.
Land trust funds	Revenue generated from land trusts. The main state example is Nebraska, which has a long-standing trust fund for education, recently expanded to include child care.
State-employer-employee partnership	Employers partnering with states to help cover employee costs of child care. A primary example is the Michigan Tri-Share program.
Public-private partnerships	Partnerships between government agencies and private businesses to help support child care services. Examples include the now concluded Caring for Kids Initiative and Salt Lake County Social Impact Bonds.

Additional Taxes

This section describes additional taxes, either new or increased, and earmarked for child care in different states and localities.

[8] In some cases, the latest information available is from 2017.

Sin Taxes

Sin taxes are taxes levied on goods or services perceived as harmful to the greater societal good. These taxes are popular with voters as a source of funding for children, who may be vulnerable to the secondhand consequences of using the products. Examples of sin taxes are taxes on tobacco, alcohol, and gambling.

Gambling Dollars

Gambling tax dollars have often been used to support education programs. In June 2021, Louisiana passed a sports betting bill. Once sports betting starts to generate revenue, 25% of it (up to $20 million annually) will be earmarked for early education. In addition, Maryland supports preK programs and K–12 education with the Maryland Education Trust Fund, which is supported by gambling fees.

In addition to gambling fees, lottery dollars are used to help fund early childhood programs in some states. Georgia and Tennessee earmark specific parts of their education lottery taxes to support early education. The Voluntary Pre-K for Tennessee Act of 2005 dedicates $25 million in annually lottery dollars to support preK funding. In 2017 Georgia's preK program received $358 million from the lottery. North Carolina's Education Lottery also provides some support for child care in the state. The general assembly changes the amount allocated each year. In 2022, $68.8 million was dedicated to North Carolina preK.

Sweetened Beverages

In 2017, Philadelphia placed an additional tax on sweetened beverages (i.e., soft drinks, juice, artificially sweetened beverages). The tax is $0.015 per ounce of sweetened beverage, which is charged to beverage distributors, not directly to consumers. However, beverage distributors may choose to pass on this increase to consumers in the form of higher prices. Revenue from the Philadelphia sweetened beverage tax supports early childhood programs in general and universal preK in Philadelphia specifically. This tax sparked intense political pressure in Philadelphia, which resulted in a Pennsylvania Supreme Court case and the development of a soda lobby, which ultimately was unsuccessful at stopping the tax. Philadelphia also experienced a 38% drop in the volume of sweetened beverages purchased in the first year the tax was enacted. Interestingly, some of the largest decreases of sweetened beverage purchases were in neighborhoods in which there were high incidents of chronic diseases such as diabetes (Edmondson et al., 2021). Although health care providers in the city touted this decrease as a benefit of the tax, others may view it as a dwindling and unsustainable funding source for early childhood programs.

Cities in California, Colorado, and Washington, plus the District of Columbia, have a similar tax on soda. Soda taxes account for roughly 1% of the general fund revenue for each city, ranging

from about $1 million in revenue in Berkeley, California, to $75 million in revenue in Philadelphia.

Marijuana

Although the use of marijuana (medically or recreationally) is not legal in all states, taxes on marijuana sales to support social programs are becoming increasingly popular. States such as Colorado, Nevada, and Oregon use taxes on marijuana to support K–12 education. In Colorado, Amendment 64 requires that a portion of taxes from marijuana sales go toward funding the construction of public schools. In 2018, Colorado generated about $245 million in tax revenue from marijuana sales, licenses, and fees (Auxier & Airi, 2022).

Oregon followed a similar path to Colorado and developed a state ballot initiative that allocated part of the tax revenue to education. In Oregon, Measure 91 required 40% of marijuana tax revenue to be allocated toward the Oregon Community School Fund. This tax amounted to $34 million in funds in 2017 (Mullen, 2019).

Recently, Alaska became the first state to earmark all taxes on marijuana sales exclusively for child care, with the voter-approved Proposition 14 in 2023. The policy and child care communities will watch what happens in Alaska to understand the impact of Proposition 14.

While all of these sin taxes raised funds for early childhood programs and/or other commendable purposes, they also come with a caveat: the tax may also result in a decreasing use of the taxed item, which, though desired, may lead to reduced revenue across time and ultimately to the unintended consequence of requiring cuts in the very services they were designed to help finance.

Sales Tax

Revenue from sales taxes on goods and services are typically designated for general state funds. However, South Carolina is an example of a state that uses sales tax revenue to support early childhood programs. In 1984, South Carolina raised the state tax by $0.01, with this one-cent increase earmarked for education funds, including support for a half day preK program. This sales tax generated $90 million in fiscal year 2021.

Multiple municipalities have also passed sales taxes to help support early childhood programs. San Antonio, Texas, enacted a 0.125-cent increase in sales taxes to help fund their preK program, and Aspen, Colorado, passed a 0.45% sales tax increase to help support their child care industry. Voters first approved a dedicated sales tax for the Denver Preschool Program in 2006 and renewed and extended it in 2014, raising $138 million to help 60,000 children attend preschool. Despite the drop in sales tax revenue during the pandemic, the city committed to maintaining and possibly increasing the level of support to the program.

Payroll Tax

Payroll taxes are state-implemented taxes that come directly from all state payrolls. In 2023, Vermont passed a new payroll tax to help fund its expanded early childhood programs. This new tax amounts to 0.44% of payroll wages and taxes 0.11% of self-employed income tax. The proposed tax generated some controversy, ultimately requiring a legislative override of the governor's veto to be enacted.

Digital Advertising Tax

Maryland is a leader in taxing new areas of online sales not currently taxed by any other state. The state passed a digital advertising sales tax that applies only to businesses with more than $100 million in revenue. This tax was heavily contested in court but was upheld at the time of this report. The tax is estimated to have generated approximately $250 million, which was earmarked for Maryland's early childhood program system in its first year in 2022. Since then, there have been calls to expand the tax to include the online selling of personal data (another currently untaxed source of revenue in the United States), as is already done in some other countries. For example, the European Union is drafting legislation for a Digital Services Tax to tax digital advertising revenue and the selling of personal data. France, Italy, and Spain tax both advertising revenue and the sale of personal data.

Local Property Taxes

One of the most common strategies to support early childhood programs at the local level is with local property taxes. Local governments may increase property taxes or earmark a portion of local property taxes to support early childhood programs. For example, in 2016, Cincinnati, Ohio, voters approved Issue 44, a tax levy that supported a citywide preschool program and closed a deficit in the Cincinnati Public Schools budget. The levy was developed to generate an additional $48 million per year for 5 years, with $15 million earmarked to subsidize 2 years of preschool. At the state level, Florida and Missouri created legislation to allow the establishment of local councils with legal authority to collect taxes and distribute funds to early childhood services within a specific locale in the state. In Florida, depending on the local council, the additional property taxes range from $50 to $120, and amount to an additional $350 million for child care services annually. In Missouri, an additional $70 million annually is collected across the state through local council property taxes. Of course, the local taxes raised can only be used to support services in the same locality. To date, it is typically the more affluent localities establishing these local councils with taxing authority. Hence, while the initiatives improve the funding of services in those locales, they may inadvertently undermine state-level financing that would be available to all areas of the state. In North Carolina, Durham County and Mecklenburg County both increased property taxes to finance local early childhood programs, and Wake County increased county funding for early childhood services. Buncombe County

implemented a property tax with approximately $2 million earmarked for early childhood programs (G. Borom, personal communication, November 21, 2023). The funds from Buncombe County's property taxes are set to increase by 2% each year. In 2022, voters in New Orleans also approved a historic property tax increase, which raises $21 million a year (in local tax revenue plus state matching funds) for 20 years and added 1,000 new child care seats for low-income families in that city.

Other Taxes

Other taxes enacted to support child care include developer fees and local marginal increases in state income tax. In Palm Desert, California, each developer is charged a fee per square foot, which varies depending on the type of development. For light industry, the fee is $0.47 per square foot; for office space, it is up to $1.15 per square foot. The fees are applied toward the construction of new child care facilities and have raised about $264,000 per year since 2005. Another example is Multnomah, Oregon, which introduced in 2020 a progressive 1.5% marginal income tax on tax filers with incomes greater than $125,000 that will almost completely fund their newly expanded universal preK program.

Land Trust Funds

Land trust funds earmark a parcel of land, and the revenue generated from that land, for a particular purpose. Land trusts are less commonly used to support early childhood program funding. As noted in the body of the report, New Mexico recently amended their constitution to use some land trust funds for early care and education. In addition, Nebraska supports early childhood programs with a land trust. When Nebraska was admitted as the 37th state in 1867, Congress endowed the state with a parcel of land (several million acres worth) with the stipulation that it be used to support "the common school." Any revenue generated from the land sale, agriculture and mineral resources, and renewable energy leases is used to support education. In 2006, Nebraska voted to include early childhood programs as a recipient of these land trust funds at a rate of $40 million annually. This public funding is also blended with an additional $20 million matching private grant.

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