

# ECE Access and Affordability

*AEFP Live Handbook*

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## Introduction

High-quality, nonparental early care and education (ECE) enables parental employment while supporting young children's (ages 0-5) development. ECE includes private or public preschools, prekindergarten, nursery schools, childcare centers, regulated family childcare homes, and informal home-based care with relatives or neighbors. However, high-quality ECE is expensive and hard to find.<sup>1</sup> Unlike K-12 education, which is publicly funded and guarantees all children access to education, families directly provide more than half (52%) of the funding in early care and education.<sup>2</sup> ECE has more limited state and federal investments, most of which are concentrated in the year prior to kindergarten entry (i.e., prekindergarten for 4 year old children), with little funding directed toward children 3 and younger.<sup>3</sup> In general, public investments support programs that target children based on sociodemographic factors, such as Head Start, childcare subsidies, and public prekindergarten with income eligibility requirements. However, while the majority states have public preschool programs, their hours, enrollment, and eligibility requirements vary dramatically. The U.S. is an outlier among its peers for its low public investment in ECE,<sup>4</sup> and families pay high out-of-pocket costs. In 2018, county median childcare prices for one child represented between 8% and 19% of family income, as prices and income vary geographically.<sup>5</sup>

Because ECE quality is based on the strength and consistency of adult-child relationships and interactions,<sup>6</sup> labor is the largest proportion of ECE program expenses.<sup>7</sup> The sector does not benefit from traditional economies of scale or technological advances that might increase efficiency in other sectors. When families can afford the expense, low profit margins and other barriers make supply scarce.<sup>8</sup> The COVID-19 pandemic increased health and staffing expenses and changed family preferences for care, exacerbating longstanding problems with supply and costs.<sup>9</sup>

The high expense and short supply of ECE and differing family preferences lead to stark socioeconomic, racial, ethnic, and geographic disparities in the use of ECE.<sup>10</sup> These disparities have downstream consequences for families' economic security, children's school readiness, and long-term educational, economic, and health outcomes and inequality.<sup>11</sup> This chapter reviews recent evidence on the affordability of and access to ECE, the resulting inequities, and the data limitations that constrain research in this area.

## Key Findings

**Key Finding # 1:** Early care and education is expensive. Unlike in peer nations, ECE in the United States is predominantly private market-based, and families spend substantial portions of their household budgets on ECE.

**Key Finding # 2:** Despite parents' high early care and education costs, the early care and education workforce faces low wages, few workplace benefits, and high rates of turnover (see workforce chapter in the current volume).

ECE is labor intensive, and in turn, labor is the largest expense for ECE programs.<sup>12</sup> The primary way to bring down prices is to reduce wages and benefits. In May 2023, preschool teachers were paid a median wage of \$17.85<sup>13</sup> per hour, and childcare workers received \$14.60<sup>14</sup> per hour, compared to \$15.79 for parking lot attendants and \$16.19 for retail salespeople.<sup>15</sup> Higher wages and more benefits are associated with lower staff turnover and improved ECE stability and quality.<sup>16</sup>

**Key Finding # 3:** Formal or regulated early care and education is in short supply. The low wages, small margins, and relatively limited public financing in ECE contribute to low supply relative to demand.

In 2018, one study estimated that about half (51%) of American children lived in “childcare deserts,” or areas where there were fewer than 1 slot at licensed or regulated ECE programs per 3 children under age 5.<sup>17</sup> The COVID-19 pandemic increased operating expenses, reduced enrollment, and exacerbated staff recruitment and retention problems, contributing to classroom or program closures and declines in supply.<sup>18</sup>

**Key Finding # 4:** Children from historically marginalized groups are less likely to be enrolled in early care and education programs.

This includes large disparities by family socioeconomic status, race, ethnicity, and child special needs or disabilities (see Figures 2 and 3). These income and other disparities contribute to gaps in school readiness and achievement at school entry and beyond.<sup>19</sup>

**Key Finding # 5:** Access to and affordability of public and private early care and education vary substantially across and within states.

Forty-four states and the District of Columbia have created public prekindergarten programs, but these vary widely in eligibility, quality measures, and spending.<sup>20</sup> The costs of private ECE programs also vary greatly: The median annual childcare price for one infant in center-based care ranged from \$8,310 in small counties to \$17,171 in very large counties (in 2022 U.S. dollars).<sup>21</sup> Head Start and Early Head Start serve particularly important roles in providing access to ECE in rural communities,<sup>22</sup> which are more likely to be considered childcare deserts and average fewer private ECE options.<sup>23</sup>

**Key Finding # 6:** Existing public investments in early care and education improve access but serve small fractions of those who are eligible or could benefit.

There are multiple public ECE programs—including Head Start, Early Head Start, childcare subsidies, and state preschool—most of which enroll children in the year prior to kindergarten (prekindergarten for 4 year-olds) and target children in low-

income families.<sup>24</sup> Individually, these programs are effective at increasing enrollment in center-based care and parental employment<sup>25</sup> but serve relatively small numbers of children.<sup>26</sup> Child and family characteristics, such as race, ethnicity, immigration status, and special needs, are associated with public program participation.<sup>28</sup>

**Key Finding # 7:** The lack of access to affordable, high-quality early care and education exacerbates downstream inequalities.

ECE enables parental employment; high ECE costs and low availability reduce parental labor force participation,<sup>29</sup> affecting family economic security. Attending high-quality ECE programs supports children's learning and preparation for school in the short term,<sup>30</sup> as well as a host of longer-term educational, economic, and health outcomes,<sup>31</sup> but inequities in access and attendance limit the reach of early learning opportunities.<sup>32</sup>

Understudied topics. Comprehensive sources of data on ECE availability and costs are largely unavailable, and relatively little is known about the specific effects of ECE costs and access on parents' labor market participation, in both the pre- and post-COVID-19 economy.

Policy considerations. Many of the above conclusions are based on rigorous, nationally representative studies of ECE availability and attendance and have broad applicability. Access to affordable, high-quality ECE is predictive of improved child developmental and parental employment outcomes. For example, enrollment in Head Start, a federally funded program that provides free preschool to low-income children, leads to significant improvements in language, literacy, and math skills by the end of preschool.<sup>33</sup> Access to childcare subsidies, which offset the high costs of care for low-income working families, is linked to higher maternal labor force participation and greater use of center-based care,<sup>34</sup> which is subsequently associated with higher quality of care and better outcomes for children.<sup>35</sup> However, ECE quality, cost, and supply vary widely and over time.<sup>36</sup> More research on how COVID-19 pandemic relief funds directed at the childcare sector affected ECE access and quality during this time of crisis. Similarly, research is needed on how policy changes affect ECE access, workforce composition, and quality, such as for example, the childcare subsidy program paying providers based on the "cost of quality," rather than a measure of the market rate.

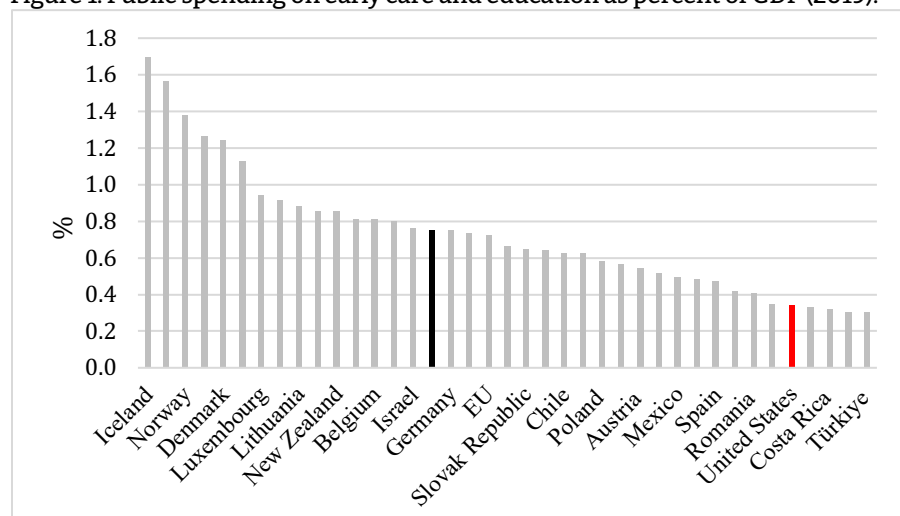
## Evidence

### *ECE Costs and Affordability*

Given low public investment, the ECE market in the United States relies primarily on private pay; about half of revenue (52%) for ECE programs is private tuition.<sup>37</sup> By contrast, public K-12 education provides publicly financed school-year, school-day services with no parent fees, and in 2021, nearly nine in 10 (87%) K-12 students attended traditional public schools.<sup>39</sup> In 2021-2022, states, localities, and the federal government jointly spent an average of \$16,272 annually per pupil (2024 U.S. dollars) in public K-12 education.<sup>40</sup> Compared to other Organization for Economic Cooperation and Development (OECD) countries, the United States invests relatively little in public funding for early care and education. In 2019, the United States dedicated only 0.3% of GDP to ECE spending, less than half of the OECD average and among the lowest of all OECD countries (see Figure 1). This amounts to about \$3,000 annually in public

spending per child aged 0-5. Most of this spending in the U.S. is dedicated to children aged 3-5, with very little given to children under age 3.<sup>41</sup>

Figure 1. Public spending on early care and education as percent of GDP (2019).



Source: OECD Social Expenditure Database, 2019

Notes: Figure represents total public expenditure on early care and education as a percentage of Gross Domestic Product. Early care and education programs include services for children from birth through age 5.

Although the U.S. Department of Health and Human Services recommends that families' childcare expenses exceed no more than 7% of family income, many families pay substantially more.<sup>42</sup> Adjusted for inflation, county median childcare prices for one child ranged from \$5,357 to \$17,171 (2022 U.S. dollars), representing between 8% and 19% of family income per child.<sup>43</sup> In a 2024 survey, parents reported spending an average of 24% of their household income on childcare.<sup>44</sup> The U.S. has several public ECE programs that offer tuition-free programming (e.g., preschool, Head Start), but these programs serve a small share of children under age 5 or of children who are eligible based on income or other requirements. In 2023, 7% of 3 year-olds and 35% of 4 year-olds nationwide were enrolled in state-funded preschool, but enrollment rates ranged widely across states from 0% to more than 80%.<sup>45</sup> In 2020, fewer than 1 in 6 children eligible under federal rules received childcare subsidies.<sup>46</sup> Programs for infants and toddlers receive considerably less investment than those for children aged 3 or older.<sup>47</sup> Further, even when families receive childcare subsidies, typically administered in the form of vouchers or coupons that help pay for private ECE, these subsidies usually do not cover the full cost of care (i.e., require family copayments), especially the full cost of high-quality care. In some states, even families receiving childcare subsidies pay as much as 14% of their family income toward childcare costs.<sup>48</sup> This will soon be limited by the new Child Care and Development Fund (CCDF) final rule, which caps family copayments in the subsidy system at 7% of family income, in alignment with the HHS benchmark for childcare affordability.<sup>49</sup> Recent evidence from Maryland suggests that after the state increased household income eligibility thresholds and provider reimbursement rates, more childcare centers and homes participated in the subsidy program, offering a potential solution for improving access to affordable care for more families.<sup>50</sup>

Despite many families being financially burdened by the high price of ECE, providers cannot easily reduce their costs. In fact, they are already charging less than the true cost of care in many cases, particularly for high-quality programming and infant care, which is more costly because it is labor intensive (requires lower child:adult ratios than for older children). On average, the true cost of licensed infant care is much higher than the amount charged to parents, with some estimating more than 40% higher than the prices programs currently charge families.<sup>51</sup> Labor costs account for an estimated 60% to 80% of provider expenses, while the remaining 20-40% goes toward occupancy, administrative, and classroom expenses.<sup>52</sup> However, ECE workers are paid low wages and offered few benefits.<sup>53</sup> As of May 2023, median hourly wages for childcare workers were \$14.60, or \$30,370 per year.<sup>54</sup> ECE workers are also much less likely to have employer-supported health insurance than their peers in K-12 education; in 2019, 16% of workers in ECE centers (including preschools, childcare centers, and Head Start programs) reported being uninsured, compared to only 3% of elementary and middle school teachers.<sup>55</sup> If the ECE workforce were provided competitive compensation and benefits adjusted for or commensurate with their educational qualifications and experience, ECE prices would be even higher than they are currently. Because providers operate with thin profit margins (as low as 1%), improving workforce compensation using their own existing revenue is usually untenable.<sup>56</sup>

High ECE prices disproportionately affect certain families. Among families with children under age 6, 29% have more than one child in that age group<sup>57</sup> and spend an even greater percentage of their family income on childcare. Families with children under age 3 also face higher prices for ECE relative to those for older ages. Infant/toddler programs are more expensive, generally due to more intensive staffing requirements such as low child: adult ratios and small group sizes.<sup>58</sup> Families residing in larger metropolitan counties (with populations over 500,000) also report disproportionately high childcare costs. These families pay between 16% and 19% of their family incomes on infant center-based care, while families living in small or mid-sized counties pay 12% to 14% of their income. Finally, families with low incomes are more likely to be eligible for public ECE programs, but due to various supply constraints, relatively few eligible families actually participate in these programs, and others just above the eligibility thresholds for public ECE programs often struggle the most. Thus, lower-income families are more burdened by the high prices of ECE. For most families, these expenses also come when they are in the lowest earning years of their careers and are least able to accommodate them.<sup>59</sup>

### Supply Constraints

The supply of licensed or regulated ECE programs is low relative to demand. A 2021 report found that up to 31% of children (3.46 million) in need of childcare do not have access to a formal or regulated slot.<sup>60</sup> Supply is constrained for several reasons. First, programs are not usually able to recoup the full cost of providing care from families who are already overburdened by ECE costs and cannot accommodate price increases.<sup>61</sup> Second, problems recruiting and retaining staff limit programs' ability to enroll children. According to a 2024 survey by the National Association for the Education of Young Children (NAEYC), 68% of childcare center directors reported experiencing staffing shortages.<sup>62</sup> Additionally, 56% of center directors reported being under-enrolled compared to their number of available slots, primarily due to staffing shortages, low compensation, and a lack of affordability for families.<sup>63</sup>

These supply constraints lead to large numbers of families who want but cannot access childcare for their children, sometimes amounting to "childcare deserts", or areas

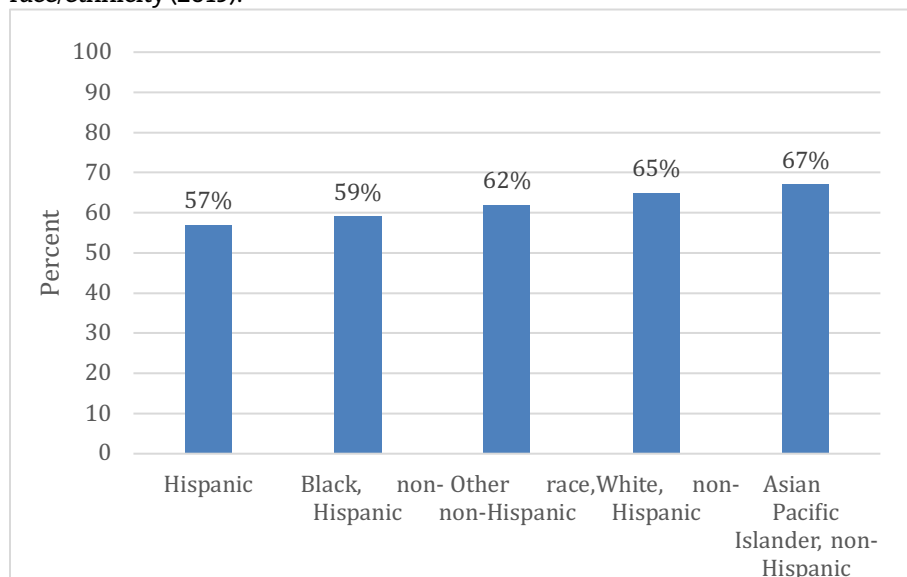
where there are either no childcare providers or 3 or more children for each licensed childcare slot.<sup>64</sup> According to a 2018 analysis by the Center for American Progress, 51% of Americans live in a childcare desert. Supply is particularly constrained among programs serving infants and toddlers, largely due to the higher costs of running these programs and the bigger gap between the true cost of program operations and the amount families can pay.<sup>65</sup> These factors can disincentivize providers from serving infants and toddlers. In some states, as many as 43% of center-based providers and 30% of home-based providers do not serve infants and toddlers.<sup>66</sup> A 2018 study of nine states and the District of Columbia found that there were more than 5 infants and toddlers for every licensed slot, an issue that was even more pronounced in rural areas where there were 9 infants and toddlers for every slot.<sup>67</sup>

Families' search for and choice of ECE is a complex process, with the limited supply of affordable, licensed ECE programs and parental preferences playing roles.<sup>68</sup> Together, these factors lead many families to opt for more informal and lower-cost forms of childcare, such as unlicensed programs or care from friends, relatives, or neighbors. Indeed, families with lower incomes (who are less likely to find accessible, affordable ECE) are more likely to rely on grandparents, family, or friends.<sup>69</sup> Home-based settings may be preferred by some parents for infants and toddlers, or for language or cultural reasons.<sup>70</sup> Some parents may also be more likely to rely on multiple care arrangements or reduce their labor force participation, potentially leaving the workforce altogether. In families that were unable to find childcare, mothers' employment is lower—77% of mothers were employed compared to 89% in families who did find childcare.<sup>71</sup> Additionally, 31% of both mothers and fathers say that they would ask for more hours at work if they had better access to childcare.<sup>72</sup> A recent study of New Haven, Connecticut, found that the city's public preschool program led parents to increase their work hours, and earnings increased by more than 20%.<sup>73</sup>

#### *Inequalities in Licensed ECE Enrollment*

The high expenses and low supply of regulated ECE programs have disproportionate impacts on some children and families. There are disparities in ECE enrollment and quality by age, socioeconomic status, race, and ethnicity. In 2019, fewer Hispanic (57%) and Black children (59%) were enrolled in center-based care than their White (65%) and Asian (67%) peers (see Figure 2). Families with annual incomes greater than \$100,000 were most likely to enroll their children in center-based care (69%; see Figure 3) and do so at younger ages.<sup>74</sup> As shown in Figure 3, take-up rates among families with moderate incomes are lower than for their peers with higher and lower incomes. Family income and ECE quality are related, but their association follows a U-shaped pattern: Children from middle-income families attend lower quality arrangements, on average, than their peers from the lowest or highest income families.<sup>75</sup> This may result from middle-income households being above the eligibility thresholds for targeted public ECE programs but unable to afford the high costs of high-quality ECE. The high expense and short supply of ECE, as well as differences in families' ECE preferences, contribute to these disparities. Finally, parents of children with disabilities are more likely to report difficulty finding care and to rely on a patchwork of multiple childcare arrangements and in part on parental care.<sup>76</sup>

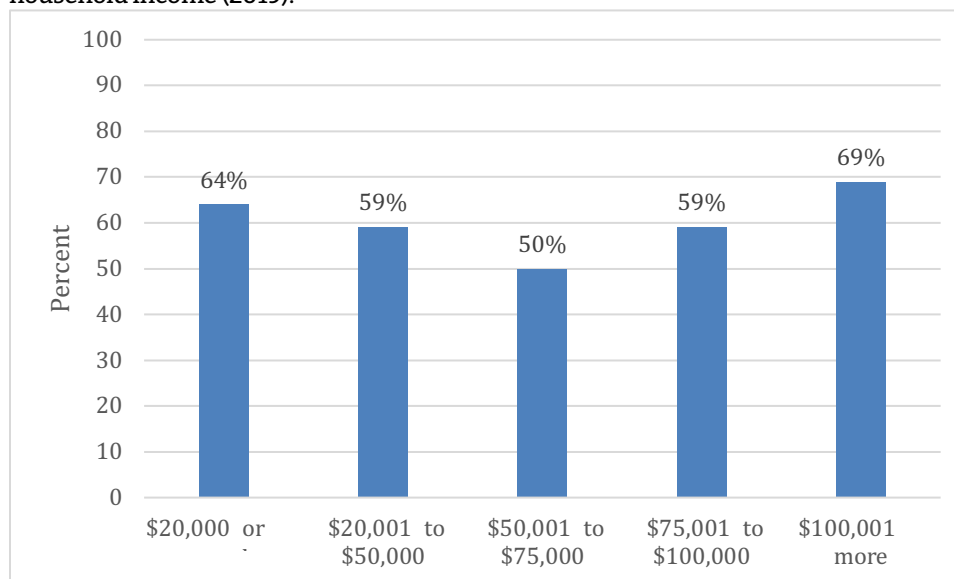
Figure 2. Percent of children from birth to age 5 enrolled in center-based care by race/ethnicity (2019).



Source: U.S. Department of Education, National Center for Education Statistics. (2021). Early Childhood Program Participation: 2019 (NCES 2020-075REV), Table 1.

Notes: Figure represents the percentage of children from birth through age 5 and not yet in kindergarten participating in center-based care arrangements, among all children with at least one weekly nonparental care arrangement. Center-based care includes day care centers, Head Start programs, preschools, prekindergarten programs, and other early childhood programs.

Figure 3: Percent of children from birth to age 5 enrolled in center-based care by household income (2019).

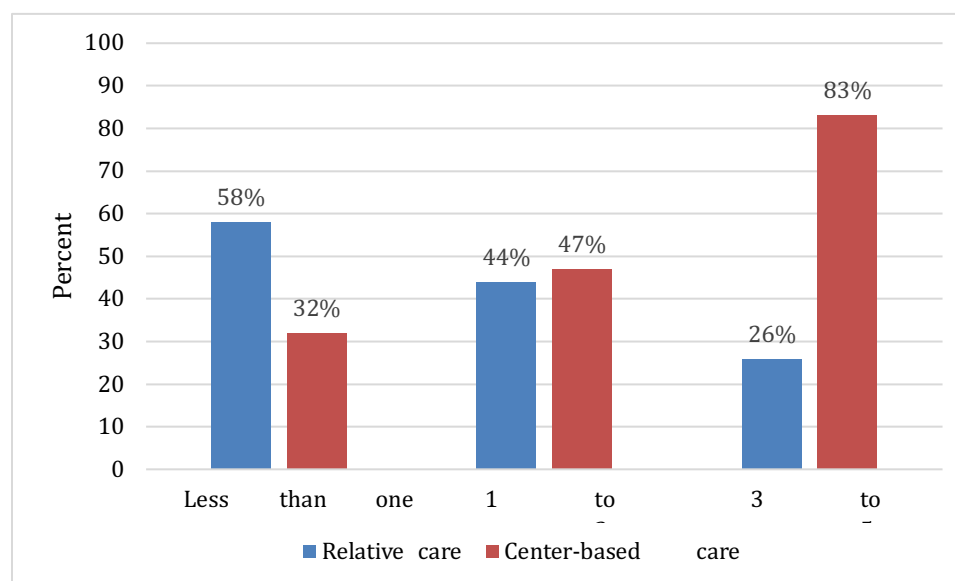


Source: U.S. Department of Education, National Center for Education Statistics. (2021). Early Childhood Program Participation: 2019 (NCES 2020-075REV), Table 1.

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Due to the particular challenges faced by providers serving infants and toddlers (i.e., high operating costs, intensive labor needs, a larger gap between operating costs and families' tuition, lower supply), parents often have fewer regulated care options available for children under age 3. As seen in Figure 4, infants and toddlers in 2019 were more likely to participate in relative care and less likely to participate in center-based care than children aged 3-5 years. It is possible that some of these patterns of ECE use reflect parents' preferences for home-based settings for their youngest children. However, while they are less likely to be in center-based care than preschool-aged children, infants from high-income families are much more likely to be in center-based care than infants from low-income families,<sup>77</sup> suggesting that lower-income parents might enroll their children in centers if they had affordable options. Indeed, research indicates that receipt of childcare subsidies, which help cover the cost of ECE for children with low-income, employed parents, increases use of center-based care.<sup>78</sup>

Figure 4. Percent of children birth through age 5 enrolled in ECE by age and program type, among all children participating in ECE (2021).



Source: U.S. Department of Education, National Center for Education Statistics. (2021). Early Childhood Program Participation: 2019 (NCES 2020-075REV), Table 1.

Notes: Figure represents the percentage of children from birth through age 5 and not yet in kindergarten participating in center-based or relative care arrangements, among all children with at least one weekly nonparental care arrangement. Center-based care includes day care centers, Head Start programs, preschools, prekindergarten programs, and other early childhood programs. Some children have multiple child care arrangements in different types of care and therefore may be represented in multiple care types in this figure.

Families with low incomes are less likely to pay out-of-pocket for childcare,<sup>79</sup> (i.e., use informal arrangements with relatives or friends) and to enroll their young children in center-based care than families with higher incomes. As of 2019, 9% of children under age 3 from households earning less than 100% of the federal poverty level were enrolled in center-based care, compared to 22% from households earning greater than 300% FPL.<sup>80</sup> Similar patterns persist among children ages 3-5: 31% of children from households earning less than 100% FPL were enrolled in center-based care, compared to 58% in households earning greater than 300% FPL.<sup>81</sup>

Quality varies widely among center- and home-based programs.<sup>82</sup> A study of high quality center-based ECE programs using data spanning 2005 and 2011 estimated that 19% children in families with low incomes were enrolled in high-quality ECE programs, compared to 29% of children from families with higher incomes.<sup>83</sup> However, research examining a nationally representative cohort of infants and toddlers found that income and quality in center- and home-based settings showed somewhat of a U-shaped relationship, with children from families with middle incomes experiencing lower care quality than children from both the lowest and highest income groups.<sup>84</sup>

There are similar disparities by race and ethnicity. For example, one study using data from two nationally representative datasets (ECLS-B in 2005-06 and ECLS-K:2011) estimated that 15% of Black children were enrolled in high-quality ECE, compared to 24% of White children.<sup>85</sup> These disparities may contribute to or exacerbate the well-established racial gaps in math and reading scores at kindergarten entry.<sup>86</sup>

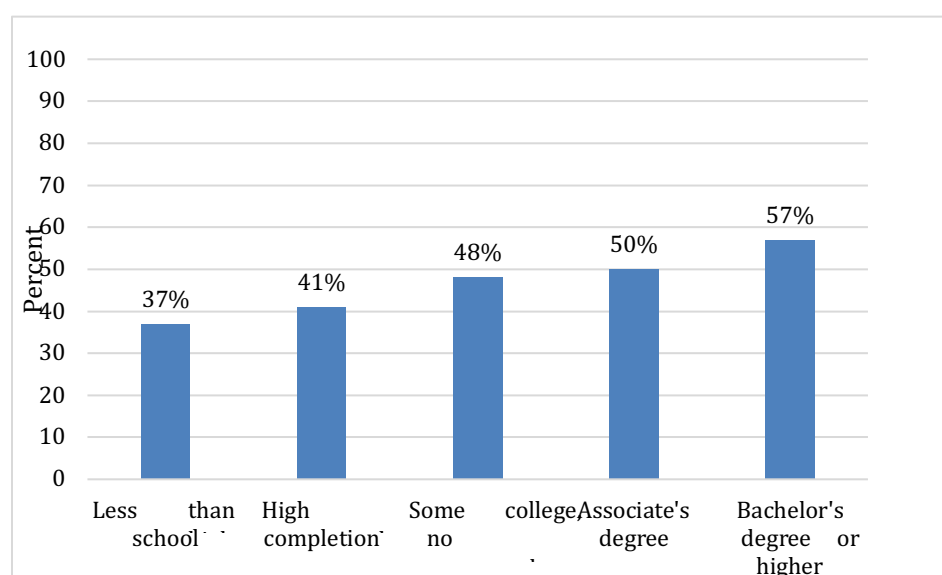
Parental education is another factor influencing ECE enrollment. As parents' highest level of educational attainment increases, their 3- to 4-year-old children are more likely to be enrolled in preschool programs.<sup>87</sup> As shown in Figure 5, parents with less than a high school degree are less likely to enroll their 3- to 4-year-old in preschool (37%) than parents with a bachelor's degree or higher (57%).

Immigrant families and children face unique hurdles to accessing quality ECE programs. Children of immigrants make up a substantial portion of the child population in the U.S.—1 in 4 children (18 million children) as of 2022.<sup>88</sup> There are considerable intersections between immigrant status and other characteristics influencing access to high-quality ECE, including parental education, race and ethnicity, and household income. Children of immigrants are more likely to be Hispanic, live in poverty, and have parents with lower levels of educational attainment than children of US-born parents.<sup>89</sup> These intersecting factors appear in data on ECE participation of immigrant children in the year before kindergarten. About 45% of children of immigrants with low incomes attended center-based ECE programs in the year before kindergarten, compared to 53% children of US-born parents with low incomes. This gap is less pronounced between children of immigrants with higher incomes (63%) and children of US-born parents with higher incomes (66%).<sup>90</sup> Conversely, children of immigrant parents with low incomes are much more likely to rely on parental care (37%) than children of U.S.-born parents with low incomes (24%) or children of immigrants with higher incomes (18%).<sup>91</sup> These gaps in enrollment have been explained by barriers to access (including, but not limited to, income as well as language<sup>92</sup>), not unique preferences for parental care arrangements.<sup>93</sup> In fact, there is no statistically significant difference in the share of U.S.- versus foreign-born parents considering center-based providers in recent searches for care.<sup>94</sup> Further, foreign born parents have more favorable perceptions of center-based care (and less favorable perceptions of relative and family childcare), on average, than U.S.-born parents.<sup>95</sup>

Finally, while there is less research on childcare among children with disabilities and special needs, findings indicate that this population has limited access to high-quality ECE programs. Compared to their peers without disabilities, children with disabilities enter childcare at older ages, spend fewer hours in care, and are more likely to participate in parental, relative or in-home nonrelative care over formal care arrangements.<sup>96</sup> Parents of children with disabilities are more likely to report difficulties in finding childcare (34% compared to 25% of families without children with disabilities). Specifically, parents report having difficulty finding providers who can meet the specific, sometimes complex needs of their children or who are prepared to

offer appropriate accommodations, particularly during the COVID-19 pandemic.<sup>97</sup> Another barrier to accessing care for children with disabilities is a lack of inclusive preschool settings where services for children with disabilities are delivered alongside their typically developing peers, a model that is generally considered best practice and demonstrates positive outcomes for children with disabilities.<sup>98</sup> These barriers to access have implications for both children with disabilities and their families. Inability to access care affects parents' ability to work and makes them more likely to rely on multiple care arrangements, including providing at least some parental care.<sup>99</sup> These challenges present missed opportunities for children with disabilities, as high-quality, inclusive ECE programs are shown to improve learning outcomes in kindergarten, including early literacy and prosocial skills.<sup>100</sup>

Figure 5. Percent of 3- to 4-year-olds enrolled in preschool programs, by level of parental education (2021).



Source: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2021. See Digest of Education Statistics 2022, table 202.20.

### *Across- and Within-State Variation*

Varying state policies contribute to substantial state-level variation in ECE affordability and accessibility. While most states (44) offer public prekindergarten programs, the share of 4-year-olds served by those programs varies widely. On average, 35% of 4-year-olds were enrolled in state prekindergarten programs in 2023, but this ranged from 0% in states with no public prekindergarten programs (Idaho, Montana, Wyoming, South Dakota, Indiana, and New Hampshire) to over 65% in states that have implemented universal preschool for 4-year-olds (the District of Columbia, Florida, Oklahoma, West Virginia, and Iowa).<sup>101</sup> These programs' hours of operation also vary widely; most commonly, programs are open only part of the day (less than 4 hours per day). This is also true for universal pre-K programs, where 73% operate on part-day schedules, with 27% operating for only 10 hours a week (or 2 hours per day).<sup>102</sup>

Within federal guidelines, states administer the childcare subsidy program, setting different eligibility requirements, thresholds, family copays, and provider payment

rates, with varying levels of participation.<sup>103</sup> These policies represent one of the key state levers for promoting affordability and accessibility of ECE programs for low-income working families. For example, in 2022, while the average initial income eligibility threshold for a family of three across all states was 229% of the federal poverty level (FPL), it ranged from 127% FPL in Indiana to 400% in New Mexico.<sup>104</sup> Given fixed federal investments in childcare subsidy programs, states must balance tradeoffs between expanding eligibility (increasing program breadth) and increasing coverage levels (or increasing program depth). For example, expanding eligibility criteria can result in less financial assistance per eligible family. Alternatively, some states may choose to provide higher subsidy provider reimbursement levels to a smaller population of eligible families or restrict eligibility, both resulting in fewer families receiving assistance. States consider these tradeoffs in pursuit of different policy goals. Some aim to increase access and support more families overall, while some aim to provide more financial support to a more targeted group of families, enabling families to access quality care and striving to control administrative costs. In addition to cross state differences in ECE policies, the supply of private ECE programs also varies within states. Rural communities are particularly affected by low supply, with 59% of rural communities being classified as childcare deserts.<sup>105</sup> Low-income neighborhoods and those with larger Hispanic/Latino populations are also disproportionately affected by low supply of licensed ECE programs.<sup>106</sup>

### *Limited Reach*

Public investments in ECE include state prekindergarten (targeted or universal programming), Head Start and Early Head Start, and childcare subsidy programs. These investments are shown to increase both the use of center-based care and parental employment.<sup>107</sup> Research indicates that access to low-cost or free ECE through public programs or subsidies increases children's enrollment, particularly in formal, center based programs.<sup>108</sup> Studies also find that expansions in public preschool increase maternal employment, work hours, and earnings, particularly among single mothers and those without younger children.<sup>109</sup> Importantly, these programs serve a relatively small percentage of eligible children and families. On average, state prekindergarten programs serve about 35% of 4-year-olds (the age group that is primarily targeted) and only 7% of 3-year-olds.<sup>110</sup> Another 6% of 4-year-olds and 7% of 3-year-olds are served by Head Start programs.<sup>111</sup> As of 2022, Head Start and Early Head Start combined were funded to serve about 784,000 children.<sup>112</sup> Compared to roughly the 3.4 million children under age 5 living in poverty (one of the criteria for Head Start eligibility), Head Start's funding severely limits its ability to provide services for eligible families who might also benefit.

Similarly, childcare subsidy programs reach only 23% of eligible children (under state eligibility rules, which are more restrictive than federal rules).<sup>113</sup>

Family characteristics, which may be a proxy for demand and a signal of the types of ECE supply needed, are also associated with participation in public programs. NonHispanic Black households who are eligible for the subsidy program are more likely to participate than their white or Hispanic counterparts,<sup>114</sup> which may reflect different needs regarding employment and earnings. Children with disabilities or other special needs are less likely to participate in the subsidy program than their peers,<sup>115</sup> which may reflect a lack of formal ECE that meets their needs.

Limited public funding constrains the share of eligible children and families served by these programs. Low-income eligibility limits, low supply of programs (especially for

infants and toddlers), limited hours of service, staffing challenges, and the administrative burden of accessing services<sup>116</sup>—each a byproduct of limited public funding and scarce resources—all limit access. For example, many state prekindergarten programs operate on part-day, part-week, or school-day schedules, often not accommodating parents' work schedules (especially parents who work nontraditional hours, who are more likely to have lower incomes).<sup>117</sup> The current ECE workforce crisis is another significant factor limiting the reach of ECE programs. One 2023 survey of Head Start grant recipients found that only about 79% of funded slots were currently enrolled and up to 275,000 children were on Head Start and Early Head Start waiting lists for currently funded slots,<sup>118</sup> likely due to staffing shortages. About 20% of Head Start and Early Head Start classrooms are currently closed, with 81% of those classrooms being closed primarily due to staff vacancies.<sup>119</sup> While turnover among Head Start staff was at an all-time high in 2022 (19%), fueled by pandemic related shifts in the labor market, turnover was also a problem before the pandemic (13.5% in 2019).<sup>120</sup> The longstanding but recently exacerbated issues with compensation and turnover within the ECE workforce are creating an environment where many ECE programs cannot keep pace with currently funded slots. The recent changes in Head Start's Performance Standards<sup>121</sup> that require increases in staff compensation may have effects on workforce recruitment and retention issues and need future research.

In addition to the limited reach of public ECE investments, when children do gain access to public ECE programs, particularly childcare subsidies, they often experience short spells of receipt, contributing to childcare instability, worse child development outcomes, and more interrupted or decreased parental employment.<sup>123</sup> Policy changes that decrease the level of administrative burden experienced by families, such as the change to 12-month eligibility redetermination periods for childcare subsidy programs required by the 2014 reauthorization, are estimated to increase spell length by up to 30%.<sup>124</sup>

### *Data Challenges*

Unfortunately, researchers' ability to examine the state of supply, cost, and demand for ECE, as well as the impacts of public investments on ECE use, is limited by the data available. Unlike K-12 education, which has numerous standardized, geolocated, and longitudinal datasets on schools and children's outcomes (e.g., the Common Core Data (CCD); the National Assessment of Educational Progress [NAEP]), ECE lacks such standardized or national data.<sup>125</sup> ECE providers are regulated, and the childcare subsidy program administered, by states that vary in how they track or make public their data,<sup>126</sup> and federal programs such as Head Start publish grantee-level data (not center- or service-level data; see Program Information Reports). Further, the multiple types of public programs and administrative levels make merging data and obtaining unduplicated counts of enrolled children or available slots difficult, as individual ECE programs and individual children may participate in more than one program at a time. One recent development is the U.S. Department of Labor's National Database of Child Care Prices, although these represent county-level measures from 2008-2018.<sup>127</sup> Data efforts such as the National Survey of Early Care and Education (NSECE) are important, although sample sizes constrain the ability of researchers to examine many subnational patterns or examine longitudinal patterns. Comprehensive ECE data efforts are necessary for better understanding the pressing policy and research questions in the field.

### *Pandemic-Related Changes*

The COVID-19 pandemic had unique and dramatic short-term and lasting effects on the accessibility and affordability of ECE in the United States. Many of the issues discussed above, including supply constraints, workforce issues, maternal labor force participation, and other childcare industry trends, worsened during the pandemic. In the first few months of the pandemic, 63% of center-based ECE programs had closed temporarily or permanently.<sup>128</sup> Enrollments also dropped significantly. For example, enrollment of children ages 3-5 in center-based programs declined by as much as 51%.<sup>129</sup> As programs closed or experienced under-enrollment and reduced revenue, the childcare industry lost about 35% of its workforce.<sup>130</sup> These ECE program closures had a disproportionate impact on working mothers; 38% cited school or childcare closures as the main reason they were not working (twice as many as working fathers), and 34% reported needing to reduce work hours during the pandemic (compared to 26% of working fathers).<sup>131</sup> Public investments including Child Care Stabilization Funds in the American Rescue Plan Act of 2021 reached a large number of ECE programs, but these and other funds expired as of summer 2024.<sup>132</sup> The long-term effects of the pandemic and its economic implications remain unknown and in need of research.

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