

# Early Childhood Council

of LARIMER COUNTY



## Early Childhood Workforce Report and Roadmap

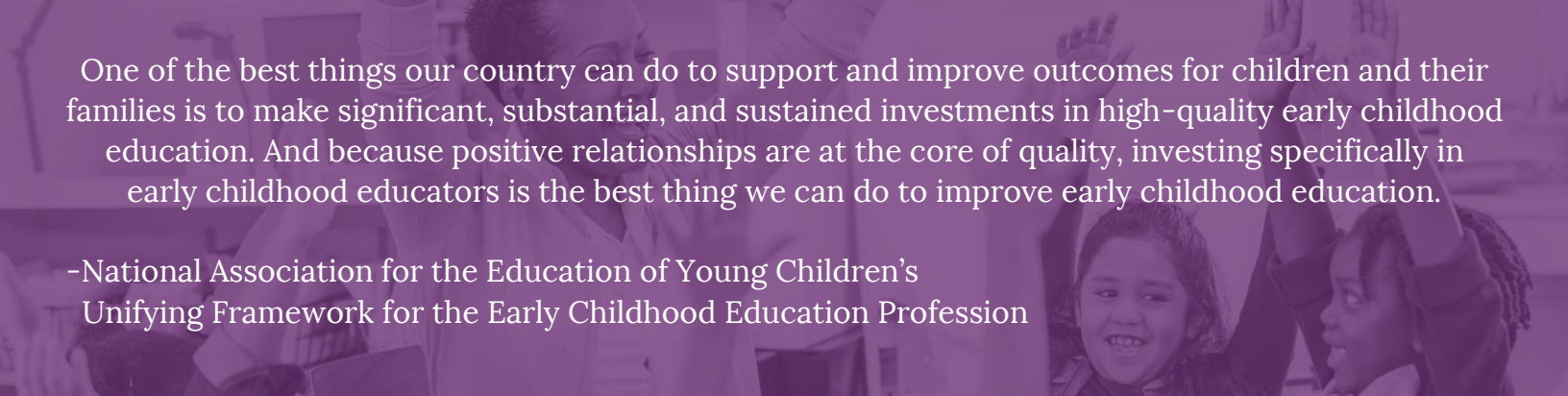
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One of the best things our country can do to support and improve outcomes for children and their families is to make significant, substantial, and sustained investments in high-quality early childhood education. And because positive relationships are at the core of quality, investing specifically in early childhood educators is the best thing we can do to improve early childhood education.

-National Association for the Education of Young Children's  
Unifying Framework for the Early Childhood Education Profession

## Introduction

### Supporting the early care and education workforce

This report begins by discussing the connections between early childhood education and Colorado's economy. Background information is given through a brief examination of the early care and education workforce context in Colorado and Larimer County. The barriers to entering and remaining in the early childhood workforce are outlined along with important lenses to be used when evaluating workforce programs or models. Next, the report identifies initiatives taking place in Colorado and around the US that are aimed at promoting a well-prepared, fairly compensated, and diverse workforce. The report concludes with a roadmap for building a stronger early care and education workforce, which will explore the programs and models that would be well-suited to the context of Larimer County and how these initiatives could be funded, including a dedicated local public funding stream.

A survey was conducted of a small sample (n=65) of early childhood professionals in Colorado to center their voices in this work. The results of the survey will be incorporated throughout the report and a summary of the results can be found in [Appendix A](#).

### Colorado's children and economy rely on the early care and education workforce

Before the COVID-19 pandemic, research in various fields had shown that the first five years of a child's life are critical to their development and that access to high-quality early childhood education during these years sets children up for a more successful life.<sup>1</sup> In 2020, the United States became more aware of how important early care and education is for the economy as parents were forced to step back at work and take on more child care responsibilities. Mothers were especially affected; participation of mothers in the Colorado workforce had still not recovered to pre-pandemic levels a year after the start of the pandemic.<sup>2</sup> The US Department of the Treasury released a report in 2021 on the economics of early care and education, which included arguments for increased government spending in this critical area.<sup>3</sup> The report concluded that "the future economic growth of our country rests on the opportunities we create for our children."

### The market failure of early care and education in the US

Early childhood education has many positive spillover effects that benefit society as a whole and these benefits provide a strong argument for a government-funded system.<sup>4</sup> Economists have shown that every dollar invested in high-quality early childhood education can create over \$7 in benefits.<sup>5</sup> More recent research has shown that returns are even greater than previously assumed when the positive effects of early childhood education on the child's siblings and future offspring are taken into account.<sup>6</sup>

The US falls behind other countries in what it invests in young children and despite the arguments for more government spending, the majority of the burden of paying for early care and education in the US falls on parents.<sup>7</sup> For parents, this cost comes at a time in life when they have not reached their full income



potential, often have mortgages or student loans to pay, and are not able to take out loans for their child's education like they could for college.<sup>8</sup>

The inability of parents to pay for early care and education services and the lack of sufficient government support indicate a market failure in the early care and education industry. When parents cannot afford to pay for the high-quality early care and education they need for their children, early care and education providers are left without the financial resources they need to be able to meet local demand. Instead of setting rates that cover the true cost of care, providers set their rates based on what parents can afford and what other providers are charging. This situation is further complicated by the highly-regulated nature of the industry. Government regulations are put in place to ensure safe, high-quality care for children but these regulations also raise costs for providers. Without dedicated and sustained public funding, providers face razor-thin margins and parents struggle to find the early care and education programs they need.

### The impact of market failure on the early childhood workforce

The early care and education workforce is primarily made up of women with a high representation of women of color.<sup>9</sup> Early childhood educators must demonstrate essential knowledge, skills, values, and dispositions, which are based on decades of research in the sciences of human development and learning.<sup>10</sup> However, longstanding biases around child care, that it is naturally suited to women and does not require skill or training, continue to affect the profession today along with the history of paying women of color little or nothing for the care and education of white children.<sup>11</sup> Black early educators in centers have been found to be less likely to earn more than \$15 an hour than other early educators and to make \$0.78 less per hour than their white counterparts, while black home-based early educators are 16% more likely to live in households with less than the national median income.<sup>12</sup>

As early childhood education businesses struggle to remain open, unable to raise fees for already cost-burdened parents, they reduce costs through paying low wages. Chronically underpaying early care and education professionals artificially subsidizes the industry and has notable consequences for the workforce. Unfortunately, a professional who feels called to work with younger children may end up sacrificing their well-being and that of their own children and families to pursue an early childhood career.

Nationally in 2019, 98% of all occupations earned more than child care teachers, who experience a poverty rate that is eight times higher than that of K-8 teachers.<sup>13</sup>

Unsurprisingly, inadequate compensation has been linked to the chronic turnover in early care and education in the US. The Institute of Medicine and the National Research Council found a 29% turnover rate for child care workers and a 15% turnover rate for preschool teachers, compared to 10% for K-8 teachers, noting that “wages appear to be an especially significant factor.”<sup>14</sup> This turnover goes on to further strain business operations and creates inconsistencies in children's caregivers, which is harmful for young children and reduces the quality of care and education being provided.<sup>15</sup>

## 2019 Colorado Early Care and Education Workforce Spashot



Over 23K  
Professionals



48% have a  
bachelor's degree



21% were new  
to the field



28% changed  
jobs in 2019

# Colorado's Early Care and Education Landscape and Workforce

## Colorado's early childhood journey so far

Colorado has been on a path to improving early childhood education outcomes state-wide since the mid-1980s, a decade that included the launch of the First Impressions initiative, the Colorado Children's Campaign, and the **Colorado Preschool Program**.<sup>16</sup> Ten years after the creation of the Office of Early Childhood was announced, Colorado has seen the launch of quality and professional development systems, the beginning of full-day Kindergarten, preparations for **universal preschool**, and the formation of the **Department of Early Childhood**.

Although these accomplishments are hard-won and worth celebrating, there is still work to be done in providing access to high-quality, affordable care for Colorado's youngest children. Not all children who need early care and education have a licensed slot available to them. According to a 2019 estimate, 246,000 children under 6 in Colorado have all parents working, while there are fewer than 154,000 licensed slots in the state.<sup>17</sup> Colorado was in the top 13 in a national ranking of *least* affordable states for infant, toddler and preschool care in both centers and Family Child Care Homes (FCCBs), with center-based care for infants and toddlers ranking 6<sup>th</sup> and 4<sup>th</sup>, respectively.<sup>18</sup> Furthermore, assistance does not always make it to those who need it. The Colorado Preschool Program only served 36% of eligible children during the 2019-2020 school year.<sup>19</sup> Head Start, Early Head Start and Migrant Head Start combined provided assistance to 3% of children 0-5 in 2021.<sup>20</sup>

The COVID-19 pandemic further complicated access to early care and education. Limits on group sizes, lower enrollment, loss of workforce, increased costs of operations, and an inability to find necessary supplies made it difficult for early childhood programs to reopen or remain open.<sup>21</sup> The pandemic also made it more difficult to fill positions and retain staff. According to an Early Milestones survey conducted in the summer of 2020, almost a quarter of the workforce was furloughed or laid off, half saw their hours decrease, and nearly as many saw their household income decline. The survey also reported that almost 10% of the workforce was not working at the time and did not see themselves returning to work.

## The Early Childhood Profession in Colorado 2012-2022

### A DECADE OF GROWING MOMENTUM AND CHANGE

**2012** Office of Early Childhood

The creation of the CO Office of Early Childhood within the CO Department of Human Services was announced

**2015** Colorado Shines and PDIS

Colorado Shines, the new statewide Quality Rating and Improvement System (QRIS), and the Professional Development Information System (PDIS) were created

**2019** Full-day Kindergarten

The State Funding for Full-day Kindergarten bill was signed into law and took effect in fall

**2022** Department of Early Childhood

The CO Department of Early Childhood was created and tasked with launching universal preschool in the fall of 2023

**2013** Early childhood education degrees

The Colorado Commission on Higher Education reversed the 1986 decision banning degrees in early childhood education

**2017** CO Early Childhood Workforce 2020 Plan

The Colorado Early Childhood Workforce 2020 Plan was published setting 3-year goals for the professional development system of the early childhood workforce

**2020** Proposition EE

Proposition EE passes creating funding for Universal Pre-K

COVID-19 causes unprecedented disruption in the sector



## Low pay contributes to hiring challenges and turnover

Recruiting can be challenging in early care and education when someone looking to work in Colorado could make 25% more as an administrative assistant, 50% more as a group fitness instructor, or nearly 75% more as a kindergarten teacher.<sup>22</sup> According to **MIT's living wage calculator**, the median wage for a childcare worker, \$14.59, would only be a living wage for a Colorado household if there were two adults working and they had no children. It would not be enough to support an adult living alone, a household of two adults where only one was working, or any household with children.<sup>23</sup>

The small sample of center or school directors and owners surveyed during the creation of this report echoed the importance of pay in recruiting and retaining staff. They identified the lack of applicants, especially qualified applicants, and insufficient pay as some of the biggest challenges to recruiting in the past year. According to the same directors, the most commonly cited reasons for an employee leaving a program were looking for work in another field, insufficient pay, and burnout.

## The true cost of quality care

While early educators want to provide the best care possible, initiatives aimed at improving quality or strengthening the early childhood system can create additional burdens for early care and education programs. The constant changes in requirements, regulations and processes can be overwhelming for providers. Navigating and adapting to new standards requires time, which is in short supply for most programs. These changes can also involve investing financial resources but rarely create a healthier financial situation for programs.

Higher quality care can cost more to provide due to the costs of having lower teacher-to-child ratios, paying for more workforce development opportunities, and purchasing the materials, curriculum and supplies needed to increase quality.<sup>24</sup> One strategy that programs use to cover the increased cost of care is to raise the fees paid by parents, many of whom are already struggling to afford early care and education for their children. **Quality Improvement Grants** are available through the Department of Early Childhood to support programs that would like a higher quality rating in Colorado Shines. Increasing funding for programs that are improving their quality level will help offset the cost of these initiatives, reducing the cost burden of parents.

For educators, the past decade of increased professional development requirements for working in early care and education have not been met with equal increases in pay. The median wage for child care workers in Colorado grew from \$10.78 in 2011 to \$14.59 in 2021.<sup>25</sup> When inflation is taken into account, this amounts to \$1.76 more per hour after a decade of increasing costly formal and continuing education requirements.<sup>26</sup>

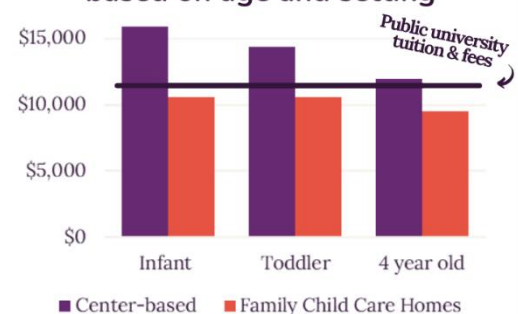
**Calculating a true cost of care** will entail considering what fair compensation would be based on the workforce's qualifications and responsibilities as well as the cost of all the other supports needed to increase quality.<sup>27</sup> Knowing the true cost of care will help policy makers and organizations like Early Childhood Councils better allocate funding to support programs.

## Access, Affordability, and Quality Snapshot

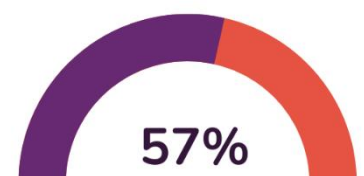
3 licensed slots for every 5 children under six with all parents working



### What Colorado parents pay based on age and setting



### Percentage of programs at Colorado Shines levels 3-5



Sources: DEC licensed facilities lists and Child Care Aware's Demanding Change Appendices

# Larimer County Status Report

## The Larimer County context

Larimer County has the 7<sup>th</sup> largest population in Colorado and experienced 20% growth from 2010 to 2020.<sup>28</sup> Over 80% of the county's population identifies as White (not Hispanic or Latino), 12% as Hispanic or Latino, 3% as two or more races, over 2% as Asian, 1% as Black or African American or Black, 1% American Indian and Alaska Native, and 0.1% as Native Hawaiian and other Pacific Islander.<sup>29</sup> Almost 9% of the people who live in Larimer County speak a language other than English at home, at least half of that number are Spanish-speakers.<sup>30</sup> According to census estimates, only 40% of Larimer county residents were born in Colorado. Over half were born in another state and over 5% were born in another country.<sup>31</sup> Around half of those born outside the US are naturalized citizens.<sup>32</sup>

In 2020, there were nearly 70,000 children under 18 in Larimer County.<sup>33</sup> An estimated 74% of Larimer County households with children under the age of 18 include two parents.<sup>34</sup> Out of the total number of households with children, 26% are households where children live with only one parent: 18% are households where the children live with a mother and 8% are households where they live with a father.<sup>35</sup> Colorado's minimum wage is \$12.56, less than half of what a single parent with one child would need to get by according to [MIT's Living Wage Calculator](#).<sup>36</sup>

The median household income is \$76,366, with the top 15% of households making \$150,000 or more per year, at least six times the income of the 15% of households that make less than \$25,000 a year.<sup>37</sup> Following the Department of Health and Human Services 7% benchmark affordability, the majority of Larimer County households cannot afford the average cost of child care for infants, toddlers or preschoolers.<sup>38</sup>

Larimer County follows the national trend of relying mostly on parent fees to fund its early care and education system. Unfortunately, support for parents who struggle to afford care is not always easy to access. Programs like the Colorado Preschool Program and Head Start only reach a small percentage of Colorado children.<sup>39</sup> The Colorado Child Care Assistance Program (CCCAP) helps eligible Colorado families pay for child care. On average, the Larimer County Child Care Assistance Program (CCAP) served 742 children per month in 2021.<sup>40</sup> To begin using CCAP in Larimer County, a household's income must be less than 235% of the Federal Poverty Level, which would be \$3,411 a month for a household of 2.<sup>41</sup> Some families who qualify for CCAP may struggle to find a provider who participates in the program near where they live.

## A Living Hourly Wage for Larimer County Households

ACCORDING TO THE MIT LIVING WAGE CALCULATOR



## Early care and education in Larimer County

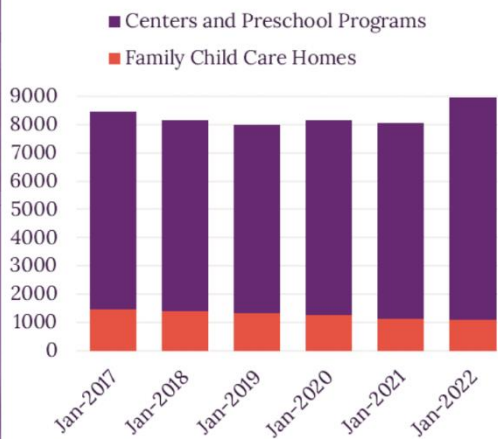
Children in Larimer County receive care and education in a variety of settings and high-quality care can be found in each type of care setting. Centers, both independent and school-based, preschools, and Family Child Care Homes (FCCH) are licensed by the state and participate in Colorado Shines, the state’s quality rating and improvement system. Family, Friend, or Neighbor (FFN) care is informal care and can be considered unlicensed or license exempt depending on how many children are being cared for and their relation to the provider and each other.

Child care is also provided in Larimer County using a variety of educational models, from more structured programs like Montessori, which emphasize academics and life skills, to play-based programs like Waldorf, where the focus is on creative play and academic subjects are introduced at a later age. Many providers choose to use a blend of methods from multiple educational models.

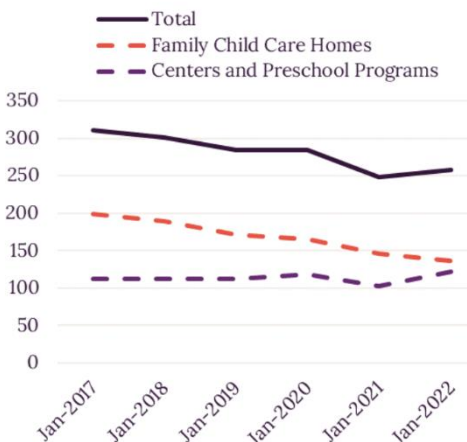
FCCH providers care for and educate smaller groups of children from the intimate setting of their own home. These programs are usually more affordable than center-based programs, can be closer to the families they serve, and can accommodate parents who want to keep siblings of different ages together during care. FCCHs are a vital part of the early care and education ecosystem. Unfortunately, Larimer County, like Colorado, has been losing FCCH programs for over a decade. Over the past 5 years, the county has lost 28% of FCCH programs and almost a quarter of FCCH slots.<sup>42</sup> The COVID-19 pandemic worsened this trend and contributed in part to the loss 143 FCCH slots between January 2020 and January 2021.<sup>43</sup>

### Larimer County Licensed Capacity

Licensed Slots in Larimer County



Licensed Programs in Larimer County



Center-based programs are able to serve more children than FCCHs; which means they can take advantage of economies of scale that smaller providers cannot. Fortunately, several new centers opened in 2019 adding slots before the start of the pandemic.<sup>44</sup> Also, through a unique partnership with the United Way and the City of Fort Collins, the Teaching Tree Early Childhood Learning Center was able to expand its Fort Collins location, enabling the center to double its capacity.<sup>45</sup>

Numbers on FFN care are harder to find, but one study of US Census Bureau data found that as many as 40% of US children are in relative care, with grandparents being the most common relative to provide care.<sup>46</sup> FFN care offers families benefits including affordability, trust, shared culture, and close proximity.<sup>47</sup>

According to a 2019 study, there were 1,163 early care and education professionals working in licensed settings in the county and over half had post-secondary degrees.<sup>48</sup> Nearly half of the professionals were 3-5 teachers and only a little over a quarter of professionals were in those roles for children from birth to 2.<sup>49</sup> The majority identified as White, followed by other (15%), Hispanic (6%), Asian and Pacific Islander (2%), Black (1%), and American Indian (1%).<sup>50</sup>

Larimer County is estimated to be home to around 17,500 children under the age of 5.<sup>51</sup> There are currently licensed slots for just over half of those children; however, infants and toddlers have fewer spots available to them.<sup>52</sup> Increasing access to high-quality care will continue to be crucial as DOLA estimates predict that there will be almost 19,000 children under the age of five by 2027.<sup>53</sup>



## Past and ongoing ECCLC workforce initiatives in Larimer County

**Early Childhood Council of Larimer County** (ECCLC) is an independent nonprofit organization and one of the 34 Early Childhood Councils operating statewide. ECCLC's work touches on every aspect of the early care and education system in Larimer County including working with the broad spectrum of early childhood professionals, connecting parents to information and resources, creating new programs to support the early care and education workforce, advocating for the needs of children with local and state government, and assisting providers in increasing the quality and capacity of their programs.

Many of the workforce development initiatives that have been core to ECCLC's work over time have focused on professional development. These have included trainings and conferences on a wide variety of topics at no or low cost, scholarships for college classes for early care and education professionals, a monthly gathering for local directors to access training and network, career navigation, mentorships, and apprenticeships. From its beginning, ECCLC has worked with emerging Family Child Care Home providers as they navigate licensing applications and the difficulties of launching a child care business.

As the organization has grown, new opportunities for supporting the professional development of the early care and education workforce have been identified and pursued. The **scholarship program** has been expanded to cover the Child Development Associate certification and various credentials included in Colorado's Professional Development Information System. From 2018-2020, the Early Milestones Early Childhood Workforce Initiatives grant provided funds for a number of ECCLC initiatives focused on apprenticeship and mentorship. ECCLC has been a leader in promoting early childhood mental health by facilitating professional development opportunities for over 2000 educators, creating a fellowship program with students from Colorado State University's School of Social Work, and sponsoring a cohort of professionals to apply for the Colorado Association for Infant Mental Health endorsement.

Innovative programs to address other challenges have been developed over the past five years. The **Provisional Early Childhood Teacher (P-ECT) Waiver**, the first of its kind in the state, was approved by the Early Childhood Leadership Commission and Child Care Licensing and allowed teachers a 12-month grace period to complete their Early Childhood Teacher (ECT) qualifications under the supervision of their director. In 2021, ECCLC launched a free **Employee Assistance Program (EAP)** for licensed early care educators, something directors or owners do not always have the resources to provide.

Most recently, ECCLC has received a \$225,000 Community Innovation and Resilience for Care and Learning Equity (CIRCLE) Grant to provide wellness stipends to a small number of local non-profit early care and education programs. This opportunity, apart from providing an additional benefit to providers, will help ECCLC understand how this type of stipend affects retention.

In 2021, ECCLC and United Way of Larimer County convened a Steering Committee of community members to shape and inform a strategic viability assessment project to determine whether and when to pursue a ballot measure to raise dedicated, local public funding for families and early care and education programs in Larimer County. Unfortunately, the Steering Committee was unable to come to agreement with County leaders regarding a mutually acceptable public-private partnership at that time. ECCLC plans to propose a ballot measure again in 2023, with the aim of creating a dedicated stream of funding that will enable the Larimer County early care and education system to provide quality care that families need and increase families' access to affordable care. Through the ballot initiative proposal, ECCLC will be advocating for the necessary increase of public funding for early childhood at the local level and setting an example for what can be done to strengthen the early care and education ecosystem throughout Colorado.

# Barriers to Working in Early Care and Education

## Low wages

In Colorado and across the US, the chronic low pay for early care and education providers has been shown to cause high turnover, personal financial struggles for providers, as well as be a deterrent for those looking to join the workforce.<sup>54</sup> The insufficient pay has led to over 15% of early care and education professionals living below the poverty level in many states and nearly half of providers relying on public supports such as Medicaid, Supplemental Nutrition Assistance Program (SNAP), and Temporary Assistance for Needy Families (TANF).<sup>55</sup> Early educators have commonly cited pursuing higher compensation when they leave a job and a 2017 Colorado survey revealed that teachers with higher qualifications (i.e. a bachelor's degree or higher) are more likely to intend to leave their job, conceivably to find work that pays them a wage that better corresponds to their qualifications.<sup>56</sup> This same survey found that “of the multitude of factors explored, only higher teacher wages were predictive of less teacher turnover” in centers. In the survey conducted for this report, nearly half of the respondents who work in early childhood education reported that the difficulty of finding a position that met their financial needs was a barrier to joining the workforce.

## Limited access to employer-sponsored benefits

Benefits, including health insurance and retirement plans, are an important component of employee compensation and have been shown to increase employee intention to stay at their current job.<sup>57</sup> However, only 41% of early care and education teachers report having employer-sponsored health insurance and only 33% report having an employer-sponsored retirement plan.<sup>58</sup> With the thin margins that centers operate on, directors and owners are forced to choose between giving their employees as much cash-in-hand as possible or providing benefits that could increase employee well-being. In the survey conducted for this report, almost a third of the respondents who work in early childhood education reported that the difficulty of finding a position that provided the benefits they needed was a barrier to joining the early care and education workforce.

## Requirements for employment

One of the most frequently cited challenges to hiring in early care and education is finding candidates that meet all the necessary qualifications to work in early childhood.<sup>59</sup> A 2015 Qualistar Colorado survey of owners, directors and principals found that “60 percent of respondents reported that the ‘lack of people who are qualified/educated/certified’ to work in early care and education was the top challenge in hiring teachers.”<sup>60</sup> Although having a well-prepared workforce is essential to providing high quality care, the pipeline needed to supply qualified applicants is lacking and the compensation offered for this type of skilled labor cannot compete with comparable professions. With the requirements to begin a career with the **Early Childhood Teacher (ECT) qualification** in Colorado, someone choosing a career path could complete the same requirements and choose a higher paying job in the K-12 education system.

## Lack of professional recognition

A lack of professional recognition, respect and appreciation has been referenced by early care and education providers in Colorado as a barrier to working in the field.<sup>61</sup> Much of this misaligned perception of the early care and education profession has roots in harmful ingrained biases around early childhood educators simply being “babysitters”, along with the systemic devaluation of the work of women, and specifically women of color.<sup>62</sup> Many who work in the field feel compelled to contribute to the early years because they know and have studied the positive lifelong impact that can result when a child has the opportunity to be involved in quality early care and education. To be consistently confronted with messages that their profession is of little worth is a discouragement to those working in early care and education and anyone considering entering the workforce. This problem is even more pronounced for Family Child Care Home providers despite being held to equally high standards as center-based providers.

## Limited opportunities for upward mobility

There are limited opportunities for upward mobility in early care and education. Even when considering pathways that lead to more diverse roles than direct service, such as roles in coaching, consulting, research, or higher education, the highest workforce need continues to be for teachers, assistant teachers, and Family Child Care Home (FCCH) providers working directly with children.

## Language barriers

Accessing rules, regulations, professional development opportunities, licensing information and coaching can be a challenge in most areas of Colorado if the provider speaks a language other than English. As the early care and education system seeks to attract a more diverse workforce that better represents the families it serves, it will be important to ensure that the profession is accessible to speakers of other languages.

## Revealing immigration status

Another specific barrier to supporting a more diverse workforce is the requirement for prospective providers to reveal immigration status. Until the enactment of Senate Bill 21-077 in 2021 it was not possible to become licensed to provide child care in Colorado without a US social security number.<sup>63</sup> Changing this requirement was an important step in reducing barriers for marginalized individuals to enter the workforce but further work is needed to ensure that those wanting to provide child care can feel safe giving information regarding their immigration status and that of their household to local and state government.

## Access to start-up capital

For owners of centers and FCCHs, a significant investment may be needed to get their center or home ready to provide child care and meet licensing requirements. Given that the child care industry is a market failure in the US and the limited amount of revenue that centers and FCCHs generate, it is more difficult to obtain a loan than it would be to open a more profitable business. Grant funding can be obtained through initiatives like the **Emerging and Expanding Child Care Grant Program** in Colorado, a term-limited program that launched in 2021. Alternative solutions such as a third party renting or selling space at a reduced cost are also being explored but access to start-up capital is still a barrier for Colorado providers.

## The impact of the COVID-19 pandemic on barriers

Many of the barriers described above worsened in the first years of the COVID-19 pandemic. Morale sank during a time when early care and education professionals were regarded as essential but that sentiment did not always translate to educators feeling safe or appreciated at work.<sup>64</sup> In 2020, nearly a quarter of early childhood professionals were laid off or furloughed, and less than half of the Colorado providers surveyed said they would stay in their position for the next two years.<sup>65</sup> The loss of teachers has worsened the staffing shortage for many centers, which is stretching the remaining workforce too thin. This situation is unsustainable and will lead to higher instances of burnout as early childhood educators are unable to take time off. Administrative staff and directors often fill in as substitutes when teachers are absent, giving them less time to dedicate to running their centers.

# 2022 ECCLC Workforce Survey Results

Directors on hiring challenges in the past year:

84%

reported a lack of applicants meeting the required skills, experience, or qualifications as one of the biggest challenges

74%

of directors reported applicant salary or wage expectations as one of the biggest challenges

Teachers on obstacles to joining the workforce:

50%

reported that finding a position that fit their financial needs was one of their biggest obstacles

33%

reported that finding a position with the benefits they needed was one of their biggest obstacles



# Lenses Used to Evaluate Workforce Support Initiatives

## Supporting the existing workforce

When exploring ways to grow the early care and education workforce, retaining professionals who already work in early childhood should be a central goal. Attracting new talent should not come at the expense of those who have already dedicated themselves to the field. The experience and institutional knowledge of the existing workforce is a valuable resource that can be leveraged through peer coaching and mentorship. Experienced providers' engagement in the design and implementation of workforce initiatives will also lead to more successful programs.

## Workforce growth requires fair compensation

Until early care and education professionals are fairly compensated, meaning that they receive wages and benefits that are comparable to those they could get in positions that require similar qualifications and responsibilities, it will be challenging to grow the early childhood workforce to meet Larimer County's need. Higher wages and improved benefit offerings will encourage educators to pursue a career in early childhood. Without these changes to compensation, early childhood professionals will continue to struggle to get by while their low wages subsidize the broken early childhood system.

## Protecting providers from benefits cliffs

Increases in income can sometimes have a negative impact on early care and education professionals, who typically earn low wages, due to the loss of public benefits. Understanding this phenomenon, referred to as a benefits cliff, is critical to successfully increasing the financial well-being of the workforce. Any increase in pay needs to be sufficient to improve the financial situation of the provider, including compensating for any public benefits that the provider loses.

## Diversity, Equity and Inclusion

The National Association for the Education of Young Children's Unifying Framework for the Early Childhood Education Profession states that initiatives aimed at growing and supporting the early care and education workforce should be "crafted through a lens of reducing the impact of structural barriers such as institutional racism, sexism, classism, elitism, and bias and ensuring that the profession reflects the diversity of the young children it serves."<sup>67</sup> This is important not only because the early care and education profession has been so heavily influenced by biases around race and gender, but also due to the prominent role diversity and culture play in early childhood development.<sup>68</sup>

Early experiences of racism and discrimination can have lifelong detrimental impacts due to how they affect early childhood socioemotional, and behavioral development.<sup>69</sup> Any proposed workforce solutions should promote quality care that is inclusive to all, creates equitable opportunities for development, and fosters the diversity of each child.

## What are Benefits Cliffs?

A benefits cliff is "the sudden and often unexpected decrease in public benefits that can occur with a small increase in earnings."<sup>66</sup>

An early care and education professional who relies on SNAP, Medicaid, or other benefits to make ends meet will have to turn down offers of increased hours or bonuses in order to not lose the benefits the provider and their family need to get by.

### A LARIMER COUNTY EXAMPLE



A SINGLE PARENT WITH ONE CHILD

\$13

MAKING \$13 PER HOUR



WORKING 30 HOURS A WEEK



COULD LOSE ACCESS TO SNAP AND MEDICAID IF THEY BEGAN WORKING 40 HOURS A WEEK

\$50

GIVING THE PROVIDER ONLY AROUND \$50\* MORE PER MONTH THAN BEFORE

\*After additional food and health care costs

## Transitioning from one-offs to sustainable solutions

In the wake of the COVID-19 pandemic, federal and state governments responded to the needs of early care and education systems by providing crucial funds to stabilize the sector. While state and federal emergency funding is still being used in Colorado, many in the field are concerned about what happens when these short-term oriented funds sunset.<sup>70</sup>

One of the important lessons reinforced during the COVID-19 pandemic is that early care and education lacks a sufficient sustained source of funding. Proposed solutions to grow the early care and education workforce must move away from one-off projects and programs towards sustainable initiatives with dedicated funding. Based on what is known about the economics of early care and education, this funding should come from federal, state and local governments.<sup>71</sup>

Increased long-term funding from the federal government was proposed through the Build Back Better Act in 2020. This act would have expanded access to free high-quality preschool for more than 6 million children and limited child care costs to no more than 7% of income for families earning up to 250% of state median income.<sup>72</sup> Unfortunately, the Build Back Better Act failed to pass in the US Senate. State funding for early childhood education in Colorado has increased through Proposition EE and the passing of HB20-1427, which expanded taxes on nicotine products. Funding from the revenue generated by the new and increased taxes will help pay for Colorado’s universal preschool program.<sup>73</sup> At the local level, increased long-term funding can take the form of a sales tax increase like those used in Denver and Aspen or the property taxes used in Summit County and San Miguel County.<sup>74</sup>

## Impact on the local early care and education ecosystem

Initiatives intended to support the early care and education workforce will not take place in a vacuum but within a complex, interconnected and layered ecosystem. The early care and education ecosystem is externally connected with local economies and social systems through the impact it has on children and the broader workforce.<sup>75</sup> Special care will need to be taken when evaluating the effects of individual and combined workforce initiatives on the broader ecosystem. Initiatives that have the potential to strengthen the broader ecosystem should be prioritized while initiatives that may negatively impact any particular group of providers or children should be reexamined.

Any plan can have unintended consequences. The teams proposing and designing workforce initiatives should proactively engage stakeholders to identify possible risks, acknowledge possible unintended consequences of the initiative, and integrate strategies to avoid or mitigate those consequences.

A recent example of when an initiative prioritized stakeholder input and examined possible unintended consequences is the creation of the **Colorado Universal Preschool Recommendations**. The stakeholder engagement opportunities included town halls, listening tour sessions, feedback sessions, online forms and numerous group and subgroup meetings.<sup>76</sup> Below are two concerns that were given as **feedback** during the planning process and two different strategies that were used to address those concerns.

Concern	Mitigation strategy	Type of approach
Family Child Care Homes and other community-based programs may be excluded or disadvantaged	The recommendations state that a <b>mixed delivery system</b> is a guiding principle and charge local leads with ensuring dollars are allocated in accordance with community plans and family demand	Proactive
Increased funding for preschool will increase demand for preschool slots, causing providers to pivot away from providing more expensive infant and toddler care	The recommendations include the implementation of incentives and workforce supports for programs that provide infant and toddler care	Reactive

# Inventory of Workforce Support Initiatives

## Supporting the early care and education workforce

As the conditions caused by the COVID-19 pandemic brought a broader awareness of the importance of early care and education, an increased sense of urgency has been felt by the policy makers and organizations across the country that support early childhood professionals.

In Colorado alone, three rounds of federal stimulus funding and a special state appropriation have infused \$700 million into the early care and education system.<sup>77</sup> The Department of Early Childhood has launched a [website](#) with updated stimulus funding information as well as the strategies for the current round of funding. The three strategies are aimed at **increasing access**, **supporting the workforce**, and **strengthening families**.

Below, a sample of the different types of workforce support initiatives are outlined, with consideration to the barriers and lenses described in the previous section. This inventory summarizes the current landscape of workforce supports in the US and Colorado. The strategic areas of impact explored are financial support, benefits offerings, professional support and development, and shared services models.

## Strategic Areas of Impact



Financial Support



Benefits Offerings



Professional Support  
and Development



Shared Services  
Models

## Financial support initiatives

Low compensation, including both wages and benefits, is one of the biggest challenges facing the early care and education workforce. There are numerous initiatives around the country to support the workforce financially and they generally fall into one of two categories: *financial relief*, including temporary or occasional payments to providers, and *compensation improvement*, a long-term and dependable increase in wages. There is a push among advocates in the US to move towards more reliable financial support through dedicated funding streams, which create long-term stability for educators rather than temporary relief that can be difficult to depend on or predict. There are existing **voter approved children's funds** in Colorado, including **Strong Start** in San Miguel County, **Kids First** in Aspen, the **Right Start Project** in Summit County, and the **Denver Preschool Program**.

In financial support initiatives, funds can be distributed directly to the provider, flow through a third party, or through the early care and education program itself. If the funding is to be distributed by the program, expectations on the how the funds are to be distributed should be clearly laid out regarding timing of payments to providers and amounts. With the numerous financial strains present in early care and education programs, this clarity is especially important in initiatives that address compensation indirectly or as part of a larger package of funding. Additionally, these initiatives should not create a significant administrative burden for programs.

For more information on recent efforts to increase compensation, check out the **Improving Child Care Compensation Backgrounder** compiled by BUILD Initiative and the National Collaborative for Infants and Toddlers Capacity-Building Hub.



Financial Support Initiative	Type	Location	Funding
<b>The ExceleRate Illinois Pilot Project (pilot factsheet)</b>	Quality improvement incentive using a <b>compensation scale</b>	Illinois	Federal Preschool Development Grant Birth through Five and state child care funds \$3.4 million funded in FY22
<b>Child Care WAGES Program</b>	Wage supplement to pay up to an established cap	North Carolina	Smart Start partnerships and the Division of Child Development and Early Education \$8.5 million annual fund
<b>Bilingual Incentive Payment</b>	Bilingual incentive one-time payment	New Mexico	General state funds \$150,000 funded for FY22 and FY23
<b>RecognizeB5</b>	Retention incentive	Virginia	Federal Preschool Development Grant Birth through Five and state funds \$20 million over 2 years
<b>Incentive to Become Licensed</b>	One-time bonus for new providers	Colorado	ARP stabilization funds \$2.4 million
<b>ECE Educator Loan Forgiveness</b>	Temporary student loan forgiveness program	Colorado	Federal stimulus funds \$1.5 million
<b>CCCAP Early Childhood Educator Salary Increase</b>	Temporary program to increase compensation	Colorado	CRRSA & ARP discretionary funds \$6 million

One notable financial support initiative, the **Colorado Child Care Assistance Program Contracted Slots Pilot** conducted by Early Milestones Colorado and three Colorado counties, was not included in the table above since the initiative did not collect data on increasing compensation. The program was aimed at increasing revenue for centers during the months the pilot took place by having Colorado Child Care Assistance Program (CCCAP) reimbursements cover contracted slots for each month.<sup>78</sup> Prior to the pilot, reimbursements covered the days when a child attended their program and the allowable absences covered by each county. The contracted slots approach creates more financial stability for programs in that they can predict the amount of CCCAP reimbursements for the month. This program was highlighted by BUILD Initiative alongside a larger pilot in Pennsylvania, which did see 67% of programs increase staff salary and 44% increase staff benefits due to the additional funding.<sup>79</sup> Using the **study** carried out by Early Milestones Colorado, which detailed the impact and challenges of the pilot, a new iteration of the pilot could be attempted with a focus on compensation.

Colorado also currently has an **income tax credit for early childhood educators**. The tax credit, which varies based on the educator's credential level, is available to licensed providers whose program has a Colorado Shines rating of 2 or higher and has either a fiscal agreement with CCCAP or meets the federal early head start or head start standards.<sup>80</sup>

## Benefits offerings

The financial constraints that make it difficult for early care and education programs to pay their educators higher salaries have a similar impact on benefits offerings. Benefits are often left out of the conversation when it comes to early care and education workforce compensation strategies although they have been shown to increase employee intention to stay at their current job.<sup>81</sup>

There is considerably more momentum, nationally and statewide, around increasing wages than there is around improving benefit offerings. Providing benefits poses a greater logistical challenge than moving around funding to increase wages since many programs do not currently offer benefits and therefore do not have the necessary systems in place.<sup>82</sup> As salaries increase, offering benefits will become crucial as educators' earnings pass the eligibility limits of public benefits. There is an urgent need to research the best ways to support providers in accessing the health, dental, vision, retirement and other benefits.

Benefit Initiative	Type	Location	Funding
<b>Washington Licensed Childcare Worker Premium Assistance Program</b>	Health Care Premium Assistance	Washington	Federal CRRSA & ARP COVID relief funds \$30 million
<b>Child Care Providers United - California Workers Health Care Fund</b>	State-funded health care benefits trust	California	State budget \$100,000 seed funding \$100 million annually
<b>Employee Assistance Program for Child Care Providers</b>	Free health, financial, legal, and lifestyle services	Larimer County, CO	Seed funding from United Way of Larimer County

The Early Childhood Council of Larimer County has recently been awarded a \$225,000 CIRCLE Grant to provide of wellness stipends to a small number of programs and examine their impact on retention.



## Professional support and development

These types of initiatives are aimed at reducing barriers to entering the early care and education workforce, supporting the growth of professionals in the workforce, and providing educators with the professional supports needed to be successful in their roles. Professional development initiatives can include scholarships and tuition payments, apprenticeships, place-based learning opportunities, requirement waivers, as well as free or reduced-cost trainings like those offered by the Early Childhood Council of Larimer County and other organizations across the state. Professional support initiatives can take many forms, including paid planning time, substitute pools, associations, communities of practice, coaching, and mentorship. Recently in the US there has been an increased focus on initiatives that are tailored to the specific challenges faced by Family Child Care Home (FCCH) and Family, Friend, and Neighbor (FFN) providers.

Provider Development Initiative	Type	Location	Funding
<b>Registered Apprenticeship for Family Child Care (FCC) Providers</b>	Registered apprenticeship for FCC providers to obtain CDA	Rhode Island	Service Employees International Union (SEIU) Education and Support Fund
<b>Early Childhood Education Career Pathway Apprenticeship</b>	Registered apprenticeship to obtain AA or BA	Pennsylvania	1199c Training & Upgrading Fund
<b>Childcare Entrepreneur Fund</b>	Business training and grants for Family Child Care providers	Boston, MA	City of Boston \$175,000 for grants
<b>RRCC Child Care Development Specialist Apprenticeship Program</b>	Registered apprenticeship for ECT or Director qualifications	Colorado	The Office of Early Childhood and Early Milestones Colorado
<b>CU Denver's Place-based Bachelor's Degree</b>	BA degree based in centers	Denver, CO	<b>Early Milestones Colorado's Early Childhood Workforce Innovation Grants</b> funded by the Buell Foundation and Gary Community Investments
<b>Pamoja Early Childhood Education and Workforce Pathway Program</b>	Career pathway for refugee and immigrant women	Colorado	<b>Early Milestones Colorado's Early Childhood Workforce Innovation Grants</b> funded by the Buell Foundation and Gary Community Investments

Other recent pipeline support initiatives include **Poudre School District's Futures Lab** as well as a **dual enrollment program** for highschoolers through the **Early Childhood Department of Western Colorado Community College**. The Department of Early Childhood is also using federal stimulus funds to launch an **apprenticeship program**. Financial assistance for professional development is available through **free ECE 101 and 103 courses**, the **T.E.A.C.H. Early Childhood® Colorado Scholarship Program**, **Early Childhood Council of Larimer County Scholarships**, and **Department of Higher Education scholarships**.



Professional Support Initiative	Type	Location	Funding
<b>Washington's Early Care and Education Substitute Pool</b>	Substitute pool for licensed programs	Washington	SEIU 925 Collective Bargaining Agreement and Early Start Act
<b>Early Childhood Service Corps</b>	Professional support through volunteers, substitutes and business advisors	Colorado	The Daniels Fund
<b>Department of Early Childhood Substitute Fund</b>	Substitute fund for licensed providers	Colorado	ARP Discretionary funds \$1.2 million (time-limited)
<b>¡Somos FAVAS! Familias. Amigos. Vecinos. Apoyádonos.</b>	Spanish-language capacity building program for Latinx FFN providers	Larimer and Weld Counties, CO	Colorado Health Foundation \$350,000



## Shared services

Since the vast majority of early care and education programs in Larimer County are independently operated small businesses, they do not have the economies of scale that are available to centers that are operated by a larger organization or corporation. For example, the largest provider of employer-sponsored child care in the country, Bright Horizons, is able to “provide centralized administrative support for accounting, finance, information systems, legal, payroll, risk management, marketing and human resources functions” to the centers it operates through its corporate offices.<sup>83</sup> This is an important part of how Bright Horizons reduces costs for its centers; however, it is not something that is feasible or available to the majority of programs in Larimer County. **Shared services models** address this issue by giving “programs access to professional business support that functions at an efficient scale but lets programs maintain their status as independent providers.”<sup>84</sup> This section will include models that provide access to a wide range of services and resources as well as models that are more narrowly targeted.

Shared services model	Type	Location	Funding
<b>Shared Services Hub</b>	Free resources and services for Family Child Care providers and directors	Washington	Washington State Department of Children, Youth & Families
<b>All Our Kin’s Family Child Care Network</b>	Staffed Family Child Care Network	Connecticut	Government grants and contributions
<b>Chambliss Center for Children Managed Programs</b>	Micro-center model including employer-sponsored sites	Chattanooga, TN	Internally funded through contributions
<b>Early Learning Ventures</b>	Shared services hub focused on technological and administrative services	Colorado	Federal and other grants, member fees, contributions
<b>Home Network of the Pikes Peak Region</b>	Family Child Care Home (FCH) shared services network	El Paso County, CO	<b>Various funding organizations</b>
<b>Kids First Nurse Consultation</b>	Shared Service-Nurse Consultation	Aspen, CO	Sales tax that supports housing and child care program funding estimated to be between \$14-18K per year

A note on micro-center or decentralized management models in Colorado:

Early Connections Learning Centers in Colorado Springs looked into running a micro-center model based on the school-based centers operated by the Chambliss Center for Children in Chattanooga, Tennessee. Like the Chattanooga model, the Early Connections Learning Centers model was aimed at providing early care and education for public school teachers. Unfortunately, licensing differences in Colorado prevented the launch of this micro-center model. Shared services solutions for Colorado programs may require advocacy at the state level to remove legislative or systemic barriers that do not exist in other states.

# Larimer County Workforce Roadmap

## STRATEGIES FOR RECRUITMENT, RETENTION & DEVELOPMENT

### GOAL

The Larimer County early care and education system has the capacity to serve all children under 5 who need care through a well-prepared, fairly compensated, and diverse workforce.

### DEVELOPMENT

Opportunities for professional development and career advancement are accessible, inclusive and equitable



Placed-based learning opportunities  
Training and professional development  
Financial assistance

### RETENTION

Early childhood programs have all of the resources they need to create positive and supportive work environments



Communities of practice  
Tailored shared services models  
Funding to support emergent needs

### RECRUITMENT

Working in early care and education is a well-paid, respected and accessible career



Fair compensation initiatives and advocacy  
Apprenticeships & career navigation support  
Loan forgiveness and scholarship programs



# Roadmap for Building a Stronger Early Childhood Workforce

## Roadmap and supporting initiatives for Larimer County

The above roadmap is proposed as a guide to enable funders, local government, the Early Childhood Council of Larimer County and partnering organizations to strategically align funding and programs to support the recruitment, retention and development of the early care and education workforce in the county. The end goal is for the Larimer County early care and education ecosystem to have the capacity to serve all children under 5 who need care through a well-prepared, fairly compensated, and diverse workforce.

The following proposed initiatives create supports for early care and education professionals in Larimer County within the strategies laid out in the Workforce Roadmap. These initiatives are aimed at addressing the barriers currently faced by providers in Larimer County through the lenses described previously in this report and within the mission of the Early Childhood Council of Larimer County (ECCLC).

### Substitute Fund

Until the long-term goal of growing the workforce and ending the shortage of early care and education providers has been accomplished, access to qualified substitutes will continue to be a need in Larimer County. A few larger Larimer County early care and education providers recruit their own substitute pools but many smaller programs do not have the administrative and financial resources needed to do this on their own. Other centers use existing independently-operated substitute pools in the county.

Creating a Substitute Fund dedicated to recruiting, training and deploying substitutes in Larimer County provides a solution for programs that are struggling under the current workforce shortage. This fund would support the workforce in two ways:

- **Funding for substitute hours:** The fund can pay for a set amount of substitute hours at programs in the county. This will reduce some financial strain on centers and Family Child Care Home (FCCH) providers but more importantly, the collective impact of increased ability to pay for substitutes will signal an opportunity for growth to independently-operated substitute pools.
- **Funding for recruitment and training:** This model can also attract professionals to the field who are interested in part-time or occasional work, such as early care and education students, retirees, and the parents of young children. Some funding would be dedicated to outreach for these populations and any necessary training that is not already free or funded through another source.

This fund could be modeled after the **Early Care and Education Substitute Pool** in Washington and the **Colorado Department of Early Childhood Substitute Fund**. It could also be informed by the work done by the **Early Childhood Service Corps**. This program would be duplicative while the Department of Early Childhood's fund is active but could replace that program in Larimer County once it has ended.

This program could provide funding for each community-based licensed program in Larimer County to pay a substitute for up to 3 days a year. The substitute could be used on days when a teacher is on time off, calls in sick, or is participating in professional development opportunities. There are multiple scholarship and free training opportunities available now that could be leveraged to prepare substitutes, which would allow this fund to prioritize spending on substitute hours for programs, recruitment efforts, and training opportunities that are not covered by existing funds.

An annual fund of \$130,000 would be needed to cover the 3 substitute days per community-based licensed program and an additional \$70,000 per year would be needed to cover staff time for coaching and any training costs.

## Celebrating Linguistic Diversity Fund

According to census data around 9% of Larimer County residents speak a language other than English at home and over half of that number speak Spanish at home.<sup>85</sup> Due to the systematic undercounting of marginalized populations in the US Census, it can be assumed that in reality the percentage is higher.<sup>86</sup> Recognizing, rewarding and incentivizing the linguistic diversity of Larimer County's early care and education professionals is an important step in creating a more diverse and inclusive workforce.

The creation of a fund that celebrates linguistic diversity can be modeled on the **Bilingual Incentive Program** in New Mexico, which gives a one-time \$1,500 incentive for each additional language spoken. This incentive should be made available to all those who regularly work with children 0-5, including but not limited to licensed providers, FFN providers, home visiting professionals, early intervention specialists, and early childhood mental health consultants.

Proof of language proficiency can be shown through transcripts or official language exam certificates but should not prevent the receipt of the incentive if no official certificate or exam is available, especially when the language is the home language of the early childhood professional. The New Mexico program is intentionally inclusive of all languages, encouraging professionals that are proficient in Native languages or American Sign Language to apply.

An annual allotment of funding for 30 incentives, with priority given to those who speak a language other than English at home, would amount to an annual fund cost of \$45,000 in addition to a small investment of staff time to oversee the application and payment process.

## Child Care Entrepreneurship Fund

Given the staggering amount of Family Child Care Home closings in Larimer County in recent years, it is crucial to increase support to this vital part of the early care and education system.<sup>87</sup> A Child Care Entrepreneurship Fund could supplement the coaching services already provided by ECCLC to FCCH providers through a year-long program of coaching and business training opportunities for a cohort of Family Child Care Home providers and a one-time \$5,000 grant to assist with business costs. This program provides an opportunity for partnership with local organizations that currently give business training to providers such as the Larimer County Small Business Development Center and the City of Fort Collins. This program could begin after the funding for the Colorado Department of Early Childhood's **\$5,000 incentive payment** for unlicensed providers to become licensed has ended.

The program could be modeled after the **Childcare Entrepreneur Fund** created by the City of Boston, which provides \$3,500 of grant funding in addition to coaching and business training opportunities to the selected FCCH providers.

This program would focus on providing deep and meaningful impact to a small cohort of providers per year. Priority would be given to FCCH providers who have recently become licensed (or are about to become licensed), represent minority populations, provide infant and toddler care, or whose businesses are not generating sufficient revenue. Due to the isolated nature of providing care in FCCHs, operating this program through a cohort model can add value to participants by creating community and peer-support among the grantees.

Funding to support grants to one cohort of 5 FCCH providers per year would require an annual investment of \$25,000. An annual program operation budget of \$25,000 would be needed to cover staff time and other program costs.

## Specialist Consultation Fund

ECCLC's vision is for all children in Larimer County to be valued, healthy and thriving. Early care and education providers are a crucial part of this mission as they create nurturing environments where all

children can grow and learn. Every child is unique and sometimes providers may need additional guidance and resources to best care for children with challenging behaviors, developmental delays, or disabilities. A Specialist Consultation Fund could provide access to experts who would support providers and the children they teach, such as early intervention specialists, speech-language pathologists, occupational therapists, or pediatric nurse practitioners. Funding would be prioritized for children who are not currently receiving early intervention or other specialized services.

This initiative could be modeled on the **Kids First Nurse Consultation** program in Aspen, Colorado or as an expansion of ECCLC's existing Early Childhood Mental Health Program. If there is sufficient demand, specialists could be employed by ECCLC and provide services to Larimer County community-based early care and education programs. Alternatively, a fund could be established to help programs pay for consultation services from independent specialists.

Funding for this program varies depending on what type of model is used to implement it. The annual salaries for the specialists listed above can range from \$75,000 to over \$100,000 in Larimer County, making full-time employment of multiple specialists cost prohibitive. The alternative model of creating a Specialist Consultation Fund could provide around 1,000 specialist consultation hours a year for community-based early care and education programs at an annual cost of \$100,000.

### **Develop a Place-based Degree Program with local partners**

An optimal way to help the early care and education workforce meet the needs of children and families in Larimer County is to provide opportunities for career growth to incumbent providers. In order to reduce barriers to higher education for incumbent providers who do not have a secondary degree, educational opportunities can be created at their centers. Many of these providers would be considered non-traditional students, students at a different stage in life than the majority of college students or professionals who have taken an alternative educational pathway.

One of the most exciting recent initiatives in Colorado has been the development of **CU Denver's Place-based Bachelor's Degree**. Through CU Denver's program, providers earn their degree on-site, in their community-based center, through instruction from a teacher and a coach, who is an experienced educator from the center that has been hired by the university. This model could be used as a blueprint to begin research into starting a similar initiative in Larimer County. This could be carried out in partnership with Front Range Community College, Colorado State University's Department of Human Development and Family Studies and the department's Early Childhood Center. CSU's Early Childhood Center shares some aspects of CU Denver's place-based learning approach that could inform the creation of a program for non-traditional students that takes place in community-based centers.

A model could be developed where providers earn an associate's or bachelor's degree without taking a leave of absence from the workforce. Building off the experience and credentials that they already hold, a place-based degree program enables providers to take the next step on their career pathway in the most realistic learning environment possible. The program also empowers and employs experienced educators at local centers to become coaches to their peers.

A feasibility study for this program should be carried out to evaluate local demand for this type of offering and to ascertain the willingness of Front Range Community College or Colorado State University's Department of Human Development and Family Studies to create a program of this type. The study would also research what funding would be needed to support the program and its participants. A budget of \$60,000 would be sufficient to cover the cost of this feasibility study, including stakeholder engagement through surveys, focus groups and workshops, and the publication of a report with the recommendations on how to proceed with the creation of this program or any alternatives that are uncovered if the program is not feasible.



## K-12 Pay Parity Initiative

Insufficient pay, a chronic issue for the early care and education workforce, has contributed to high turnover and a poverty rate for early childhood teachers that is eight times higher than that of K-8 teachers.<sup>88</sup> In order to meet the Larimer County Workforce Roadmap goal of fair compensation for early care and education professionals, a K-12 Pay Parity Initiative should be considered to increase compensation without passing the cost on to families who are already struggling to afford care.

Pay parity, also called *comparable worth* or *pay equity*, “is based on the idea that those with equivalent qualifications and duties should receive equivalent compensation (i.e., salaries and benefits) for the amount of time they work (days or weeks per year).”<sup>89</sup> Working in early education and care requires essential knowledge, skills, values, and dispositions that are based on decades of research in the sciences of human development and learning.<sup>90</sup> Over half of Larimer County licensed early care and education professionals have an associate’s, bachelor’s or advanced degree. Additionally, the requirements to begin a career with the **Early Childhood Teacher (ECT) qualification** in Colorado are comparable to those in place to begin a career as a K-12 teacher.<sup>91</sup> A K-12 Pay Parity Initiative would provide compensation to address the gap between what licensed early care and education providers earn and what they would make in the K-12 system.

To estimate the cost of this initiative in Larimer County, the salaries for starting teachers in the three local public school districts were averaged at two educational attainment levels, teachers with a bachelor’s degree and teachers with a master’s degree. These averages were used to estimate an entry-level tier for providers who have not completed a degree program and to create a simplified three-tier pay scale. Table 1 below displays the pay scale at an hourly rate and income totals, assuming a 40-hour work week for 50 weeks a year. Table 2 displays the difference calculated between current market rates for early care and education professionals and professionals working in public K-12 school districts. Current pay was estimated through averaging the hourly rates currently advertised at local hiring early care and education centers for each tier.

**Table 1 – Pay Scale**

Tier	Educational attainment	Hourly rate	Monthly income	Annual income
1	Some high school - some college	\$20.00	\$3,333.33	\$40,000.00
2	Associate's or bachelor's degree	\$22.00	\$3,666.67	\$44,000.00
3	Master's degree or higher	\$24.00	\$4,000.00	\$48,000.00

**Table 2 – Estimated Gap Between Current Market Pay for Early Childhood and K-12 Educators**

Tier	Educational attainment	Hourly rate	Monthly income	Annual income
1	Some high school - some college	\$5.00	\$833.33	\$10,000.00
2	Associate's or bachelor's degree	\$6.00	\$1,000.00	\$12,000.00
3	Master's degree or higher	\$5.50	\$916.67	\$11,000.00

Three scenarios were created to estimate the total annual cost of this initiative. In Scenario 1, all licensed providers are eligible for supplemental pay. Half of licensed providers are eligible in Scenario 2 and a quarter are eligible in Scenario 3. Table 3, on the next page, displays the total annual cost of the initiative using an equal distribution across educational attainment levels. The number of providers for each tier is based on a 2019 estimation of educational attainment among licensed providers in Larimer County.<sup>92</sup>

**Table 3 – Estimated Total Annual Cost of the K-12 Pay Parity Initiative**

Scenario	Percentage of providers eligible	Number of eligible providers	Total annual cost
1	100%	1500	\$16,500,000.00
2	50%	750	\$8,244,000.00
3	25%	375	\$4,125,000.00

Eligibility criteria, aside from educational attainment, have not been included in these scenarios as they would require further research and input from stakeholders. Some examples of possible eligibility criteria could include participation in quality improvement initiatives, serving low-income populations, being located in a rural area or a **child care dessert**, or including infant and toddler slots. In a similar initiative, **The ExceleRate Illinois Pilot Project**, eligibility criteria included being rurally located, implementing the state’s Continuous Quality Improvement standards, and at least 40% of the program’s children participating in the Child Care Assistance Program. ECCLC could work with partners and stakeholders to identify which providers have the highest need and to explore if this initiative should target or prioritize a specific population of providers.

The estimates above are based on generalized information, and more research would be needed to confirm or modify the assumptions used. Further study would also be necessary to evaluate the pay gap for Family Child Care Homes since center-based data was used for estimating current pay. Market wages could also vary geographically as they do in local school districts.

This initiative would require significantly more funding than other initiatives included in this report, however it is also likely to have a greater impact for both care providers and well as the children in their care. This initiative requires investments to address the pay gap for early childhood providers and K-12 professionals, as well as investments to support the long-term operation of the initiative. Guaranteeing that the compensation payments would be available over time to providers supports their ability to achieve a more stable financial position. Income supplements like bonuses and stipends that are not long-term can work as an incentive or as emergency financial relief but do not increase the financial stability of providers over time. The benefits of ongoing compensation support for the financial stability of providers would be greater than those of one-time income supplements. Many providers may also experience a benefits cliff effect, where they no longer qualify for public benefits that they have used in the past. This initiative will need to include an educational component that helps providers understand how their public benefits may change if they accept supplemental income payments and what alternative benefit options are available to them.

As plans are put in place to explore how this initiative could be implemented in Larimer County, stakeholder engagement should be prioritized to understand any possible unintended consequences and incorporate proactive solutions into the initiative to avoid or mitigate any inadvertent negative impact.

### **Funding sources**

There are various sources of funding that could be used to support the launch of the above initiatives. For initiatives where the Early Childhood Council of Larimer County is the lead organization, the council may be able to turn to funding partners that have supported their work in the past. Some significant past funding partners include **United Way of Larimer County**, **Early Milestones Colorado**, the **Buell Foundation**, and the **Department of Early Childhood**.

Local governments can play an important role in funding initiatives that will impact their residents. Until the federal government modernizes its spending on early care and education, local governments can move at a quicker pace to provide funding for this economically vital industry. The 2017 **Talent 2.0 Regional Workforce Strategy Report** found that the lack of affordable child care was one of three structural barriers

to workforce recruitment and retention in the Fort Collins and Loveland metro areas. After five years, child care remains a workforce and economic issue that requires significant funding to address.

Local county and municipal governments have supported many early care and education projects in the county. The Larimer County Department of Human Services provided \$40,000 to ECCLC for the launch of their child care referral website, **Larimer Child Care Connect**. Larimer County Commissioners, recognizing that ECCLC's early childhood social-emotional work aligned with Larimer County's 2013-2017 Strategic Plan, provided approximately \$75,000 of seed funding for ECCLC to launch the Leap Coalition. The Leap Coalition has evolved to become the Early Childhood Mental Health (ECMH) Program, a fully embedded program area of the Council. Larimer County is also leveraging ARPA funding to support large-scale projects aimed at improving child care access, including the support of a 0-18 community campus model in Loveland alongside Teaching Tree Early Childhood Learning Center, Respite Care and the Boys & Girls Club of Larimer County.

The City of Fort Collins has provided **grant funding to local non-profit organizations** that increase access to child care for low-income families. The City of Fort Collins also played an important role in the **expansion of Teaching Tree's Fort Collins facility**. The **Town of Estes Park** supports early care and education through need-based scholarships and funding for capital and non-capital projects. County and municipal governments will continue to be important partners as more child care expansion projects are proposed to meet the needs of local families.

A **dedicated public funding stream** could be established to ensure that early care and education workforce initiatives have stable funding moving into the future. This will prevent the destabilizing ebbs and flows that occur when short-term funding sources run out and will increase the financial sustainability of the early care and education system in Larimer County. Some examples of existing **voter approved children's funds** in Colorado include **Strong Start** in San Miguel County, **Kids First** in Aspen, the **Right Start Project** in Summit County, and the **Denver Preschool Program**. In Colorado, these funds are usually sourced through sales or property taxes. Occasionally they are sourced through a sin tax, such as the taxes on nicotine products that were introduced at the state level in Colorado through Proposition EE.<sup>93</sup>

ECCLC is in the process of preparing a ballot measure proposal to include a county-wide sales and use tax increase question to voters at the November 2023 election for the purpose of supporting working parents, children, and early care and education programs in Larimer County. If the sales and use tax increase is approved by voters, funding would become available for the initiatives detailed in this report. In addition to supporting the early care and education workforce, the funds could be used to increase access to affordable early care and education for Larimer County families and to support quality improvement initiatives for programs.

## **Policy recommendations**

Over the past 2 years, the US has become more aware of how vital early care and education is to the health of our economy and communities. The positive spillover effects of early care and education have been shown to generate a 13% return on investment for government.<sup>94</sup> The US Department of Treasury **has argued** that the federal government should increase long-term, stable investment in early childhood. The Build Back Better proposal was a bold move in the right direction for the country as a whole; however, until changes at the federal level take place, it is up to states and local governments to increase funding. ECCLC will continue to advocate for funding dedicated to increasing access, affordability, quality and providing support to the early childhood workforce.

It is possible to create an early care and education ecosystem where providers are well-prepared for the complexities of early childhood, are fairly-compensated for their work, and are as diverse as the children they teach. Creating this future will require removing barriers at a systemic level to ensure that all who are



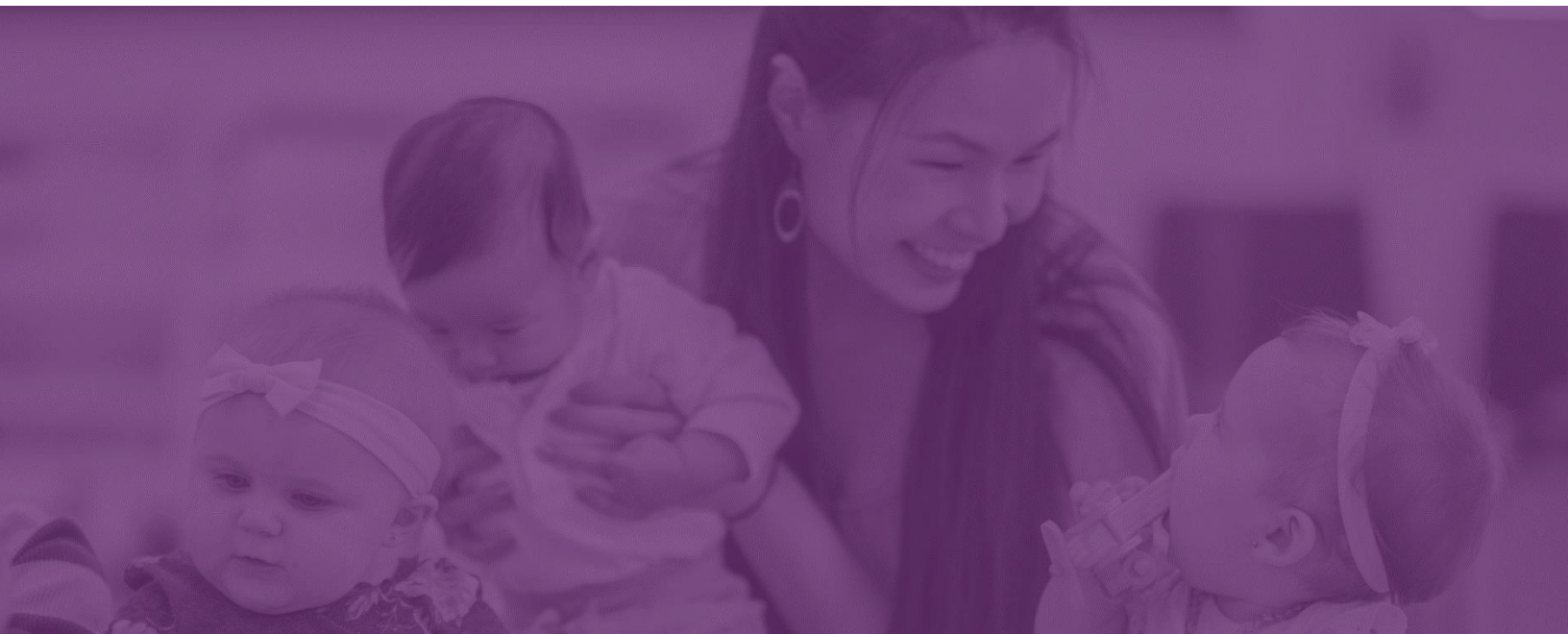
called to early care and education can choose this career path without jeopardizing their future well-being. ECCLC will continue to carry out initiatives that support the workforce and advocate for changes in policies that hinder the operations and growth of early care and education programs in Larimer County.

Specific policy recommendations to increase financial support to early care and education providers in Larimer County include:

- Evaluating the impact of sunseting stimulus fund programs to identify initiatives that should continue on a more long-term basis
- Exploring contracted slots for the Colorado Child Care Assistance Program (CCCAP) to give providers more financial stability with a focus on increases in provider pay
- Advocating for CCCAP and Universal Preschool rates to reflect the true cost of care
- Developing a suggested compensation scale for Larimer County early care and education professionals to inform workforce initiatives at the state level (See the Compensation Scales and Standards section of the **BUILD Initiative's compensation backgrounder** for further information and guidance).
- Creating a health care premium program through Connect for Health Colorado for all licensed and qualified exempt providers (modeled on the **program** administered by the Washington Health Benefits Exchange)

Specific policy recommendations to remove barriers to early care and education career pathways in Larimer County include:

- Removing systemic barriers to potential Family Child Care Home providers who live in subsidized housing and are not permitted to run a home-based business
- Ensuring that rules, regulations, professional development opportunities, licensing information, coaching and Childhood Development Associate exams available in the languages spoken in Larimer County
- Ensuring the licensing process protects the identities of applicants and any household members who do not have a social security number
- Removing barriers to and expanding federal student loan forgiveness programs to cover all eligible providers
- Creating funding sources so that all pathways to becoming Early Childhood Teacher qualified can be pursued without provider-debt
- Supporting the expansion of apprenticeships and place-based degree programs



# A Vision for the Future of Early Care and Education in Larimer County

When we prioritize the care and education of young children in our decisions, policies and budgets, we create a future where:



## Workforce

Compensation reflects qualifications versus a market failure

Educators reflect the diversity of the children they serve

Career pathways are accessible and debt-free



## Access

Infant and toddler slots available for working parents

The number of Family Child Care Homes is growing

CCAP rates promote access in high-need areas



## Affordability

Government investment reflects economic importance of early childhood

Affordability efforts prioritize infant & toddler slots

Households spend no more than 7% of income on child care



## Quality

Incentive funds accurately support costs of quality improvement

Colorado Shines reflects equity for FCCHs & Centers

Quality initiatives and funding are accessible to FFN providers



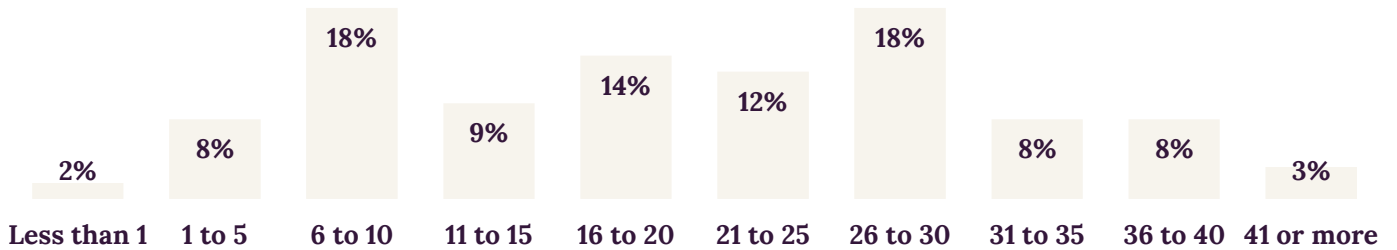
# Appendices

## Appendix A - Survey Results Summary

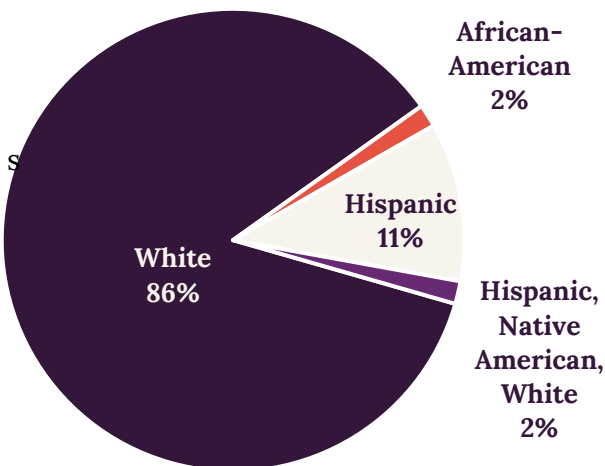
Respondents represented a variety of roles in early care and education and professionals that support the early care and education workforce and almost half of respondents lived in Larimer County. The majority of respondents work full-time (94%) and some full-time professionals (11%) have at least 1 additional job.

Title	Number of Respondents
Director, principal, owner or equivalent of an early care and learning center or school	19
Teacher at a school or early care and learning center	11
Family Child Care Home owner or provider	8
Provider coach or consultant	7
Administrative staff	5
Community college or university instructor	5
I don't work in directly with early childhood teachers but support the field in my work	2
Assistant Director	1
Assistant teacher at a school or early care and learning center	1
Early Childhood Council	1
Early Childhood Non-Profit Director	1
Home visitor	1
HR Shared Services	1
Mental health professional/clinician	1
Professional Development Manager	1
<b>Total</b>	<b>65</b>

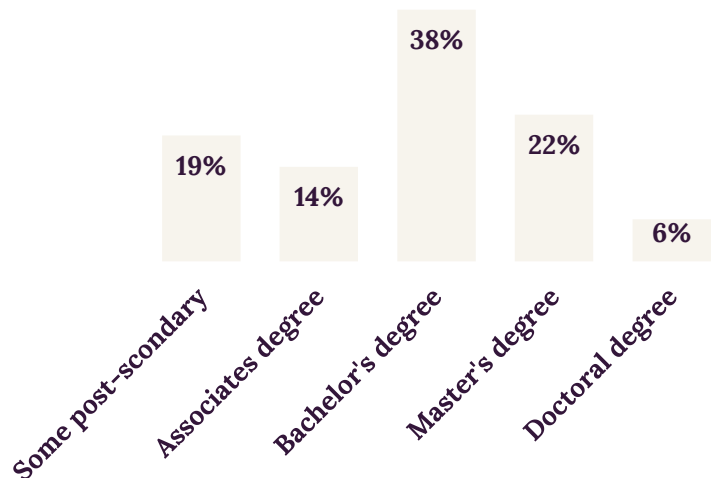
How many years have you been working in early childhood education and care?



What is your ethnic background?

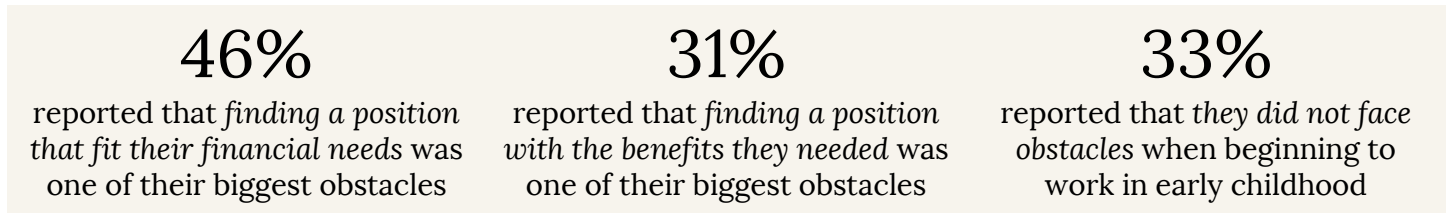


What is the highest level of education you have completed?





Over half of respondents who work directly in early care and education (directors, teachers, assistant directors, assistant teachers, and FCCH providers), *free training opportunities* and *scholarships* were helpful when beginning their career early care and education. *On-site or place-based learning opportunities* were helpful for a quarter of respondents and *mentorships* were helpful for 17% of respondents. This group reported that the two biggest obstacles they faced when entering the field were related to compensation, while a third did not face obstacles when beginning their careers:

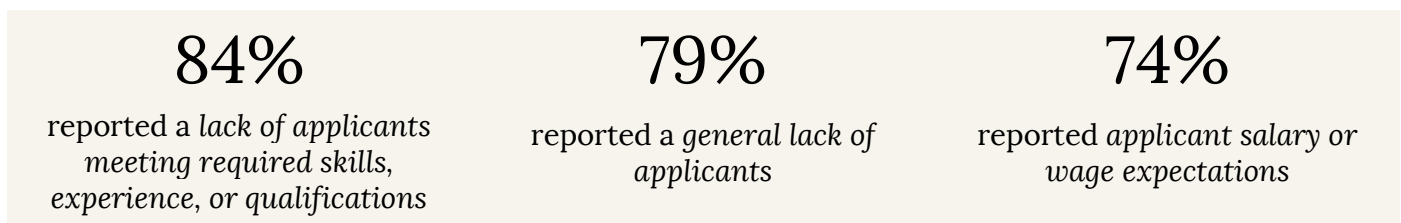


After joining the workforce, those working directly in early care and education continue learning and many reported that *free training opportunities* (54%) and *scholarships* (33%) help them to remain in the field. Income supplements or bonuses were also helpful for nearly a third of respondents. A supportive work environment, however, was the most frequently cited support, which helped 67% of respondents remain in the early care and education workforce. The majority of this group of respondents (85%) had *not changed jobs in the previous year* and over half (55%) saw themselves *remaining in their current role for the next 3 years*.

For teachers, accessing professional development opportunities appears to continue to be a challenge. The majority (75%) felt they had enough *relevant options to choose from* but only a third felt that they had sufficient *funding to pursue opportunities*. Having sufficient *paid time off* and *access to substitutes* to participate in professional development opportunities was the experience for just one respondent and only two felt that they had *sufficient energy* to participate in professional development opportunities.

Family Child Care Home (FCCH) providers differed in a few ways from the larger group. The two biggest obstacles for FCCH providers when they were entering the workforce were *having enough money to launch their home-based child care business* and *preparing their home for licensing*. Half of FCCH providers reported that stipends helped them to remain in the early care and education workforce.

When directors were asked what the biggest challenges to hiring had been in the previous year, the majority pointed to a lack of applicants and salary or wage expectations:



Directors reported that a *lack of qualifications* (63%), a *poor fit for the position* (53%), and an *inability to meet scheduling requirements* (42%) were the most common reasons for rejecting an application. They were also asked what the most commonly referenced reasons for leaving a position in their school or center were. The most common were:



## Appendix B - Definitions

### **Benefits cliff**

The sudden and often unexpected decrease in public benefits that can occur with a small increase in earnings

### **Colorado Child Care Assistance Program (CCCAP or CCAP)**

A program that helps families that are homeless, working, searching for work or in school find low-income child care assistance

### **Centers**

Larger licensed settings where children are cared for in a group away from their homes for all or part of the day, including preschools, co-ops, church-based, private, and nonprofit programs

### **Colorado Shines PDIS**

Colorado's Professional Development Information System (PDIS), which offers a broad array of e-learning courses addressing all aspects of child development, health and safety, and quality instruction to early care and education professionals

### **Colorado Shines QRIS**

Colorado's Quality Rating and Improvement System (QRIS), which monitors participating programs and professionals and assists them in improving their quality through assessment, training and tools

### **Community-based programs**

Early care and education programs where providers are not employed by the local school district

### **Early care and education**

When young children (0-5 for the purpose of this report) are cared for and taught by adults other than their parents or primary caregivers with whom they reside

### **Family Child Care Homes (FCCHs)**

Licensed family providers who care for a small group of children in a private residential setting

### **Family, Friend or Neighbor (FFN)**

Informal child care provided by a family member, friend or neighbor because it is convenient, affordable and available when and where they need it, some may be licensed exempt

### **Living wage**

A family's likely minimum food, childcare, health insurance, housing, transportation, and other basic necessities (e.g. clothing, personal care items, etc.) costs estimated using a market-based approach that draws upon geographically specific expenditure data ([MIT Living Wage Calculator's definition](#))

### **Pay parity**

Also called *comparable worth* or *pay equity*, is based on the idea that those with equivalent qualifications and duties should receive equivalent compensation (i.e., salaries and benefits) for the amount of time they work (from [Compensation and Comparable Worth](#))

### **Mixed delivery system**

A mixed-delivery system administers funds across licensed center- and family-based child care programs, Head Start, Early Head Start, public schools, and community-based organizations to ensure access to high-quality, affordable options for children through age five and their families. ([Early Care & Education Consortium](#))

### **School-based programs**

Typically, preschool programs for children ages 3 to 5 including Head Start and other early learning classes

### **True cost of care**

The cost to provide high-quality, developmentally appropriate, safe, and reliable child care staffed by a professionally compensated workforce

## Appendix C – Initiative Selection Rubric

Proposed initiative name:

Score	Criteria	A 1 looks like	A 5 looks like	Notes
	Follows Roadmap	Indirectly supports the recruitment, retention or development of the early childhood workforce	Directly supports the recruitment, retention or development of the early childhood workforce	
	Reduces Barriers	Reduces one or more of the barriers described in the Workforce Report in the short term	Reduces or eliminates one or more of the barriers described in the Workforce Report on a long-term basis	
	Supports the existing workforce	Attracts new ECE professionals without negatively impacting the incumbent workforce	Leverages and rewards the experience and institutional knowledge of the existing workforce	
	Supports fair compensation	Increases compensation even if temporarily or as a one-off	Promotes a comparable wage for required qualifications and responsibilities of ECE work in the long-term	
	Acknowledges benefits cliffs	Includes an educational component that allows providers to gauge the impact of the initiative on their benefits	Fully compensates for any benefits lost while improving the financial situation of the providers	
	Supports Diversity, Equity and Inclusion	Promotes quality care that is inclusive to all, creates equitable opportunities for development, and fosters the diversity of each child	Actively supports marginalized populations in the ECE workforce and in the community	
	Sustainability	Temporary programs that will not negatively impact the system if ended	Has dedicated funding for the life cycle of the program and a transition plan in place in the event of sunseting funds	
	Has a positive impact on the local ECE ecosystem	Studies and acknowledges possible unintended consequences of the initiative and includes mitigation strategies in plan	Proactively engages stakeholders to identify possible risks, acknowledges possible unintended consequences, and integrates preventative strategies into plan	



## Appendix D – Additional Resources

This report draws on dozens of reports, studies and analyses from around Colorado and across the US in addition to the knowledge and experience of the Early Childhood Council of Larimer County. Below is a list of resources that were especially helpful when exploring workforce supports.

### United States

[Early Childhood Workforce Index 2020](#) from the Center for the Study of Child Care Employment

[Underpaid and Unequal Racial Wage Disparities](#) in the Early Childhood Workforce from the Center for American Progress

[Improving Child Care Compensation Backgrounder](#) from Build Initiative

[Learning from ECE Apprenticeship Models Across the Country Webinar](#) from ECEPTS

### Colorado

[Colorado's Early Care and Education Professionals 2019 Snapshot Report](#) from The Colorado Evaluation and Action Lab at University of Denver

[Quality Child Care in Colorado: A Cost Study](#) from Bell Policy Center

[Bearing the Cost of Early Care and Education in Colorado: An Economic Analysis](#) from Early Milestones Colorado

# Endnotes

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- <sup>1</sup> Anatole S. Dekaban and Doris Sadowsky, Changes in brain weights during the span of human life: Relation of brain weights to body heights and body weights, *Annals of Neurology*, 1978, 4(4), 345–356.; Dana Charles McCoy, Hirokazu Yoshikawa, Kathleen M Ziol-Guest, Greg J Duncan, Holly S Schindler, Katherine Magnuson, Rui Yang, Andrew Koepp, and Jack P Shonkoff, “Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes,” *Educational researcher* 46, no. 8 (November 15, 2017): 474–487.; James J. Heckman, “Schools, Skills, and Synapses,” *Economic inquiry* 46, no. 3 (July 1, 2008): 289–324.; Pedro Carneiro and Rita Ginja, (2014), “Long-Term Impacts of Compensatory Preschool on Health and Behavior: Evidence from Head Start,” *American Economic Journal: Economic Policy* 6 (4): 135-173.
- <sup>2</sup> Common Sense Institute, Colorado Jobs and Labor Force Update: February 2021, <https://commonsenseinstitute.co/colorado-jobs-and-labor-force-update-february-2021/>.
- <sup>3</sup> U.S. Department of the Treasury, The Economics of Child Care Supply in the United States, 2021, <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>.
- <sup>4</sup> Ibid.
- <sup>5</sup> Jorge Luis García, James J. Heckman, Duncan Ermini Leaf, and María José Prados, Quantifying the Life-cycle Benefits of a Prototypical Early Childhood Program, 2017.
- <sup>6</sup> Jorge Luis García, Frederik H. Bennhoff, Duncan Ermini Leaf, James J. Heckman, The Dynastic Benefits of Early Childhood Education, Becker Friedman Institute Working Paper 2021-77.
- <sup>7</sup> Elise Gould and Hunter Blair, Who’s paying now? The explicit and implicit costs of the current early care and education system, Economic Policy Institute, 2020, <https://www.epi.org/publication/whos-paying-now-costs-of-the-current-ecce-system/>.; Claire C. Miller, " How Other Nations Pay for Child Care. The U.S. Is an Outlier.," *The New York Times*, October 6, 2021, <https://www.nytimes.com/2021/10/06/upshot/child-care-biden.html>.
- <sup>8</sup> U.S. Department of the Treasury, The Economics of Child Care Supply in the United States, 2021, <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>.
- <sup>9</sup> Lea J.E. Austin, Bethany Edwards, Raúl Chávez, and Marcy Whitebook, Racial Wage Gaps in Early Education Employments, Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley, 2019, <https://cscce.berkeley.edu/racial-wage-gaps-in-early-education-employment/>.
- <sup>10</sup> National Association for the Education of Young Children, Professional Standards and Competencies for Early Childhood Educators, 2019, [https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/standards\\_and\\_competencies\\_ps.pdf](https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/standards_and_competencies_ps.pdf).
- <sup>11</sup> Debra J. Ackerman, “The Costs of Being a Child Care Teacher: Revisiting the Problem of Low Wages,” *Educational Policy* 20 1 (2006): 85–112.; Evelyn Nakano Glenn, *Forced to Care: Coercion and Caregiving in America* (Cambridge, MA: Harvard University Press, 2010), available at <https://caringlabor.files.wordpress.com/2012/05/forced-to-care.pdf>.
- <sup>12</sup> Lea J.E. Austin, Bethany Edwards, Raúl Chávez, and Marcy Whitebook, Racial Wage Gaps in Early Education Employments, Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley, 2019, <https://cscce.berkeley.edu/racial-wage-gaps-in-early-education-employment/>.
- <sup>13</sup> Caitlin McLean, Lea J. E. Austin, Marcy Whitebook, and Krista L. Olson, Early Childhood Workforce Index – 2020, Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley, 2021, <https://cscce.berkeley.edu/workforce-index-2020/report-pdf/>.
- <sup>14</sup> Institute of Medicine and National Research Council, *The early childhood care and education workforce: Challenges and opportunities: A workshop report*, Washington, DC: The National Academies Press, 2012.
- <sup>15</sup> Marcy Whitebook, Carolee Howes, Deborah Phillips, and Caro Pemberton, “Who Cares? Child Care Teachers and the Quality of Care in America,” *Young children* 45, no. 1 (1989): 41–45.; Meg Franko, Andrew Brodsky, Ann Wacker, and Miriam Estrada, *Bearing the cost of early care and education in Colorado: An economic analysis*, Denver: Butler Institute for Families, Graduate School of Social Work, University of Denver, 2017.
- <sup>16</sup> Transition Working Group, Department of Early Childhood Transition Plan, Colorado Early Childhood Leadership Commission, 2021, <https://drive.google.com/file/d/1haHVk8WvAYOzAQ9Qe-QWgWxoUdYXIR92/view>.
- <sup>17</sup> Kids Count Data Center, Children under age 6 with all available parents in the labor force in Colorado, citing as the source U. S. Census Bureau, 2019, citing as the source data from the American Community Survey 5-Year Estimates, Table B23008.; Colorado Office of Early Childhood, Licensed Child Care Facility Lists: January – June 2022, 2022, [https://www.coloradoofficeofearlychildhood.com/oec/OEC\\_Resources?p=Resources&s=Reports-and-Data&lang=en](https://www.coloradoofficeofearlychildhood.com/oec/OEC_Resources?p=Resources&s=Reports-and-Data&lang=en).

- 
- <sup>18</sup> Child Care Aware of America, (2020), Demanding Change: Repairing our Child Care System, <https://www.childcareaware.org/demanding-change-repairing-our-child-care-system/>.
- <sup>19</sup> Colorado Department of Education, Colorado Preschool Program Legislative Report 2021, 2021, <https://www.cde.state.co.us/cpp/2021cpplegreport>.
- <sup>20</sup> Kids Count Data Center, Head Start enrollment by age group in Colorado, 2021, citing as the source data from the annual Program Information Report (PIR), administered by the Office of Head Start (OHS), Administration for Children and Families (ACF), U.S. Department of Health and Human Services (HHS).
- <sup>21</sup> Suzanne Delap, Meg Franko, Katherine Nicolaou, Gerardo Silva-Padrón, and Courtney Thornton, Measuring the Impact of COVID-19 on Colorado's Early Care and Learning Sector, Early Milestones, 2021, <https://earlymilestones.org/wp-content/uploads/2021/03/COVID-Wave-1-Report-Web.pdf>.
- <sup>22</sup> May 2021 State Occupational Employment and Wage Estimates, Bureau of Labor Statistics, U.S. Department of Labor, <http://stats.bls.gov/oes/>.
- <sup>23</sup> Amy K. Glasmeier, Living Wage Calculator, Massachusetts Institute of Technology, 2020, <https://livingwage.mit.edu/>.
- <sup>24</sup> Meg Franko, Andrew Brodsky, Ann Wacker, and Miriam Estrada, Bearing the cost of early care and education in Colorado: An economic analysis, Denver: Butler Institute for Families, Graduate School of Social Work, University of Denver, 2017.; Qualistar Colorado and Colorado Children's Campaign, Child care affordability in Colorado: An investigation into child care costs and recommended strategies for improving affordability, Denver, CO: The Women's Foundation of Colorado, 2014, [https://wp-cpr.s3.amazonaws.com/uploads/2019/06/colorado\\_cost\\_of\\_child\\_care\\_report\\_2014.pdf](https://wp-cpr.s3.amazonaws.com/uploads/2019/06/colorado_cost_of_child_care_report_2014.pdf)
- <sup>25</sup> May 2011 State Occupational Employment and Wage Estimates, Bureau of Labor Statistics, U.S. Department of Labor. <http://stats.bls.gov/oes/>; May 2021 State Occupational Employment and Wage Estimates Colorado, Bureau of Labor Statistics, U.S. Department of Labor. <http://stats.bls.gov/oes/>.
- <sup>26</sup> Calculated using US Bureau of Labor Statistics CPI Inflation Calculator, [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm)
- <sup>27</sup> Simon Workman, The True Cost of High-Quality Child Care Across the United States, The Center for American Progress, 2021, <https://www.americanprogress.org/article/true-cost-high-quality-child-care-across-united-states/>.
- <sup>28</sup> Colorado Department of Local Affairs, 2020 Population Survey, 2022, <https://drive.google.com/uc?export=download&id=1Klq9pdHjeGTFaol2VCabKnLJVB4Ksx0q>.
- <sup>29</sup> U.S. Census Bureau, "Quick Facts Larimer County, Colorado", accessed July 10, 2022, <https://www.census.gov/quickfacts/fact/table/larimercountycolorado/PST045221>.
- <sup>30</sup> U.S. Census Bureau, "Language Spoken at Home Larimer County, CO," 2 2020: ACS 5-Year Estimates Subject Tables, accessed July 10, 2022, <https://data.census.gov/cedsci/>.
- <sup>31</sup> U.S. Census Bureau, "ACS Demographic and Housing Estimates in Larimer County, CO," 2 2020 ACS 5-Year Estimates Data Profiles, accessed July 10, 2022, <https://data.census.gov/cedsci/>.
- <sup>32</sup> Ibid.
- <sup>33</sup> U.S. Census Bureau, "Selected Social Characteristics in Larimer County, CO," 2 2020 ACS 5-Year Estimates Data Profiles, accessed July 10, 2022, <https://data.census.gov/cedsci/>.
- <sup>34</sup> Kids Count Data Center, (2019), Children under 18 by family type in Larimer 2011-2015, citing as the source U. S. Census Bureau, American Community Survey 5-Year Estimates, Table B23008.
- <sup>35</sup> Ibid.
- <sup>36</sup> Amy K. Glasmeier, Living Wage Calculator, Massachusetts Institute of Technology, 2020, <https://livingwage.mit.edu/>.
- <sup>37</sup> U.S. Census Bureau, "Income in The Past 12 Months (in 2020 Inflation-Adjusted Dollars) Larimer County, CO," 2 2020: ACS 5-Year Estimates Subject Tables, accessed July 10, 2022, <https://data.census.gov/cedsci/>.
- <sup>38</sup> U.S. Department of Health and Human Services Administration for Children and Families, "Child Care and Development Fund (CCDF) Program," Federal Register 81 (190) (2016): 67438–67595, available at <https://www.gpo.gov/fdsys/pkg/FR-2016-09-30/pdf/2016-22986.pdf>; Early Childhood Council of Larimer County, "Average Cost of Care in Larimer County," 2021, <https://ecclc.org/app/uploads/2021/08/Average-Cost-of-Care-in-Larimer-County-2020-2021.pdf>.
- <sup>39</sup> Colorado Department of Education, Colorado Preschool Program Legislative Report 2021, 2021, <https://www.cde.state.co.us/cpp/2021cpplegreport>; Kids Count Data Center, Head Start enrollment by age group in Colorado, 2021, citing as the source data from the annual Program Information Report (PIR), administered by the Office of Head Start (OHS), Administration for Children and Families (ACF), U.S. Department of Health and Human Services (HHS).
- <sup>40</sup> Based on CCAP data provided to the Early Childhood Council of Larimer County.
- <sup>41</sup> Colorado Office of Early Childhood, Family Income Guidelines, accessed August 11, 2022, [https://docs.google.com/spreadsheets/d/1WzobLnLoxGbN\\_JfTuw3JUCZV5N7IA\\_0uvwEkloMt3Wk/edit#gid=1350122430](https://docs.google.com/spreadsheets/d/1WzobLnLoxGbN_JfTuw3JUCZV5N7IA_0uvwEkloMt3Wk/edit#gid=1350122430)



- 
- <sup>42</sup> Colorado Office of Early Childhood, Licensed Child Care Facility Lists: January 2018-2022, [https://www.coloradoofficeofearlychildhood.com/oec/OEC\\_Resources?p=Resources&s=Reports-and-Data&lang=en](https://www.coloradoofficeofearlychildhood.com/oec/OEC_Resources?p=Resources&s=Reports-and-Data&lang=en). Note: Centers that self-reported as closed were not included in the analysis.
- <sup>43</sup> Ibid.
- <sup>44</sup> Ibid.; Pat Ferrier, “New day care spots opening are not enough to ease Fort Collins shortage,” *The Coloradoan*, 2019, <https://eu.coloradoan.com/story/news/2019/09/03/fort-collins-child-day-care-shortage-new-spots/2143181001/>.
- <sup>45</sup> Ibid.
- <sup>46</sup> Lynda Laughlin, Who’s Minding the Kids? Child Care Arrangements: Spring 2011, 2013, The United States Census Bureau, <https://www.census.gov/library/publications/2013/demo/p70-135.html>.
- <sup>47</sup> Phillip Chung, Nathan Davis, Amy M. Roberts, Meg Franko, Molly Yost, and Amy Woolridge, The impact of COVID-19 on Family, Friend, and Neighbor care in Colorado: Ensuring ALL children are valued, healthy, and thriving, Mile High United Way, 2021, <https://unitedwaydenver.org/wp-content/uploads/2021/04/Family-Friend-and-Neighbor-Care-Study-with-Mile-High-United-Way.pdf>.
- <sup>48</sup> Colorado Evaluation and Action Lab and Mile High Data Viz, Colorado Early Care and Education Workforce, CO Office of Early Childhood, 2019, [https://public.tableau.com/views/OEC\\_PDIS\\_BIU\\_Analytics/Home?:showVizHome=no](https://public.tableau.com/views/OEC_PDIS_BIU_Analytics/Home?:showVizHome=no).
- <sup>49</sup> Ibid.
- <sup>50</sup> Ibid.
- <sup>51</sup> U.S. Census Bureau, "ACS Demographic and housing Estimates Larimer County, CO," 2020: ACS 5-Year Estimates Data Profiles, accessed July 10, 2022, <https://data.census.gov/cedsci/>.
- <sup>52</sup> Colorado Office of Early Childhood, (2022), Licensed Child Care Facility Lists: June 2022, [https://www.coloradoofficeofearlychildhood.com/oec/OEC\\_Resources?p=Resources&s=Reports-and-Data&lang=en](https://www.coloradoofficeofearlychildhood.com/oec/OEC_Resources?p=Resources&s=Reports-and-Data&lang=en). Note: Centers that self-reported as closed were not included in the analysis.
- <sup>53</sup> Colorado Department of Local Affairs, Population by Single Year of Age – County: Larimer County 2027, <https://coloradodemography.github.io/population/data/sya-county/>.
- <sup>54</sup> Debra J. Ackerman, “The Costs of Being a Child Care Teacher: Revisiting the Problem of Low Wages,” *Educational Policy* 20 1 (2006): 85–112.; Diana D. Schaack and Vi-NHuan Le, Retaining early childhood teachers in Colorado: Factors that predict turnover, retention, and well-being. Denver, CO: University of Colorado Denver, 2017.; JB Pritzker, Katherine Kaufmann, and Jeffrey Bradach, “The Early Childhood Challenge for Philanthropists,” *Stanford Social Innovation Review*, 2015. <https://doi.org/10.48558/CMKF-1T75>.; Suzanne Delap, Meg Franko, Katherine Nicolaou, Gerardo Silva-Padrón, and Courtney Thornton, Measuring the Impact of COVID-19 on Colorado’s Early Care and Learning Sector, *Early Milestones*, 2021, <https://earlymilestones.org/wp-content/uploads/2021/03/COVID-Wave-1-Report-Web.pdf> .
- <sup>55</sup> Marcy Whitebook, Building a Skilled Teacher Workforce: Shared and Divergent Challenges in Early Care and Education and in Grades K-12, 2014, [https://cscce.berkeley.edu/wp-content/uploads/publications/Building-a-Skilled-Teacher-Workforce\\_September-2014\\_9-25.pdf](https://cscce.berkeley.edu/wp-content/uploads/publications/Building-a-Skilled-Teacher-Workforce_September-2014_9-25.pdf).; U.S. Department of the Treasury, The Economics of Child Care Supply in the United States, 2021, <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>.
- <sup>56</sup> Diana D. Schaack and Vi-NHuan Le, Retaining early childhood teachers in Colorado: Factors that predict turnover, retention, and well-being. Denver, CO: University of Colorado Denver, 2017.; Marcy Whitebook, Building a Skilled Teacher Workforce: Shared and Divergent Challenges in Early Care and Education and in Grades K-12, 2014, [https://cscce.berkeley.edu/wp-content/uploads/publications/Building-a-Skilled-Teacher-Workforce\\_September-2014\\_9-25.pdf](https://cscce.berkeley.edu/wp-content/uploads/publications/Building-a-Skilled-Teacher-Workforce_September-2014_9-25.pdf).
- <sup>57</sup> Diana D. Schaack and Vi-NHuan Le, Retaining early childhood teachers in Colorado: Factors that predict turnover, retention, and well-being. Denver, CO: University of Colorado Denver, 2017.
- <sup>58</sup> Diana D. Schaack and Vi-NHuan Le, The Colorado Early Childhood Workforce Survey 2017: Findings from Denver Metropolitan Area, Denver, CO: University of Colorado Denver, 2017.
- <sup>59</sup> Diana D. Schaack and Vi-NHuan Le, Retaining early childhood teachers in Colorado: Factors that predict turnover, retention, and well-being. Denver, CO: University of Colorado Denver, 2017.
- <sup>60</sup> Qualistar Colorado and The Women’s Foundation of Colorado, Leading Colorado’s Early Care and Education Workforce, 2016, <https://www.wfco.org/file/Qualistar-Leading-Colorados-ECE-Workforce-Report.pdf>.
- <sup>61</sup> Qualistar Colorado and The Women’s Foundation of Colorado, Leading Colorado’s Early Care and Education Workforce, 2016, <https://www.wfco.org/file/Qualistar-Leading-Colorados-ECE-Workforce-Report.pdf>.; Suzanne Delap, Meg Franko, Katherine Nicolaou, Gerardo Silva-Padrón, and Courtney Thornton, Measuring the Impact of COVID-19 on Colorado’s Early Care and Learning Sector, *Early Milestones*, 2021, <https://earlymilestones.org/wp-content/uploads/2021/03/COVID-Wave-1-Report-Web.pdf>.

- 
- <sup>62</sup> Debra J. Ackerman, “The Costs of Being a Child Care Teacher: Revisiting the Problem of Low Wages,” *Educational Policy* 20 1 (2006): 85–112.; Evelyn Nakano Glenn, *Forced to Care: Coercion and Caregiving in America* (Cambridge, MA: Harvard University Press, 2010), available at <https://caringlabor.files.wordpress.com/2012/05/forced-to-care.pdf>.
- <sup>63</sup> Remove Lawful Presence Verification Credentialing, Colorado S.B.21-077, 2021 Regular Session.
- <sup>64</sup> Suzanne Delap, Meg Franko, Katherine Nicolaou, Gerardo Silva-Padrón, and Courtney Thornton, Measuring the Impact of COVID-19 on Colorado’s Early Care and Learning Sector, Early Milestones, 2021, <https://earlymilestones.org/wp-content/uploads/2021/03/COVID-Wave-1-Report-Web.pdf>.
- <sup>65</sup> Suzanne Delap, Meg Franko, Katherine Nicolaou, Gerardo Silva-Padrón, and Courtney Thornton, Measuring the Impact of COVID-19 on Colorado’s Early Care and Learning Sector, Early Milestones, 2021, <https://earlymilestones.org/wp-content/uploads/2021/03/COVID-Wave-1-Report-Web.pdf>.
- <sup>66</sup> “Addressing Benefits Cliffs,” National Conference of State Legislators, August 20, 2019, <https://www.ncsl.org/research/human-services/addressing-benefits-cliffs.aspx>.
- <sup>67</sup> National Association for the Education of Young Children, (2020), *Unifying Framework for the Early Childhood Education Profession.*, <https://powertotheprofession.org/wp-content/uploads/2020/03/Power-to-Profession-Framework-03312020-web.pdf>.
- <sup>68</sup> Debra J. Ackerman, “The Costs of Being a Child Care Teacher: Revisiting the Problem of Low Wages,” *Educational Policy* 20 1 (2006): 85–112.; Evelyn Nakano Glenn, *Forced to Care: Coercion and Caregiving in America* (Cambridge, MA: Harvard University Press, 2010), available at <https://caringlabor.files.wordpress.com/2012/05/forced-to-care.pdf>;  
Jeanne L. Reid, Sharon Lynn Kagan, and Catherine Scott-Little, “New Understandings of Cultural Diversity and the Implications for Early Childhood Policy, Pedagogy, and Practice.” *Early child development and care* 189, no. 6 (2019): 976–989.
- <sup>69</sup> Obianuju O. Berry, Amalia Londoño Tobón, and Wanjikū F. M Njoroge. “Social Determinants of Health: The Impact of Racism on Early Childhood Mental Health.” *Current psychiatry reports* 23, no. 5 (2021): 23–23.
- <sup>70</sup> Ann Schmicke and Erica Meltzer, “Colorado lawmakers pledge \$100 million for child care,” *Chalkbeat Colorado*, April 21, 2022, <https://co.chalkbeat.org/2022/4/20/23034594/colorado-bill-100-million-child-care-support-federal-relief-arpa>;  
Hailey Gibbs and MK Falgout, “The American Rescue Plan Shored Up Child Care, But a Long-Term Solution Is Necessary,” *Center for American Progress*, March 21, 2022, <https://www.americanprogress.org/article/the-american-rescue-plan-shored-up-child-care-but-a-long-term-solution-is-necessary/>.
- <sup>71</sup> Jorge Luis García, James J. Heckman, Duncan Ermini Leaf, and María José Prados, *Quantifying the Life-cycle Benefits of a Prototypical Early Childhood Program*, 2017.; U.S. Department of the Treasury, *The Economics of Child Care Supply in the United States*, 2021, <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>.
- <sup>72</sup> The White House Briefing Room, “Build Back Better Framework”, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/28/build-back-better-framework/>
- <sup>73</sup> Cigarette Tobacco And Nicotine Products Tax, Colorado H.B. 20-1427, 2020 Regular Session.
- <sup>74</sup> Ann Schmicke, “This Colorado ski town had an early childhood education crisis. Here’s what local leaders did about it.” *Chalkbeat Colorado*, October 6, 2017, <https://co.chalkbeat.org/2017/10/6/21103492/this-colorado-ski-town-had-an-early-childhood-education-crisis-here-s-what-local-leaders-did-about-i>
- <sup>75</sup> James J. Heckman, “Schools, Skills, and Synapses,” *Economic inquiry* 46, no. 3 (July 1, 2008): 289–324.; U.S. Department of the Treasury, *The Economics of Child Care Supply in the United States*, 2021, <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>.
- <sup>76</sup> Transition Working Group, *Universal Preschool Recommendations*. Colorado Early Childhood Leadership Commission, 2022  
<https://cdec.colorado.gov/sites/cdec/files/documents/FINALUniversalPreschoolRecommendations.pdf>
- <sup>77</sup> Ann Schmicke, “How Colorado will boost child care with latest round of federal COVID aid,” *Chalkbeat Colorado*, September 27, 2021, <https://co.chalkbeat.org/2021/9/27/22696960/covid-relief-early-childhood-colorado-american-rescue-plan>.
- <sup>78</sup> Colorado Child Care Assistance Program Contracted Slots Pilot Report, Early Milestones Colorado, 2020, <https://earlymilestones.org/wp-content/uploads/2020/03/CCCAP-Contracted-Slots-Pilot-Final-Report.pdf>.
- <sup>79</sup> Chad Dorn, *Infant and Toddler Contracted Slots Pilot Program: Evaluation Report*, Pennsylvania Office of Child Development and Early Learning, 2020, available at [https://s35729.pcdn.co/wp-content/uploads/2020/11/IT-Pilot-Evaluation-Report\\_PA\\_Final.V2.pdf](https://s35729.pcdn.co/wp-content/uploads/2020/11/IT-Pilot-Evaluation-Report_PA_Final.V2.pdf).; Harriet Dichter and Ashley LiBetti, *Improving Child Care Compensation Backgrounder* October

---

2021, The BUILD Initiative, 2021, available at <https://buildinitiative.org/resource-library/background-er-on-compensation-in-child-care/>.

<sup>80</sup> Income Tax Credit For Early Childhood Educators, Colorado H.B. 19-1005, 2019 Regular Session.

<sup>81</sup> Diana D. Schaack and Vi-NHuan Le, Retaining early childhood teachers in Colorado: Factors that predict turnover, retention, and well-being. Denver, CO: University of Colorado Denver, 2017.

<sup>82</sup> Qualistar Colorado and The Women's Foundation of Colorado, Leading Colorado's Early Care and Education Workforce, 2016, <https://www.wfco.org/file/Qualistar-Leading-Colorados-ECE-Workforce-Report.pdf>.

<sup>83</sup> Bright Horizons, 2019 Annual Report on Form 10-K, 2020, <https://investors.brighthorizons.com/static-files/5686ac43-20fd-4d5a-8a30-4f64a724e47f>.

<sup>84</sup> Louise Stoney and Libbie Naman Poppic, "Shared Services: Strengthening Early Care and Education," Communities and Banking (Fall, 2010): 19-21. [http://www.bostonfed.org/commdev/c&b/2010/fall/Stoney\\_Poppick\\_early\\_education.pdf](http://www.bostonfed.org/commdev/c&b/2010/fall/Stoney_Poppick_early_education.pdf).

<sup>85</sup> U.S. Census Bureau, "Language Spoken at Home Larimer County, CO," 2 2020: ACS 5-Year Estimates Subject Tables, accessed July 10, 2022, <https://data.census.gov/cedsci/>.

<sup>86</sup> U.S. Census Bureau, "Census Bureau Releases Estimates of Undercount and Overcount in the 2020 Census," 2022, <https://www.census.gov/newsroom/press-releases/2022/2020-census-estimates-of-undercount-and-overcount.html>.

<sup>87</sup> Colorado Office of Early Childhood, Licensed Child Care Facility Lists: January 2018-2022, [https://www.coloradoofficeofearlychildhood.com/oec/OEC\\_Resources?p=Resources&s=Reports-and-Data&lang=en](https://www.coloradoofficeofearlychildhood.com/oec/OEC_Resources?p=Resources&s=Reports-and-Data&lang=en). Note: Centers that self-reported as closed were not included in the analysis.

<sup>88</sup> Caitlin McLean, Lea J. E. Austin, Marcy Whitebook, and Krista L. Olson, Early Childhood Workforce Index – 2020, Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley, 2021, <https://cscce.berkeley.edu/workforce-index-2020/report-pdf/>; Marcy Whitebook, Carolee Howes, Deborah Phillips, and Caro Pemberton, "Who Cares? Child Care Teachers and the Quality of Care in America," *Young children* 45, no. 1 (1989): 41–45.

<sup>89</sup> Dan Bellm and Marcy Whitebook, Compensation and comparable worth: What lies ahead for California's preschool teachers? Berkeley, CA: Center for the Study of Childcare Employment, 2004.

<sup>90</sup> National Association for the Education of Young Children, Professional Standards and Competencies for Early Childhood Educators, 2019, [https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/standards\\_and\\_competencies\\_ps.pdf](https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/standards_and_competencies_ps.pdf).

<sup>91</sup> Colorado Evaluation and Action Lab and Mile High Data Viz, Colorado Early Care and Education Workforce 2019 Larimer County Snapshot, CO Office of Early Childhood, 2019, [https://public.tableau.com/views/OEC\\_PDIS\\_BIU\\_Analytics/Home?:showVizHome=no](https://public.tableau.com/views/OEC_PDIS_BIU_Analytics/Home?:showVizHome=no).

<sup>92</sup> Ibid.

<sup>93</sup> Cigarette Tobacco And Nicotine Products Tax, Colorado H.B. 20-1427, 2020 Regular Session.

<sup>94</sup> Jorge Luis García, James J. Heckman, Duncan Ermini Leaf, and María José Prados, Quantifying the Life-cycle Benefits of a Prototypical Early Childhood Program, 2017.