EXECUTIVE SUMMARY: BEARING THE COST OF EARLY CARE & EDUCATION IN COLORADO

Colorado's economy is healthy, with higher average annual income and personal income growth, and lower unemployment rates, than in the United States as a whole. Within the context of this thriving economy, the licensed, paid early care and education industry serves over 100,000 children birth-4 years old[1] and employs more than 22,000 workers.[2] It adds $2.25 to the state economy for every dollar of services purchased in the industry.[3] At the same time, the cost of high-quality care is prohibitive for many families in Colorado[4] and wages for the early care and education workforce do not promote family self-sufficiency.[5]

This report explores this paradox. How does an industry that contributes money and both short- and long-term workforce to the state's economy, also shortchange the parents, children, and the professionals that rely on it?

The Early Care and Education Sector is a Key Driver for Colorado's Economy

The early care and education sector is a key driver for the state's economy. The industry itself directly produces over $639 million and 22,000 jobs annually.[6] It also indirectly generates nearly $800 million in annual sales and services, over 10,000 jobs, and more than $265 million in related earnings across Colorado's economy. Considered all together, the industry generates $1.4 billion in annual sales and services, over 32,000 jobs, and more than $619 million in related statewide earnings.[7] It's economic impact is similar to other educational sectors (e.g., K-12 and higher education) and industries such as home health care, hotels and lodging, amusement and recreation services, and food and drinking services.[8]

The early care and education sector also generates additional economic benefits that other industries don't. It generates $4.4 billion

[1] Calculated using data from: Child Care Aware of America. (2015). *State child care facts in the state of Colorado*.
[2] RegionTrack, Inc. (2015). *Child Care in State Economies*. Oklahoma City, OK: Committee for Economic Development; Alliance for Early Success.
[3] Bureau of Economic Analysis. (2015). Table 1.5: Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Colorado (Type II) & Table 2.5: Total Multipliers for Output, Earnings, Employment, and Value Added by Industry Aggregation Colorado (Type II).
[4] RegionTrack, Inc. (2015). *Child Care in State Economies*. Oklahoma City, OK: Committee for Economic Development; Alliance for Early Success.
[5] Bureau of Economic Analysis. (2014). *Real Personal Income for States and Metropolitan Areas, 2014*. News Release, July 7, 2016. U.S. Department of Commerce: Washington, DC.
[6] RegionTrack, Inc. (2015). *Child Care in State Economies*. Oklahoma City, OK: Committee for Economic Development; Alliance for Early Success.
[7] Authors' calculations and analyses. See full report for details.
[8] Bureau of Economic Analysis. (2015). Table 1.5: Total Multipliers for Output, Earnings, Employment, and Value Added by Detailed Industry Colorado (Type II) & Table 2.5: Total Multipliers for Output, Earnings, Employment, and Value Added by Industry Aggregation Colorado (Type II).

in earnings annually by enabling parents to work and it saves the economy $832 million each year due to the long-term effects of a quality early education (e.g., avoided special education and juvenile justice costs, and increased lifetime earnings).[9]

Families and Early Care and Education Professionals Bear the Cost

Currently, public programs provide approximately 28% of the revenue for Colorado's early care and education industry, while family fees pay the remaining 72%.[10] In addition to the costs paid by families, the costs borne by early care and education businesses and professionals are also substantial:

- Families in Colorado with an infant or toddler in center-based care pay 44% more for a year of care than they would pay for a year of public college tuition in the state[11]
- Early care and education businesses operating at a level 3 on Colorado Shines quality rating system have to cover an average annual gap between revenues and expenses of over $37,000[12]
- Early care and education professionals earn just 51% of the average salary for kindergarten teachers in Colorado, placing them at the poverty level for families with one adult and two children

Because of the high cost of paid, licensed early care and education, many families find alternatives, such as family, friends, and neighbors (FFN), who will either provide care for free or for substantially lower costs than the licensed system. Recent national studies estimate that FFN providers care for nearly 60% of children in families where all available parents work.[13] Other parents drop out of the workforce altogether.

Early care and education businesses and professionals also have to make choices to enable them to bear the cost of providing child care in an environment where revenues do not meet expenses. For businesses, this can mean cutting costs (and related quality), most frequently by paying extremely low wages and hiring less qualified workers to fill open positions. For early care and education professionals, the price is wages so low that they qualify for public subsidy programs like the Supplemental Nutrition Assistance Program (SNAP), Housing and Urban Development (HUD) assistance, and Medicaid/Child Health Insurance Plans.[14]

The children themselves also pay a price for a system that is not adequately funded. When families can't afford quality care and when early care and education businesses can't afford to provide quality, children spend their earliest, formative years in environments that do not adequately prepare them for school and life. The $832 million in economic benefits from quality care that Colorado currently realizes comes from children who are in programs that are accredited or that are Level 3 or higher on

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[9] Authors' calculations and analyses. See full report for details.
[10] RegionTrack, Inc. (2015). *Child Care in State Economies*. Oklahoma City, OK: Committee for Economic Development; Alliance for Early Success.
[11] RegionTrack, Inc. (2015). *Child Care in State Economies*. Oklahoma City, OK: Committee for Economic Development; Alliance for Early Success.
[12] Authors' modeling. See report for full details.
[13] Davis, N. (2013) *School readiness for all: The contribution of family, friend, and neighbor care in Colorado*. Colorado Children's Campaign: Denver, CO.
[14] *Pearce, D. (2015). The self-sufficiency standard for Colorado 2015. The Colorado Center on Law and Policy: Denver, CO.*

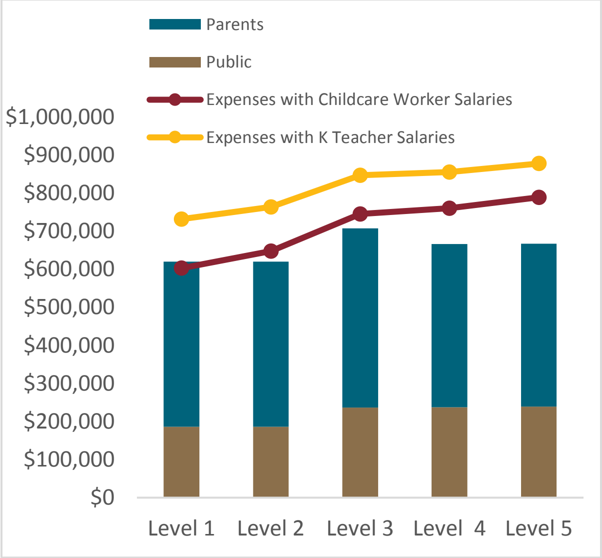
the Colorado Shines rating system. This number could be substantially higher if more children were in high-quality care from birth through age four. Unfortunately, the industry cannot afford to provide this kind of quality to all children.

Understanding What Drives the Industry's Lopsided Balance Sheets

To better understand the drivers that influence the costs of providing early care and education, we adapted an economic model developed by Louise Stoney and Libby Poppick in 2016. Adaptations included salary adjustments to reflect current data, variations to wages based at increasing provider quality levels, county-specific modifications to market and reimbursement rates, and staff-child ratio updates.

Collectively, our modeling shows that early care and education revenue sources in Colorado are insufficient to meet the costs of providing high-quality early care and education, even at the low wages that are prevailing for childcare workers and preschool teachers. At livable salaries comparable to their kindergarten teacher peers, the gap between revenues and expenses widens even further. Figure 1 shows a mid-sized early care and education provider in a medium cost-of-living county that serves 30% subsidy clients, provides infant/toddler care, and has industry standard levels of bad debt (3%) and staff turnover (30%).

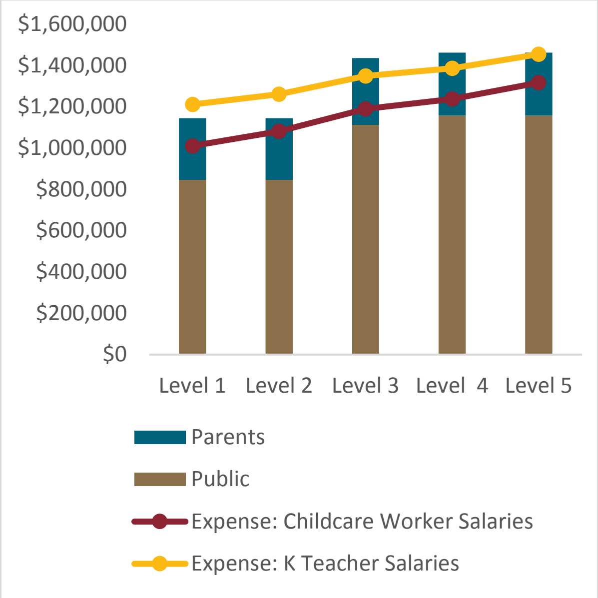
Figure 1. Expenses/revenues under typical operating scenario



Several factors impact the revenue and expense balance, but the most significant factors are teacher salary levels, regional market rates and child care reimbursement structures, provider size, whether a provider serves infants and toddlers, turnover rates, and levels of bad debt (unpaid tuition).

To the extent that providers can adjust for these factors they could improve their sustainability and profitability. For instance, a *large* provider in the same mid-range cost-of-living region of the state as the typical scenario above would be able to meet or exceed expenses if they were to serve 75% of children through public reimbursement, *not* serve infants and toddlers, and have exceptionally low turnover (10%). These same providers could even raise salaries to parity with kindergarten teachers and still meet expenses at high levels of quality, assuming tiered reimbursements that meet or are higher than market rates at high-quality levels, as they are in this Colorado county (Figure 2).

Figure 2. Expenses/revenues under profit-maximizing operating scenario



However, building a large early care and education business with such low turnover requires significant capital and operating investments along with strong workforce incentives to minimize turnover. Additionally, excluding services for infants and toddlers is a burden on children and families that is already reflected in the market, which statewide only has licensed capacity to care for 18% of children under 2 years old.[15] Similarly, there are not enough child care support dollars available to allow all businesses to serve a high proportion of children with subsidized care, and in some counties the reimbursement structure does not support strong tiered reimbursement structures that incentivize quality.

Solutions for Market Failure in the Early Care and Education Sector

The reality of the early care and education economy and the ideal are presently far apart. As the early care and education industry currently operates, families are unable to pay the full cost of the quality care and education that they want and that society benefits from. However, society is not picking up the marginal costs between what families can afford and what quality services cost. The result is that the early care and education sector is in market failure.

Innovative strategies are needed to create sustainability within the sector. Possible solutions may include: increasing public funding for early care and education in Colorado to the national average, creating institutional subsidies, instituting tax credits for early learning professionals, and shifting turnover expenses to increased salaries. In particular, based on the results of the current study, the report makes the following recommendations:

Increase funding for early care and education subsidies. Current public funding for early care and education subsidies, such as the Colorado Child Care Assistance Program (CCCAP), the Colorado Preschool Program (CPP), and Head Start does not meet the demand for these services.[16,17] Additional funding for early care and education funding assistance could help more children and families access quality care, put more parents in the workforce, improve the

[15] Qualistar Colorado and Colorado Children's Campaign. (2014). *Child care affordability in Colorado: An investigation into child care costs and recommended strategies for improving affordability*. The Women's Foundation of Colorado: Denver, CO.

[16] Hardin, J. & Fulton, B. (2017). Colorado Child Care Assistance Program stakeholder convening series final report. Denver, CO: Civic Canopy.

[17] Colorado Department of Education. (2016). *Colorado Preschool Program Amended Legislative Report*. Denver, CO.

solvency of providers, and increase resources for raising early childhood teachers' salaries. State lawmakers should explore opportunities for either accessing more federal funding and/or creating new state early care and education funding streams.

Improve tiered reimbursement structures. Our modeling demonstrates that counties with tiered reimbursement strategies that effectively incentivize quality and the care of infants and toddlers can promote provider sustainability. In addition, those counties that reimburse quality programs at or above market rates are better able to counteract the market failure of the industry. In Colorado, the state and counties should work together to encourage each county to set reimbursements rates that will encourage the provision of infant/toddler care and maximize high-quality early care and education for all children.

Create institutional subsidies. Institutional subsidies have been used to support other industries we value as a society, such as solar energy and farming, where the public sector steps in to pay the marginal cost of a public good. A similar mechanism for the early care and education industry could be made available to providers as direct institutional subsidies that are tiered to reflect quality levels and the care of infants and toddlers. That is, higher quality providers, and especially those who provide care to underserved age groups, should be incentivized with higher subsidies.

Institute tax credits for early care and education professionals. At a time when the state has greatly increased professional development and educational expectations for early care and education professionals, it is more important than ever to recognize increased skill development with appropriate wage increases. One option for improving workforce retention, reducing turnover, and compensating professionals for their increased educational attainment is to institute professional tax credits that award refundable, graduated tax credits to early childhood educators who earn increasingly higher levels of education and credentials.[18]

These recommendations and the research supporting them are explored more deeply in the full report.

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[18] Ullrich, R., Hamm, K., & Schochet, L. (2016). *Six policies to support the early childhood workforce.* Washington, DC: Center for American Progress.