



EARLY CARE *and* EDUCATION

Support Today's Workers and Plant the Seeds for Tomorrow's Success

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Indiana University Southeast Applied Research and Education Center in collaboration with the
Southern Indiana Early Learning Coalition
Funded by a community partnership grant from Early Learning Indiana



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The Applied Research and Education Center (AREC) is an outreach project of Indiana University (IU) Southeast. The AREC provides research, consulting and technical assistance to nonprofit organizations, foundations, government agencies and local businesses. The student staff enhances classroom learning through applied research projects as it actively engages every stage of each community-based project. The AREC combines learning, teaching and doing to support and empower community organizations in the IU Southeast service region.

Southern Indiana Early Learning Coalition

Committee Members

The Southern Indiana Early Learning Coalition, consisting of Clark, Floyd, Harrison, Scott, and Washington Counties, strives to improve the wellbeing of our community's youth through orchestrating community collaboration for the most effective outcomes.

The committee has been meeting regularly for two years, exploring opportunities to increase awareness and to improve early care and education in Southern Indiana.

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Executive Summary

Early Care and Education in Southern Indiana Louisville-Metro

High quality early care and education (ECE) provides social and economic benefits to employers, working parents, those who work in the child care sector, the children who will comprise our future labor force, and to the communities and the larger economy.

In the five Southern Indiana Louisville-Metro (SILM) counties (Clark, Floyd, Harrison, Scott, and Washington), an estimated 77.4% of children birth to age 5 live in households where all parents work. These children represent an opportunity to invest in quality of life and economic growth.

Investments in high quality early care and education (ECE) provide immediate benefits to local business and the region's economy. Early

Care and Education enjoy healthy economic development multipliers in both employment and earnings. This means that ECE produces economic activity and benefits beyond the transactions between parents and providers. Society's investments in early childhood education and care "can be an essential component in economic development" and community building.

ECE has higher than average output multipliers and lower, but still meaningful, employment multipliers (Figure 1 for an explanation of these measures of economic impact). According to Regiontrack, in the state of Indiana (2012), birth to five care and education had the following statewide impact:

- * Direct Output = \$625.1 million
Total Output = \$1.18 billion
- * Direct Earnings = \$311.7 million
Total Earnings Impact = \$540.7 million
- * Direct Employment = 26,249
Total Employment Impact = 36,180

Child care directly impacts earnings for three groups of workers: parents, child care workers, and the children that will comprise tomorrow's work force. Increased earnings of all three groups have additional induced effects on both the local and national economy.

For every public dollar invested in quality early care and education tax payers enjoy a return between \$2 and \$10 in combined public savings and revenue. These public finance benefits are the result of increases in current and future tax revenue due to higher household earnings and savings resulting from reduced expenditures on special education, healthcare, welfare, social services, and crime.

Decades of research support increases in both public and private investment to maximize enrollment of children in high quality early care and education from birth.

Quality

Child development from birth to age five lays the foundation for healthy productive lives. Early Care and Education (ECE) has the capacity to improve opportunities for today's workers, increase labor force engagement, and develop a high quality future work force, but only if the care and education are high quality.

- * More neural connections are formed from birth to age five than at any other stage in the lifespan.
- * A 1995 study found that by age three, "children with college-educated parents or primary caregivers had vocabularies two to three times larger than those whose parents had not completed high school." Those

differences start to become apparent as early as 18 months of age.

- * A quality language-rich environment from birth to five can close the gap between children of parents with different levels of education, an important step in leveling the educational playing field.
- * Quality care and education provide physical, social, cognitive, and emotional nourishment through mentally stimulating play and activities. In addition to basic safety considerations within a facility, attention to nutrition and sleep are essential to creating a safe and healthy environment for children.

Indiana has taken steps to improve the quality of ECE options statewide. In the SILM area, less than half of all children in some form of care are in facilities rated as quality ECE providers.

Indiana's Paths to QUALITY™, Teacher Education and Compensation Help (T.E.A.C.H), and Child Care and Development Fund (CCDF) voucher programs work in concert to support improvements in the quality of care and education provided to children birth to five. Paths to QUALITY™ is an evidence-based quality rating and improvement system that provides a



framework for developing and supporting quality care in Indiana.

- * As of July 2017, just under half of known child care providers in SILM were participating in Paths to QUALITY™ and 38.2% of those (18.9% of all known providers) had a quality rating of Level 3 or Level 4 indicating “high quality.”
- * A substantial unregulated market in child care remains beyond the reach of quality assessment and regulation, leaving a large number of children in care that may not maximize brain development and health in the first five years.
- * Indiana provides higher CCDF reimbursement rates to higher quality providers. This helps offset the costs of providing quality care and makes high quality care accessible to those low-income families who receive vouchers.
- * Policies that incentivize higher quality in meaningful ways (with robust subsidies for higher wages and strong bonuses) produce greater participation. The CCDF incentive is a good step, but has not done enough to generate the kind of effective demand that can shift the market toward widespread supply of quality care.



*Child care issues result in a
\$1.1 billion annual loss of
economic activity in Indiana.*

Indiana Public Policy Institute 2018

- * Improving the ECE labor force is essential to quality and requires policies and funding to support developing a professional workforce, living wage jobs, and opportunities for career advancement.

In 2017, a total of 741 SILM children eligible for CCDF vouchers waited an average of 139.5 days to receive their voucher for care. Vouchers are not doing enough to increase access to high quality care. The region simply does not have enough high quality care available.

Access

Out-of-home care for children birth to five is hard to find, expensive and largely of poor quality. Full access to high quality care for children birth to five across income levels and the rural to urban landscape is essential to generating strong returns on the investment. The number of licensed child care slots in SILM counties ranged in 2016 from 9.1 slots per 100 kids birth through age five in Scott County to 33.8 slots per 100 kids birth through age 5 in Floyd County, down from highs of 22.4 (2008) and 36.5 (2010), respectively (Figure 1).

Population declines and the aging Southern Indiana population in rural areas (particularly Scott and Washington counties) have contributed to the decrease. These figures control for the number of children birth to five, but may not account for community impacts of growth in the portion of the population over age 65 on various community amenities and public services. Few areas in the region have seen growth in the population of households with young children. Among ECE slots known to be high quality (Paths to QUALITY™ Level 3 or 4), the range is a low of 2.5 slots per 100 children *under* age 5 in Washington County to a high of 12.3 slots per 100 children *under* age 5 in Harrison County (Figure 2).

Availability of high quality care is one of several factors that affect access. Across the country, access to quality Early Care and Education (ECE) is

constrained by the following:

- * Availability.
- * Affordability.
- * Flexibility of arrangements.
- * Location and transportation.
- * Capacity of providers to care for children with special needs.
- * Provision of care for sick children.

Affordability

According to the Department of Health and Human Services, affordable child care should consume no more than 10% of a family's income. Indiana's average yearly cost for full-time child care is \$11,239 for an infant and \$7,957 for a preschool age child. Average Median Family Income in SILM counties is \$62,316.

Indiana's full-time, minimum-wage workers would have to spend 43.7% of their annual earnings on average child care costs for a 4-year-old child, and 56.1% to cover average infant care costs. Under these circumstances, the decision to work is not always the best economic choice for families. When parents do work, they must find cheap care options and may not be able to prioritize quality.

For Hoosiers, the cost of infant care is equivalent to college. Child care costs range from 78.0% of the costs for full-time, in-state public college tuition for a four year old to 100.2% of the cost for in-state public college tuition for infants.

With the exception of Scott County, Southern Indiana families with children under the age of 5 are more likely to live in poverty compared to families in general, making it even less likely that young families can afford quality care. A large share of these families remain on the waiting list for child care vouchers for which they qualify. In 2017, a total of 741 SILM children eligible for Child Care Development Fund (CCDF) vouchers waited an average of 139.5 days to receive their voucher for care.

Affordable high quality early care and education has the capacity to support parents' decision to work, to

provide good jobs to those providing quality care, and to build a strong future work force by improving the social and emotional growth of young children during the prime years of brain development.

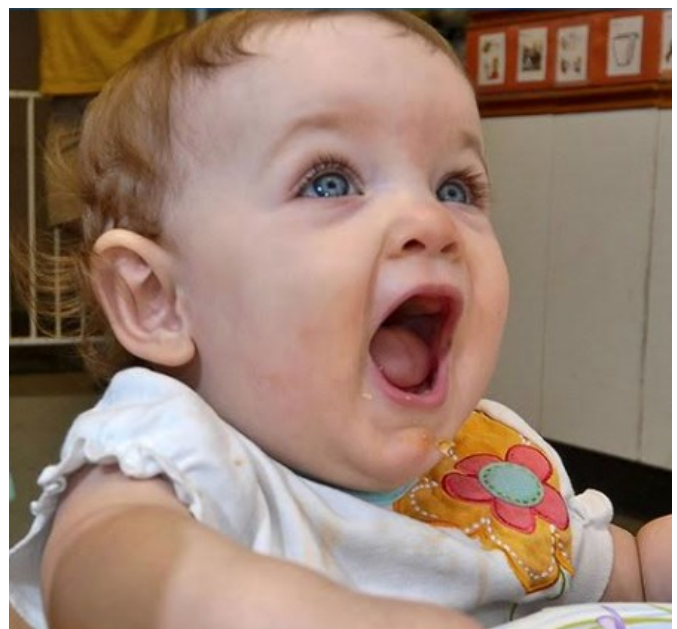
Implications

An approach that treats children as a public resource for investment, and that acknowledges that quality care requires knowledge of early childhood development, might encourage a different political dialogue about how and why the state and private employers should make ECE affordable for all.

Employers whose workers access high quality reliable child care enjoy lower absenteeism and turnover rates. Workers who place their children in quality care enjoy job and income stability.

Investments in quality ECE will professionalize the child care sector, improve job quality, and increase earnings in the sector, generating greater economic activity and additional tax revenue that can help fund a high quality ECE system.

Because high quality birth to five care benefits families, employers, and the larger community and economy, all sectors have both individual and system roles to play in ensuring access to high quality affordable care and education. Public policies can provide incentives, enabling structures, and oversight, while a mix of public and private investments can fund systems change. Communities and families will need to increase awareness of the transformational importance of the first five years.



Economic Development

Investments in high quality early care and education (ECE) provide immediate benefits to local business and the region's economy.¹ Early Care and Education enjoy healthy economic development multipliers in both employment and earnings.² This means that ECE produces economic activity and benefits beyond the transactions between parents and providers. Society's investments in early childhood education and care "can be an essential component in economic development."

Southern Indiana's future economic growth depends on supporting today's workers and building an



educated 21st century labor force. ECE has higher than average output multipliers and lower, but still meaningful, employment multipliers (Figure 1 for an explanation of these measures of economic impact).³ According to Regiontrack, in the state of Indiana (2012), birth to five care and education had the following statewide impact:

- * Direct Output = \$625.1 million
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Child care directly impacts earnings for three groups of workers: parents, child care workers, and the children that will comprise tomorrow's work force. Increased earnings of all three groups have additional induced effects on both the local and national economy.

For every public dollar invested in quality ECE tax payers enjoy a return between \$2 and \$10 in combined public savings and revenue.⁴ These public finance benefits are the result of increases in current and future tax revenue due to higher household earnings and savings resulting from reduced expenditures on special education, healthcare, welfare, social services, and crime.⁵

Decades of research support increases in both public and private investment to maximize enrollment of children in high quality early care and education from birth.

Increase Labor Force Participation, Improve Reliability and Productivity

Parenting workers' access to quality, affordable early care and education provides immediate benefits to employers and our larger economy. Quality care provides a safe, nurturing environment, proper adult/child ratios, and planned activities that support learning. Paths to QUALITY™ is Indiana's statewide rating system. Programs rated Level 3 or 4 are considered high quality. When parents and children have access to consistent and affordable quality care, employers enjoy the following benefits:

- * Increased labor force participation of parents of children under age five.⁶

(Continued on page 12)

Figure 1: Measuring Economic Impact

Economists use models of economic activity and sector linkage effects to generate regional “multipliers” that allow planners and community economic development professionals to estimate the impact of a new plant or business or the closing of a major area employer. Over the last 15 years, significant research has employed input-output analysis to understand the direct, indirect and induced effects of the child care sector on regional economies.

Direct effects: the change in economic activity in the child care industry. This will lead providers to generate more revenue and employ more child care workers.

Indirect effects: a measure of inter-industry purchases spurred by industry spending. This is a measure of the economic activity triggered in a region as a result of purchases of goods and services in the region by area child care businesses. Child care providers may purchase more food which will impact output, earnings, and employment among groceries or food service providers.



Induced effects: the impact of household spending. This is a measure of the economic activity of households whose earnings are affected by the direct and indirect effects. Increased revenue in child care can lead to new employment and/or higher pay. More highly paid child care workers will likely spend increased wages in local businesses as will the employees of the grocery or food service.

Multipliers are presented as Type I and Type II.

Type 1 Multiplier = (direct effect + indirect effect)/direct effect

Type 2 Multiplier = (direct effect + indirect effect + induced effect)/direct effect

Economic development studies include three multipliers: output, earnings, and employment (See Indiana’s numbers for early care and education on page 2).

Output multiplier: estimates the total sales that would be generated in the entire economy by each dollar of increased direct spending for child care services.

Employment multiplier: estimates the number of jobs that would be created throughout the regional economy from an increase in demand for child care services large enough to stimulate the addition of one new job in the child care industry.

Earnings multiplier: estimates the increase in regional earnings generated by increases in earnings in child care that result from increases in employment and wages.

Source: Warner, Mildred. 2009.

(Continued from page 10)

- * Improved reliability of workers who parent young children.⁷
- * Lower employee turnover.⁸
- * Increased productivity of parents and organizations.⁹

Affordable access to high quality reliable child care benefits business and the larger economy.

Labor Force Participation

U.S. labor force participation peaked at 67.3% in 2000 and has fallen to its lowest rate since the 1970's at 62.7% in May 2017.¹⁰ The number is likely to continue its descent as baby boomers age out of the workforce and mechanization continues. Labor force participation in Southern Indiana Louisville Metro (SILM) is high, but could improve (Figure 2). In particular, the region has a significant share of workers employed part-time who would prefer full-time work.¹¹ Child care is often a barrier to such a move.¹²

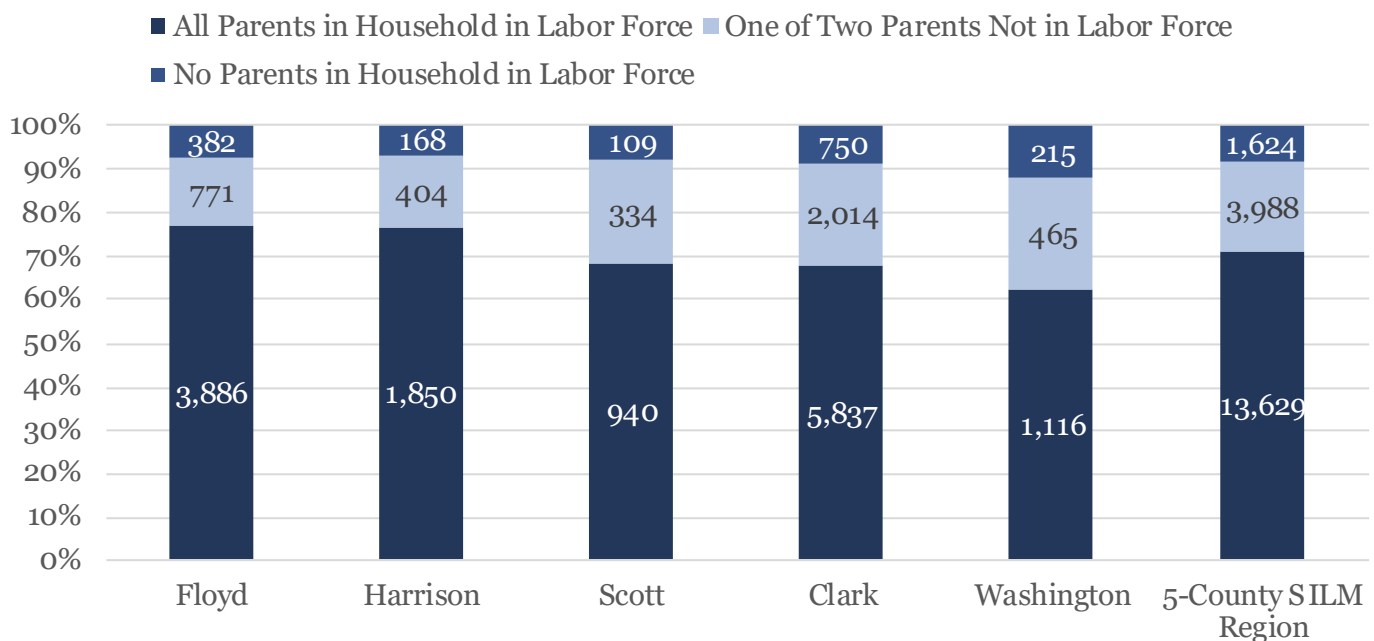
Historically, women have had lower labor force



participation rates than men. Research suggests that increasing women's participation in the paid labor force has great potential to increase overall labor force participation rates and annual Gross Domestic Product (GDP).¹³ Women perform the vast majority of unpaid caring labor in the U.S. When women choose to outsource this caring labor in order to go to school or work themselves, their choices have an impact beyond their own employment and earnings as child care employment rises.

The labor force participation of mothers of young children rose from 40% (34% for mothers of

Figure 2: Labor Force Participation in Households with Children Under 6, SILM 2012-2016



Source: U.S. Census Bureau. *American Community Survey*, 5-year Estimates 2012-2016. Table B23008.

children under 3) in the mid-1970's to 65% in 2012 (60% for mothers of children under 3),¹⁴ but no major change in our schools or institutions of care accompanied the shift.

From 1979 to present, U.S. wages stagnated such that households sending a second parent into the labor force and single parent households did not enjoy wage increases sufficient to help cover the added expenses of having both parents in the labor force, including child care. Households required two working adults to maintain the standard of living they previously enjoyed with one parent working. For low, and even moderate-income workers, the financial burden of child care became a barrier to work:

- * 11.4% of the nonworking poor have children, a full 70% of them cite “taking care of home/family” as the reason they are not in the work force.¹⁵
- * In a 2017 survey of Louisiana parents of children under 5, women were 7 times more likely than men to quit a job, 5 times more likely to leave full-time work in favor of part-time work, and 6 times more likely to turn down a promotion due to child care concerns.¹⁶
- * Combined with high rates of single parent female headed households, decisions to work less or forego a promotion impact child poverty. Single parents were at least twice as likely as married parents to report making these choices.¹⁷

Access to affordable high quality ECE boosts labor force participation of parents, moving more parents from part-time to full-time work, and putting parents in a position to accept promotions that require a reliably consistent work schedule. These changes increase household income and reduce child poverty.

Productivity

For more than 20 years, studies have shown positive impacts of reliable high quality child care on parent productivity in the work place.

- * A survey of American Business Collaboration members in 2000 found that 63 percent of



member employees reported improved productivity while using quality dependent care.¹⁸

- * The average American working parent misses nine days of work per year. That number goes up as kids move through elementary school.¹⁹
- * Among 3,100 parents with access to employer sponsored child care, 95% said on-site child care improved their on-the-job concentration, 87% said it made them more productive, and 79% said it enabled them to volunteer for things not formally required by their job.²⁰

The 2017 study²¹ of Louisiana parents of young children and their employers found significant costs to business associated with child care issues. The Indiana University Public Policy Institute reproduced the Louisiana impact models for the state of Indiana²²:

- * Absences and employee turnover cost Indiana employers an estimated \$1.8 billion a year.
- * Child care issues result in a \$1.1 billion annual loss of economic activity in Indiana.
- * Indiana loses an estimated \$118.8 million annually in tax revenue due to child care issues.
- * Lack of quality reliable child care leads to more time spent at work on personal issues, which is a key factor shaping worker

(Continued on page 16)

Figure 3: Building the Soft Skills of a Quality Work Force

Sixty percent of business decision-makers surveyed by Zogby Analytics say it's more difficult to find job candidates with adequate social-emotional skills than candidates with adequate technical skills. Southern Indiana business leaders echo this concern. Many aspects of brain development and socialization responsible for these behaviors and skills are developed from birth to age five. Universal pre-K is a vital step, but birth to age four care must be part of a quality early care and education system. Pre-K studies indicate more difficulty moving social and emotional skills in a single year than for math and language skills. Moreover, low income kids are far more likely to have deficits in this area, making it difficult to close gaps in achievement, education, and income.

The Perry Preschool Study found improvements in “character skills” related to motivation and behavior problems explained a large share of the program’s positive adult outcomes (Heckman 2006).^{*} Another study (Jones et al. 2015) of nearly 800 low-income kids documented their social-emotional development in kindergarten and, without intervention, documented positive and negative milestones up to age 25. The sample draws from a low-income school and half the kids are at risk for significant behavior problems. The study provides important information on the relationship between the social-emotional development of low-income kids at the start of kindergarten and their adult outcomes.

For every one-point increase in social competence score, the study found children;

- * 54% more likely to graduate from high school.
- * Twice as likely to graduate from college in early adulthood.
- * 46% more likely to have full-time employment at age 25.
- * 68% less likely to have been arrested for a severe offense by age 25.
- * 66% less likely to have days of binge drinking in the past month by age 25.
- * 55% less likely to have days of marijuana use in the past month by age 25.
- * 54% less likely to have years on medications for emotional or behavioral mental health issues through high school.

For every one-point decrease in social competence score, the study found children

- * 63% more likely to be receiving public assistance at age 25.
- * 67% more likely to have been arrested at some point through high school.
- * 60% more likely to have been arrested shortly after high school (ages 19-20).
- * 63% more likely to have made a court appearance shortly after high school (ages 19-20),
- * 61% more likely to have stayed in a detention facility both through high school or shortly after.
- * 86% more likely to have a form of drug dependence by age 25.
- * 61% more likely to have externalizing mental health problems by age 25.

Source: Heckman 2006; Shonkoff and Phillips 2000; Jones et al. 2015.

For information and resources on social and emotional development, visit the Robert Wood Johnson Foundation’s resource page: <https://www.rwjf.org/en/library/collections/social-and-emotional-learning.html>.

Figure 4: Local Spotlight: Quality Pre-School in Harrison County Closes the Kindergarten Readiness Gap for Low-Income Kids

In 2013, the Harrison County Community Foundation began funding JumpStart. They pay for up to 200 low-income four-year old children to attend all-day pre-K. The project provided a parallel to the state's On My Way Pre-K pilot in one of our local rural communities. By the 2015-2016 school year, the Foundation had all participating programs using the I-STAR Kindergarten Readiness (KR) assessment to measure progress. The score measures represent the demonstrated development level in months.

The I-STAR-KR is not a test, but an assessment based on multiple observations.

Consistent with the national literature, low-income children showed up to pre-K with developmental delays. On average, they were 15 to 16 months behind in language and pre-literacy skills and math and quantitative reasoning skills. By the end of the school year, however, the gap was closed and students demonstrated capacities consistent with their median age.

JumpStart participants improved in social and emotional development as well, but did not close the gap to the same degree. Kids showed up an average 16.4 months behind expected development and were 10.3 months behind expected development by the end of the school year.

Harrison County JumpStart 2016-2017 Mean Pre and Post Assessment Performance Compared to Median Age (age and assessed development in months)

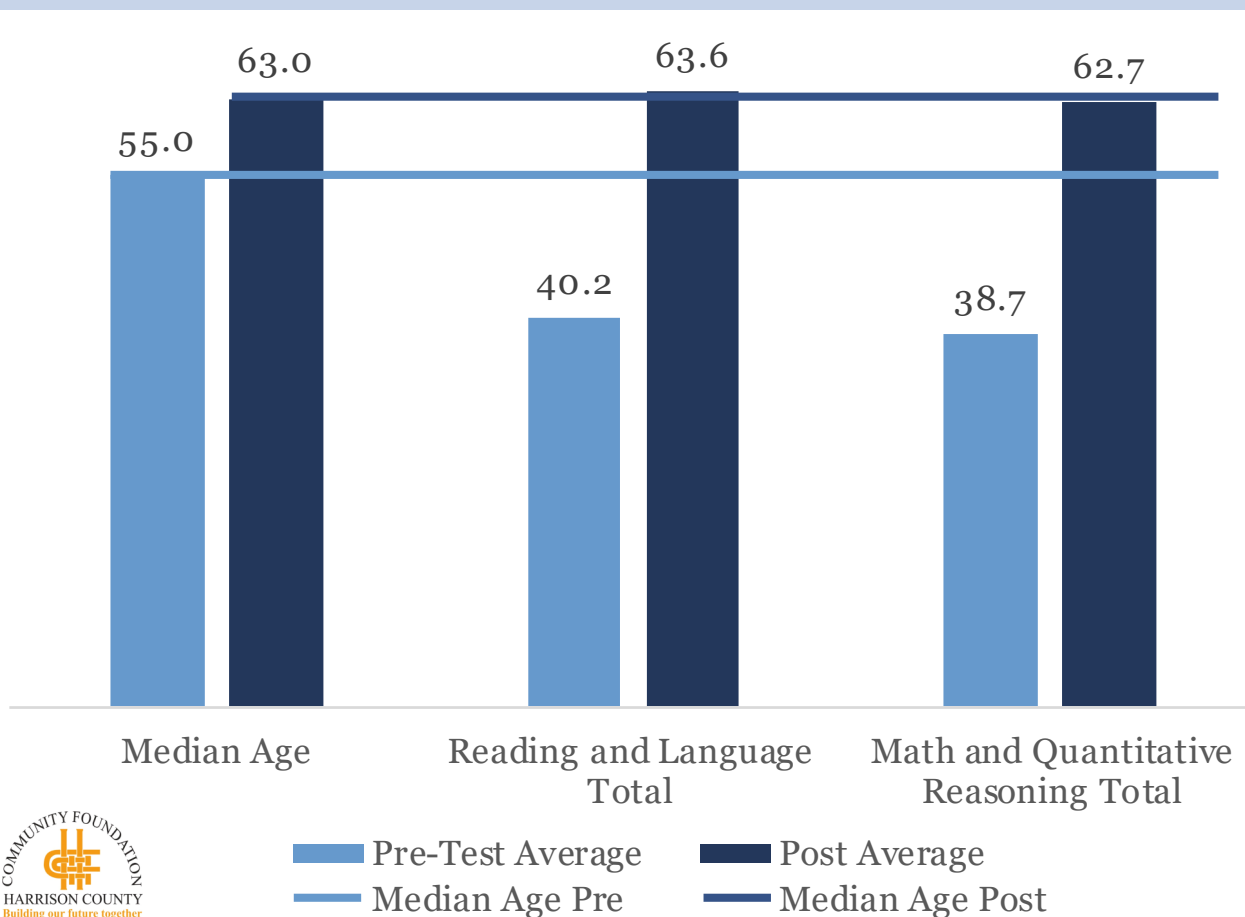
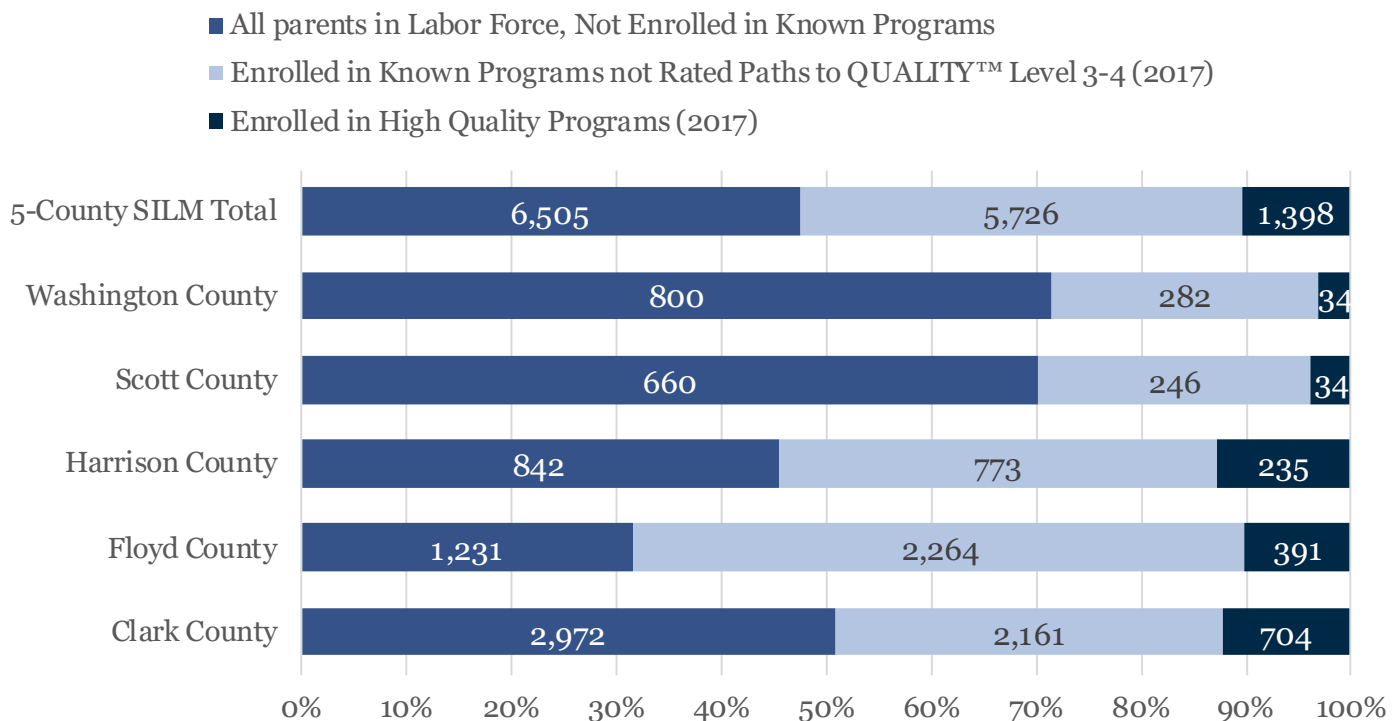


Figure 5: Children of Working Parents: Not in Known Programs, in Known Programs, and in Paths to QUALITY™ Level 3 and Level 4 (High Quality) Known Programs



Sources: U.S. Census Bureau. *American Community Survey*, 5-year Estimates 2012-2016. Table B23008; Early Learning Advisory Committee. *2018 ELAC County Dashboards*. <http://www.elacindiana.org/data/early-childhood-profiles/>.

(Continued from page 13)

productivity.²³

Lower turnover increases company productivity and improves morale. These impacts on work also affect the larger community as parents are able to maintain stable work and income.

Reliability

In a recent focus group with area employers, absenteeism and high turnover were cited as top concerns for Southern Indiana businesses. A large portion of children in households with all parents working are not enrolled in known programs, much less in Paths to QUALITY™ rated high quality programs (Figure 5). This may contribute to regional challenges with labor force reliability.

Absenteeism costs companies enormous sums in lost productivity, but lack of reliability also leads

to turnover, which is even more expensive.

Replacement costs can be as high as one and a half times the annual salary of an exempt employee and three-quarters the wages of an hourly employee.²⁴

A 2017 Louisiana Study²⁵ further explored the impact of child care issues on employee reliability and absenteeism.

- * Nearly 19% of respondents report that child care issues caused them to leave full-time employment in favor of part-time employment and an additional 9.5% made the decision to remain part-time due to child care concerns.
- * Half of survey respondents rely on family members for child care (39% with an at-home parent and 12% with other family members).
- * One in six respondents quit a job due to child care issues.

- * One in 13 were fired due to recurring child care issues.
- * 40.8% of parents with children under five had missed work, 32.9% were tardy, and 42.4% left early due to child care issues in the last three months. There were no statistically significant differences between men and women in these impacts on reliability and productivity.
- * A 1986 study found that reliable child care reduced missed work days by as much as 20%-30%.



Research suggests companies should look closely at how much lack of quality reliable child care costs them and consider investing to support employee access to high quality reliable care. Programs can be cheaper than the costs of lost productivity and turnover.²⁶

southern Indiana is \$31,245,²⁹ but that figure is inflated by the presence of several public school-based pre-school programs. Earnings among child care workers outside the schools tend to be far lower. Low wages make it hard to attract a quality stable work force and make it difficult for workers to invest in advancing their skills to improve quality.

Create Good Jobs in Early Care and Education

Increasing the quality and availability of early childhood education and care creates good jobs.²⁷ When families outsource child care, the demand for child care workers and early education teachers increases. High quality care requires more training and will have to pay more to attract a stable, educated workforce.

Indiana ranks 39th among states for earnings per worker in the child care sector at \$11,874. Among family in-home providers, per proprietor earnings are \$8,034 and among center based care that figure is a much higher \$15,681.²⁸

The average salary for preschool teachers in

40.8% of parents with children under 5 had missed work, 32.9% were tardy, and 42.4% left early due to child care issues in the last 3 months

In order to reap the full benefits of quality early care and education, public and private investment, and wage and benefit improvements for working parents are required to support higher wages for child care workers and preschool teachers.

The SILM region expects a deficit of 536 workers in the

ECE and care workforce by 2026.³⁰ Even without any deliberate sector expansion, the region is unable to supply the labor force needed to meet demand. The sector is ripe for growth, but requires investment and systems and structures that ensure revenues that support the true costs of providing care.

The ECE and care workforce will induce additional economic effects. As their numbers increase and their incomes rise, they will pay more taxes and will also spend more of their income in the community.

Develop Tomorrow's Workforce

The largest returns on investments in ECE come from the long term impacts on child participants. From birth to age five, children develop the cognitive and neural foundations upon which development builds. That key formative time cannot be replaced. Investments in birth to five will yield a stronger, smarter work force, with more of the social and emotional skills needed to succeed (Figure 3). In addition, the investment will result in savings in other areas of government programming and will increase the tax base to further support quality early childhood programs.

- * Investments in children will pay returns to this region's economy: 60-70% of child participants will spend their careers in Indiana and 40-50% nationally remain in the same metro area.³¹
- * For every dollar invested, early childhood programs increase present value of state per capita earnings by \$5-\$9.³²

- * Kindergarten retention costs SILM school districts an estimated \$807,291 in 2017.³³ High quality care from birth to age five can reduce kindergarten retention by improving language and quantitative reasoning skills (Figure 4).

Three strong randomized controlled trials that include long term follow-up (Perry Preschool, Abecedarian Educare, and the Chicago Child Parent Center), and several other studies that lack an experimental design, show significant and continuing benefits³⁴:

- * **Perry Preschool**—19% earnings advantage of participants over counterparts that were not enrolled.³⁵
- * **Abecedarian/Educare Child Care**—26% earnings advantage over control group.
- * **Infant Health and Development Program and Nurse Family Partnership** —12% earnings advantage of participants.
- * Head Start sibling comparison shows effects on income at 11%.
- * The Chicago Child Parent Center neighborhood



comparison shows test score effects that predicted 11% earnings effects.

- * Several other studies from across the country note pre-K entry test score differences that predict earnings effects between 6% and 15%.

Harrison County's JumpStart program demonstrates how a year of full-day high quality preschool can close existing gaps in preschool language and quantitative reasoning skills (Figure 4). Long term well-structured research provides strong evidence that ECE is a sound investment in our future citizens and our future workforce.

Summary

Southern Indiana has a lot to gain from investments in early care and education. Improving access to

high quality care will help today's parents be reliable and productive full-time workers prepared to take on responsibilities, accept promotions, and focus on their work. Reductions in absenteeism and turnover benefit the local economy.

Increasing demand for high quality care will increase child care employment and improve wages in the sector, creating good jobs and increasing overall economic activity.

Language-rich, developmentally appropriate environments with strong nutrition and support for good sleep habits will improve health and education for tomorrow's work force. These investments will reduce future public spending on special education, juvenile and criminal justice, healthcare, and public assistance, and will increase tax revenue.

Quality

The Early Care and Education (ECE) of children impacts every aspect of a child's development and is a leverage point for building healthy, educated, economically sustainable communities marked by strong quality of life. Investments in high quality ECE provide immediate benefits to local business and the region's economy, and enjoy an even greater long term return on investment.³⁶ Quality drives the strength and resilience of the social and economic returns on investment in ECE.

Quality ECE programs recognize the importance of the brain's plasticity during the early years and maximize the use of that time for positive brain development that lays the foundation

for all future learning and for social and emotional growth and stability (Figure 3).³⁷

More neural connections are formed from birth to age five than at any other stage in the lifespan.³⁸ In fact, in the first few years, "more than 1 million new



neural connections are formed every second."³⁹ A 1995 study found that by age three, "children with college-educated parents or primary caregivers had vocabularies two to three times larger than those whose parents had not completed high school."⁴⁰ Those differences start to

become apparent as early as 18 months of age.⁴¹ A quality language-rich environment from birth to five can close the gap between children of parents with

different levels of education, an important step in leveling the educational playing field.⁴²

With the majority of parents working, the need for child care presents an opportunity to ensure that children from diverse backgrounds enjoy the benefits of language rich environments that nurture their development. Sixty-five percent of Indiana's children birth to age five live in homes where all parents work (Figure 2).⁴³ Among those who need care in Indiana, only 15% are enrolled in programs rated "high quality" (Figure 5).⁴⁴ More children may be enrolled in quality care and education, but because not all providers are rated, the state is unable to accurately account for their quality. Less than half (49 percent) of registered programs in the Southern Indiana Louisville Metro (SILM) region participate in Paths to QUALITY™ (PTQ), the state's Quality Rating and Improvement System (QRIS) (Figure 8). Of those SILM providers rated in the

PTQ™ system, 38.2% are rated Level 3 or 4, indicating high quality (Figure 7). With 51% not in the PTQ™ system (Figure 6), this means less than 1 in 5 (18.9%) of SILM registered providers have a high quality rating from the state's QRIS (Figure 6).⁴⁵ Increasing supply of quality care requires shifting an idealized image of the stay-at-home mom or baby sitting frame to a professionalized understanding of early child development and the role caregivers and environment play in future outcomes.

Professionalize Early Care and Education

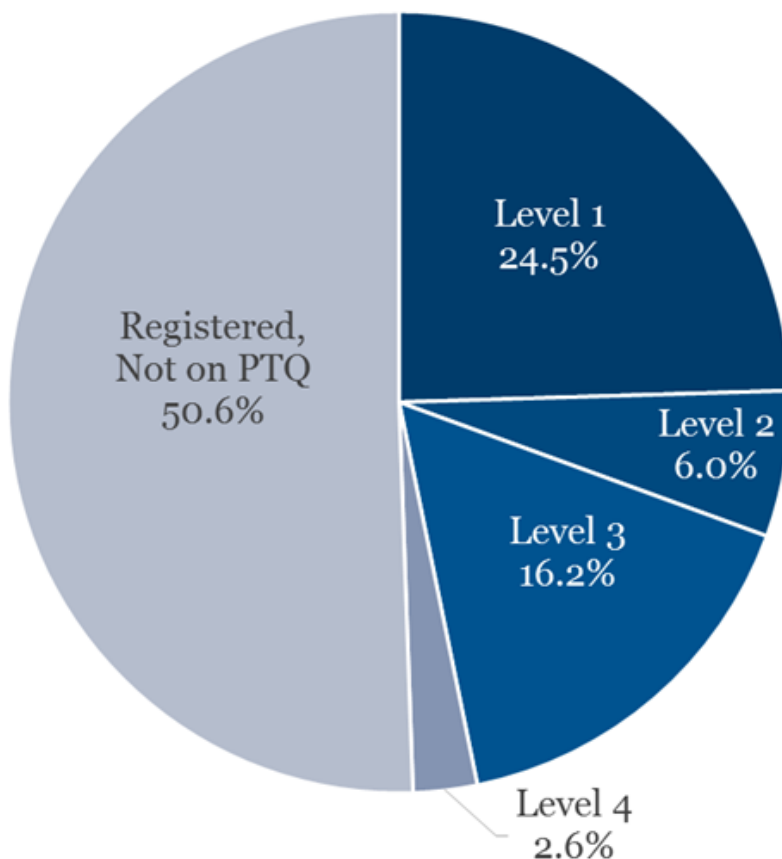
Historically, when people imagined care for children under the age of five, they often thought of "babysitting." Babysitting can nurture child development and education, but it does not have to. Under a babysitting model, caregivers feed and diaper children, but how kids spend their time may

vary considerably. This approach to care, which assumes any responsible teen or adult can provide the same service, will not systematically produce strong child development outcomes that prepare kids for school and lifelong learning.

The average standard of education and care in today's pre-kindergarten classrooms has been found to produce strong impacts during the year of the program. However, in the most rigorous recent study assessing Tennessee's statewide pre-K effort, effects were not sustained through third grade.⁴⁶ Researchers conclude that explicit attention to the factors that constitute "high quality" must be part of any public investment in order for it to enjoy the returns lauded in other long term studies of pre-K impacts. The current run-of-the-mill programs are insufficient.

Many of today's child care and pre-K programs provide a safe space and some opportunities for play, but they "fail to provide the kinds of instructional support that children need to be ready to learn."⁴⁷

Figure 6: Paths to QUALITY™ Participation and Rating for SILM Registered Providers (N=265)



Source: SIEOC Data as of July 2017.



“[c]hildren in informal settings learn meaningfully less, on average, in both literacy and math than those in formal child care centers or preschools.”⁴⁹

Informal care arrangements are common and most often occur beyond the oversight of licensing procedures. In SILM, nearly half of children birth to five, whose parents are in the labor force, and who are cared for by someone other than a parent,

Informal settings tend to be more affordable and the decision to opt for informal arrangements cuts across class lines.⁴⁸ This choice may be tied to lingering feelings that center-based care’s more “institutional” characteristics make it less like home, which remains the preferred option in the cultural psyche that idealizes the stay-at-home mother as the best child care option. In reality, however,

receive care through informal arrangements outside of licensed or registered facilities (Figure 6). Even in national samples, only about a quarter of one and two-year-olds are in licensed formal care settings.⁵⁰

The difference in quality between formal and informal care is striking. For example:

(Continued on page 24)

Figure 7: Paths to QUALITY™ Participation and Ratings among Registered Providers, SILM 2017

	Registered, but Not Participating (percent of registered providers)	Level 1 (percent of registered providers)	Level 2 (percent of registered providers)	Level 3 (percent of registered providers)	Level 4 (percent of registered providers)	Total	Percent Registered that are PTQ™ Level 3 or 4	Percent of PTQ™ that are Level 3 or 4
Clark	49 (59.0%)	12 (14.5%)	6 (7.2%)	13 (15.7%)	3 (3.6%)	83	19.3%	47.1%
Floyd	46 (43.0%)	34 (31.8%)	8 (7.5%)	15 (14.0%)	4 (3.7%)	107	17.8%	31.1%
Harrison	17 (47.2%)	6 (16.7%)	1 (2.8%)	12 (33.3%)	0 (0.0%)	36	33.3%	63.2%
Scott	6 (42.9%)	5 (35.7%)	1 (7.1%)	2 (14.3%)	0 (0.0%)	14	14.3%	25.0%
Washington	16 (64.0%)	8 (32.0%)	0 (0.0%)	1 (4.0%)	0 (0.0%)	25	4.0%	11.1%
SILM Total	134 (50.6%)	65 (24.5%)	16 (6.0%)	43 (16.2%)	7 (2.6%)	265	18.9%	38.2%

Source: SIEOC Data as of July 2017.

Figure 8: Indiana's Paths to QUALITY™ QRIS

Quality Rating and Improvement Systems (QRIS) establish criteria for assessing the quality of early care and education. These systems intend to do the following:

- * Provide a means for consumers to make informed choices about care
- * Help providers assess and improve the quality of the care and education they deliver
- * Educate decision-makers on the care and education children receive in participating organizations
- * Measure and understand the impact of variations in quality on outcomes.

Established in 2008, Indiana's Paths to QUALITY™ (PTQ) rating system seeks to ([Elicker et al 2007](#)) :

- * Raise the quality of child care and early experiences for children.
- * Give parents the tools to help determine the best quality program for their children.
- * Support and recognize providers for quality care.

Paths to QUALITY™ classifies providers using four levels of performance that include attention to protecting and nurturing physical well-being, brain development, and social and emotional stability and support. Each level rating is inclusive of all previous levels so a level three center meets levels 1, 2, and 3 criteria for quality.

Level 1 – Health and Safety

- * Program meets basic requirements for health and safety.
- * Program develops and implements basic health and safety policies and procedures.
- * Staff members receive orientation within 30 days of being hired.

Regulation requires that:

- * The license and registration, both issued by [the] Family and Social Services Administration (FSSA), are current and in good standing.
- * In the case of faith-based programs, the ministry meets all Child Care and Development Fund (CCDF) provider eligibility standards.

Level 2 – Learning Environment

- * Provides an environment that is welcoming, nurturing, and safe for the physical, emotional and social well-being of all children.
- * Activities and materials reflect the age, interests and abilities of all children.
- * Program provides for the children's language and literacy skill development.
- * Staff provides pertinent program information to families.
- * Organization promotes staff/assistant caregivers' development and training.
- * Program has a written philosophy and goals for children.

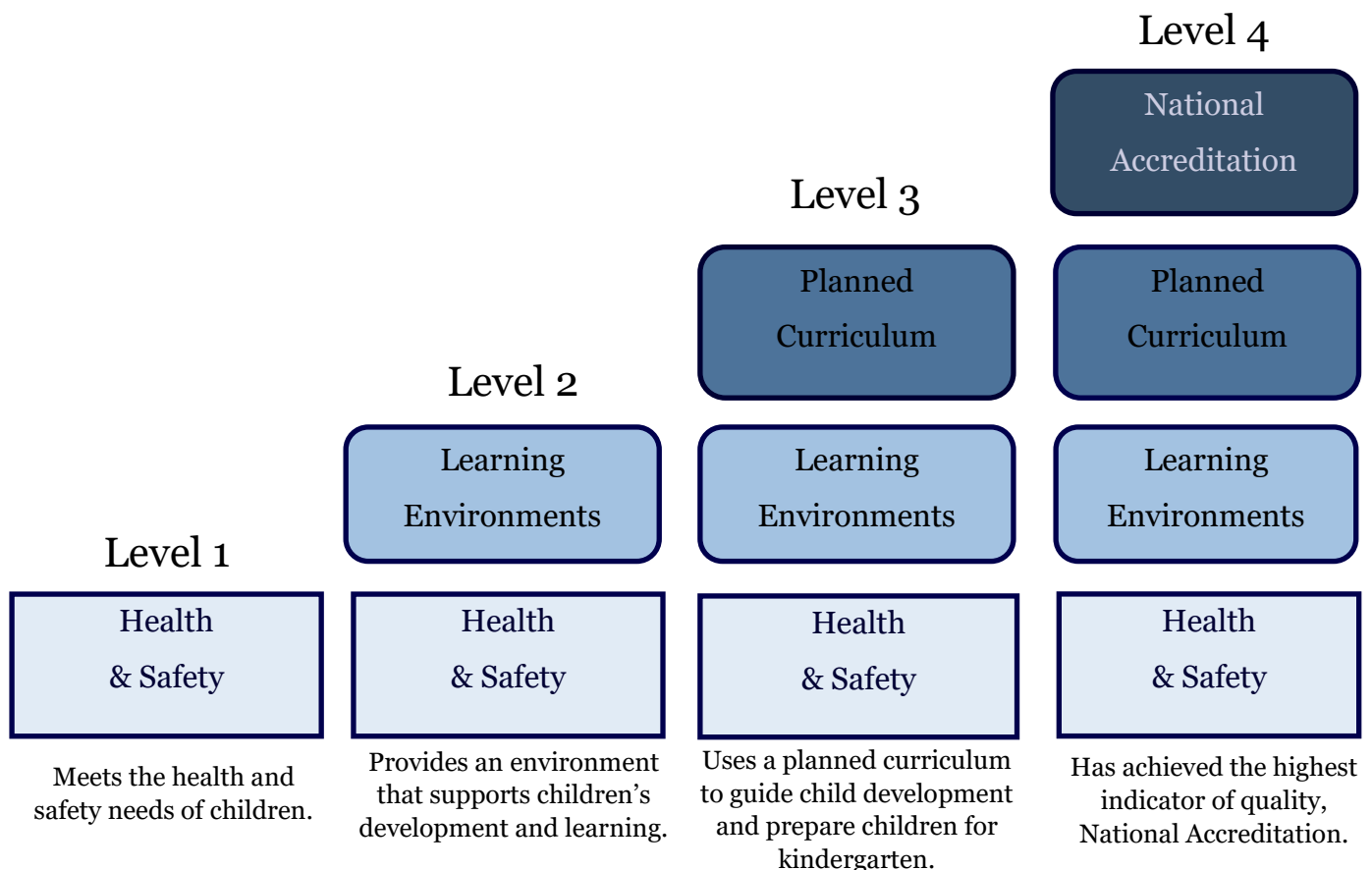
Level 3 – Planned Curriculum

- * A written curriculum and planned program for children reflects developmentally appropriate practice.
- * Program evaluation is completed annually by parents and staff.
- * Actively engage in program evaluation and have an action plan for improvement.
- * Demonstrate professional growth of Director and staff or lead caregiver and assistants in excess of licensing requirements.
- * Facilitate family and staff input into the program.
- * Program has been in operation for a minimum of one year or lead Caregiver has at least 12 months experience in a licensed or Bureau of Child Care nationally recognized accredited child care setting as a child care provider.

Level 4 – National Accreditation

- * Accreditation is achieved through the National Association for the Education of Young Children (NAEYC) or the National Association of Family Child Care (NAFCC).
- * Professional development and involvement continues including mentoring other directors / providers.

Source: Elicker, James, Carolyn Clawson Langill, Karen Ruprecht, and Kyong-Ah Kwon. 2007. *Paths to Quality A Child Care Quality Rating System for Indiana: What is its Scientific Basis?* West Lafayette, IN: Purdue University Center for Families and Department of Child Development & Family Studies. Retrieved March 1, 2017 (<http://www.in.gov/fssa/files/ScientificBasisPTQ.pdf>).



(Continued from page 21)

- * Four-year-olds in home-based, informal care watch an average of almost two hours of television per day, compared with fewer than 7 minutes in formal care.⁵¹
- * 93 percent of formal caregivers report doing both reading and math activities on a daily basis compared with 68 percent of informal caregivers for reading and 60 percent for math.⁵²

Indiana has a science-based validated Quality Rating Improvement System (QRIS) (See Figure 8 for full explanation).⁵³ As noted, however, too few providers engage Paths to QUALITY™ (PTQ) and among those that do, less than half have achieved a high quality rating (Figure 7). Research suggests that some aspects of quality take longer to achieve than others, but among the quickest results are changes in activities.⁵⁴ Providers that engage quality improvement systems tend to make changes to program

activities in the first year of participation.

In one study, a rigorous evaluation design found observable improvements to quality, but noted that improvements to education and experience of the ECE workforce (which necessarily take longer to achieve) kept programs from seeing improvements in their QRIS rating in the first 6 months of participation.⁵⁵ Overall, however, research supports the effectiveness of QRIS in supporting advancements in quality care and improving the education and training of the ECE workforce.

Quality care and education provide physical, social, cognitive, and emotional nourishment through mentally stimulating play and activities. In addition to basic safety considerations within a facility, attention to nutrition and sleep are essential to creating a safe and healthy environment for children. Understanding what this means at each age and stage requires education in child development.

The quantity and quality of interaction between adult care providers and the children they serve



can promote strong social and emotional development and increase the size of a child's vocabulary.⁵⁶ In quality ECE settings a clear understanding of early childhood development and psychology informs play activities that stimulate particular brain and motor functions in ways that are most appropriate to maximizing growth at each stage of development.⁵⁷

Physically, socially, emotionally, and mentally nurturing environments impact vocabulary, pre-literacy skills, quantitative reasoning, classroom behavior, problem solving, and soft skills necessary for children to

show up to kindergarten ready to learn.⁵⁸

Assessments of kindergarten readiness that measure only language and math skills miss the importance of social and emotional development to later performance.⁵⁹

Those who score below average on language and cognition skills and demonstrate limited social and emotional skills at the beginning of kindergarten are most likely to have the lowest ratings on self-control and classroom motivation at the end of first grade.⁶⁰ These impacts persist over time.⁶¹

In the SILM region a mix of rural and more densely populated suburban communities face distinct challenges. Washington and Scott counties suffer from a dearth of quality child care options, while Clark, Floyd, and Harrison counties are home to more providers overall and to more quality providers (Figures 7 and 10). Clark, Floyd, and Harrison counties have higher levels of education and earnings than Scott and Washington,

generating more effective demand for quality care (Figure 7). Figures 9 and 10 indicate the geographical distribution of families with children under age five and the locations of registered child care providers by PTQ™ rating. Rural areas of all five counties, however, remain underserved, limiting both employment and care options for young families in those areas (Figures 7 and 10).



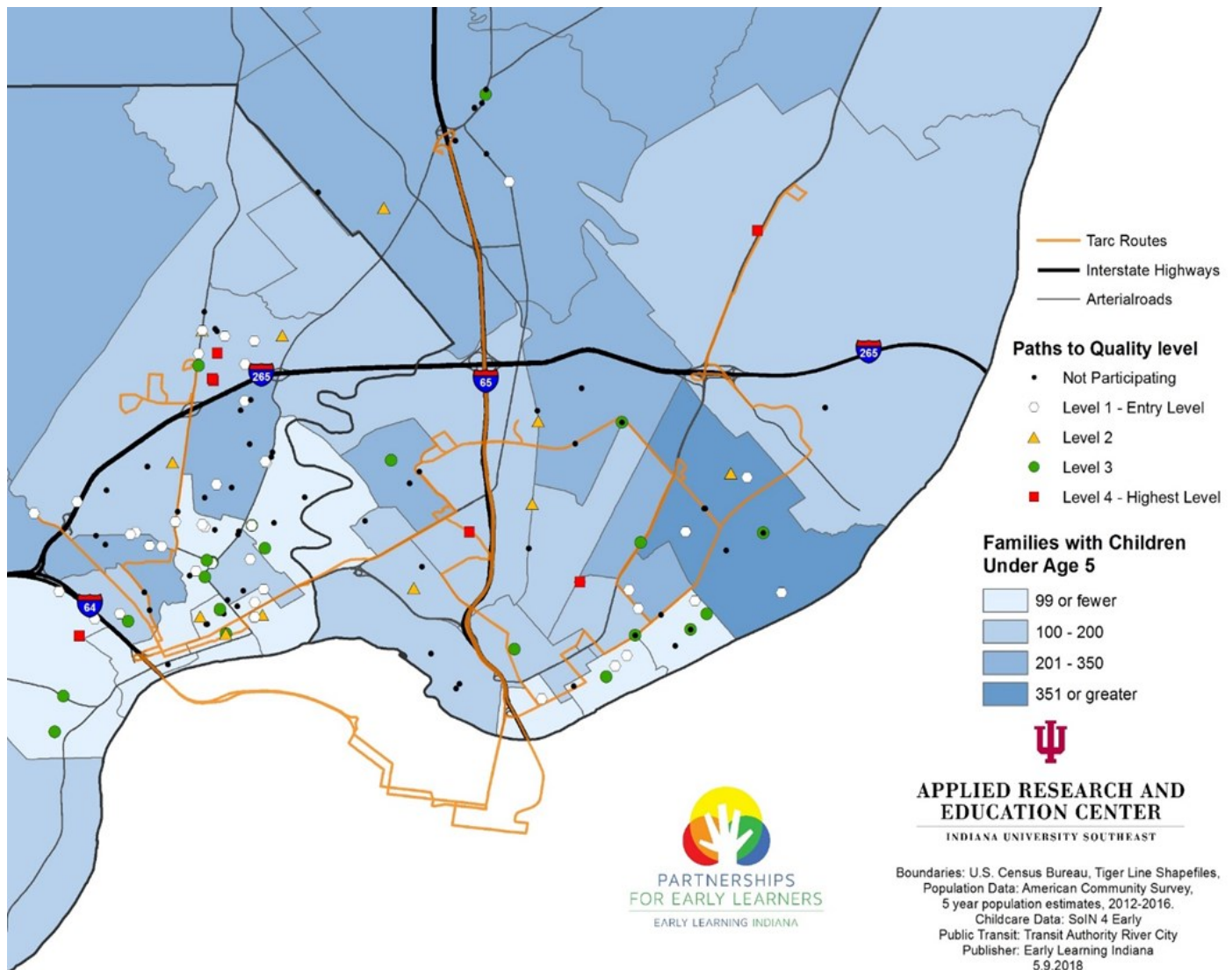
Barriers to Quality

Barriers to quality occur on both the supply and demand sides of the child care market.⁶² Affluent parents with high levels of education are both able and likely to demand and pay for high quality care that includes highly qualified teachers, safe facilities with

stimulating, age appropriate developmental toys and books, and low student teacher ratios that facilitate positive social and emotional development in small group settings.⁶³ Low- to moderate-income families, however, are less able to demand quality for the price they can afford.

Higher income families live free of the daily stressors of poverty known to impact early childhood development. More highly educated parents are more likely to talk with their infants and toddlers, and to have a range of developmentally appropriate toys and books in the home. These advantages accumulate and result in higher scores on kindergarten readiness at age five. The busy and often stressful lives of low- to moderate-income parents combined with lack of knowledge about early childhood development, may leave children with less overall interaction and fewer books and educational activities.

Figure 9: Paths to QUALITY™ Participation, Ratings, and Geographic Distribution of Families with Children Under Age 5, SILM Population Centers



On the supply side, providers face challenges in terms of finding the time to complete the tasks required by the QRIS system and funding to cover the costs associated with meeting standards. Staff education and training as well as family engagement all take time. Costs include increased staff hours for planning, assessment, and family engagement, higher wages for qualified staff, facility improvements, supplies to support developmentally appropriate curricula, and the costs of ongoing professional development.

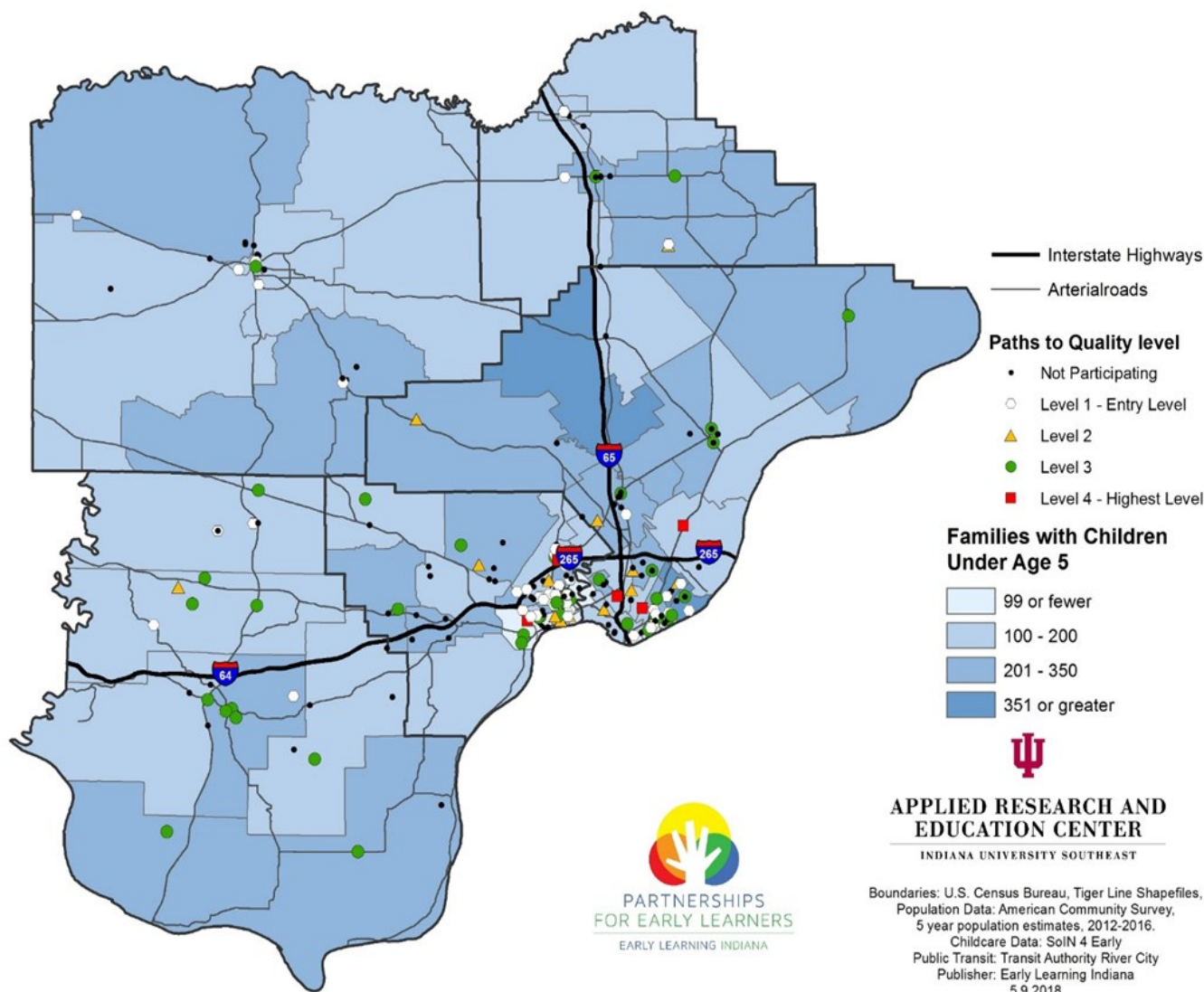
In 2011, Purdue University completed its comprehensive evaluation of Indiana's Paths to QUALITY™ standards and their implementation. Among Indiana providers, the biggest obstacles to

moving to the next PTQ™ level:⁶⁴

- * Finding the time to complete tasks required by PTQ™.
- * Completion of required education and training.
- * Insufficient funding to meet standards.

In the years between the 2011 study and today, the Indiana Association for Child Care Resource and Referral has developed technical assistance and training resources to help alleviate these barriers, but the same issues still affect participation and advancements in quality ratings.⁶⁵

Figure 10: Paths to QUALITY™ Participation and Ratings and Geographic Distribution of Families with Children Under Age 5, SILM



Time

Time is both a structural barrier in its own right and relates to cost. Child care providers, whether formal or informal, operate with low margins. This means directors and administrative staff, or proprietors in home-based settings, are responsible for a wide range of administrative tasks. The addition of another layer of work means more time on the job for people who are already working long hours. In terms of time for professional development, planning, and assessment, providers do not tend to have enough staff to allow some to leave the care setting for professional development opportunities, planning, or administration and interpretation of assessment.

PTQ™ advancement requires additional family

engagement. Whether that comes in the form of family newsletters or family programming, planning and execution of family engagement requires time. Providers have to pay for the additional staff time when taken beyond their standard work schedule or they must find a way to free up staff time in the existing work schedule. Neither of these is easy to accomplish in organizations that tend to operate with tight staffing and budgets.

Wages in the sector are low. This factor shapes staff willingness and ability to invest additional time or personal resources in professional development. Even when the state and their employer contribute significantly to covering the



costs, as through the Teacher Education And Compensation Helps (T.E.A.C.H.) program, agencies still have to find ways for staff to carve out time for training and education.

Cost⁶⁶

If providers are to deliver quality care, they need to be able to pay for the following:

- * An educated work force, engaged in ongoing professional development.
- * Hiring additional staff to support low child to adult ratios.
- * Regular performance assessment to support continuous feedback, improvement, and accountability.
- * Safe facilities that are conducive to learning.
- * Toys, books, and supplies that aid in developmental play.
- * Equipment and supplies necessary to comply with health and safety standards.

Many parents of children under the age of five struggle to pay for high quality care. According the federal government, child care is *affordable* when families spend no more than ten percent of income on child care. For families with children birth to age five, ten percent of their income often fails to reach

the level necessary to cover the costs of quality child care for one child, much less if they have more than one (Figure 11).

The average county median family income across the SILM is a \$62,316.⁶⁷ Ten percent of that amount is \$6,232. The average cost of high-quality care in the region ranges from a low of \$6,539 for preschool in a family child care setting to \$12,468 for infant care in a child care center (Figure 11).

Some of the provider costs for engaging in PTQTM can be recovered through providers' ability to charge higher rates for better care. A majority of Indiana parents interviewed for the Purdue Evaluation of PTQTM reported a willingness to pay more for higher level PTQTM providers. As Figure 11 illustrates, however, not all parents can afford to pay more. The National Center on Child Care Quality Improvement, a service of the Administration for Children & Families Office of Child Care, found the following⁶⁸:

- * Without state supports in the form of tiered voucher rates based on quality rating, providers simply cannot afford to engage the quality improvements required to increase their QRIS level.
- * Across the board, providers can break even at QRIS Level 1.
- * At Level 2, those in states with tiered rates fall short of the break even, and those with tiered rates and bonuses do slightly better than breaking even.
- * At Level 3, providers in states with tiered rates make money and those that also have bonuses end up even further ahead.

Indiana provides tiered reimbursement rates that support providers' ability to raise rates and maintain enrollments as they advance to higher levels. Indiana provides financial support to providers that wish to move from Level 3 to Level 4, and also provides small one-time bonuses to providers who advance levels, and

annual bonuses to those who maintain PTQ™ Level 4. But these incentives are small– a \$1000 bonus each year for maintaining Level 4.

Tiered reimbursement both supports supply of quality care and supports demand by making it possible for low-income parents to choose high quality care (Figure 24 includes information on local tiered reimbursement). If, however, those who do not qualify for vouchers struggle to pay higher rates, providers may still find it difficult to recover the costs of providing high quality care.

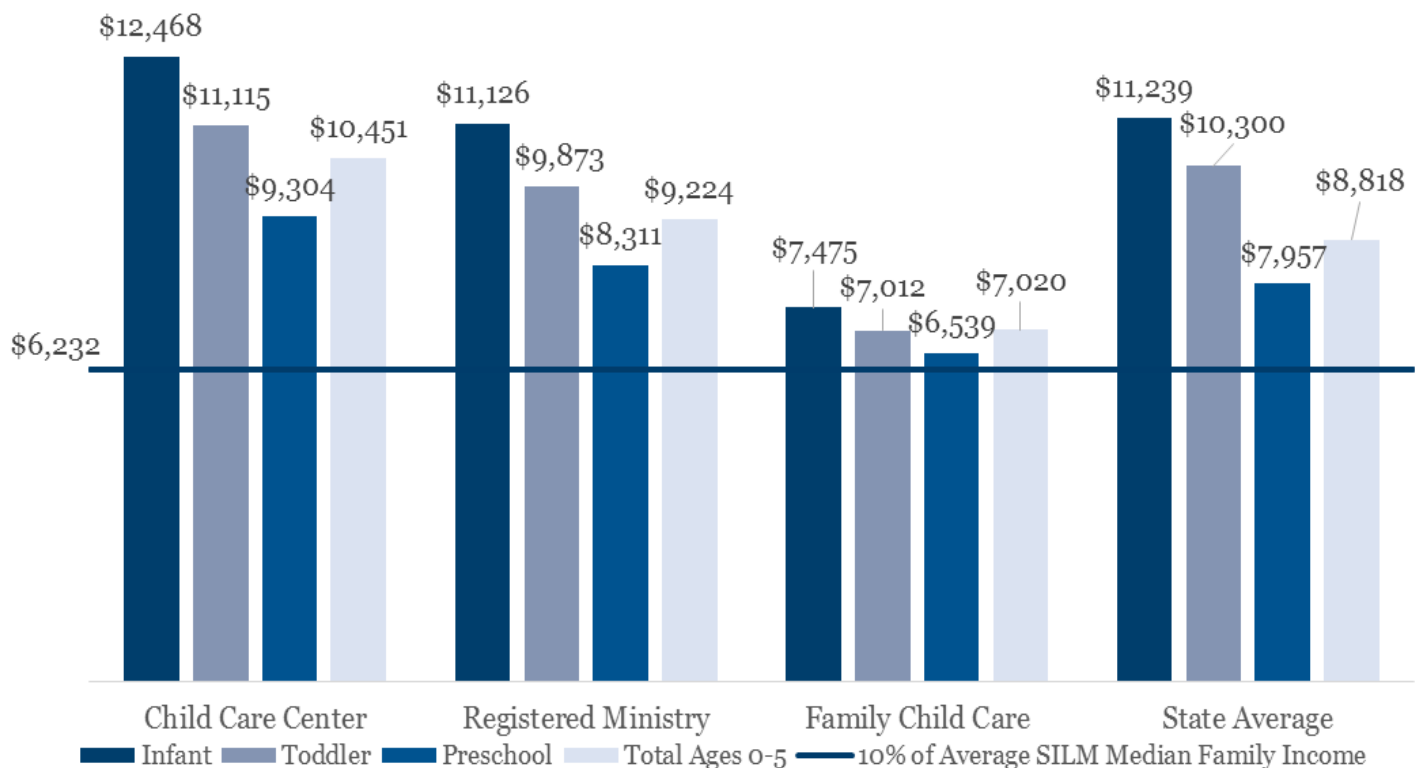
Additionally, current tiered reimbursement rates are in line with the average costs of care at each level of quality in Indiana’s SILM counties,⁶⁹ but those costs reflect a sector that continues to pay low wages and struggles to maintain a highly qualified stable workforce. In other words, reimbursement

rates that match current average fees for child care are not enough to constitute effective pressure toward and support for local providers to become “high quality.”

Qualified Workforce

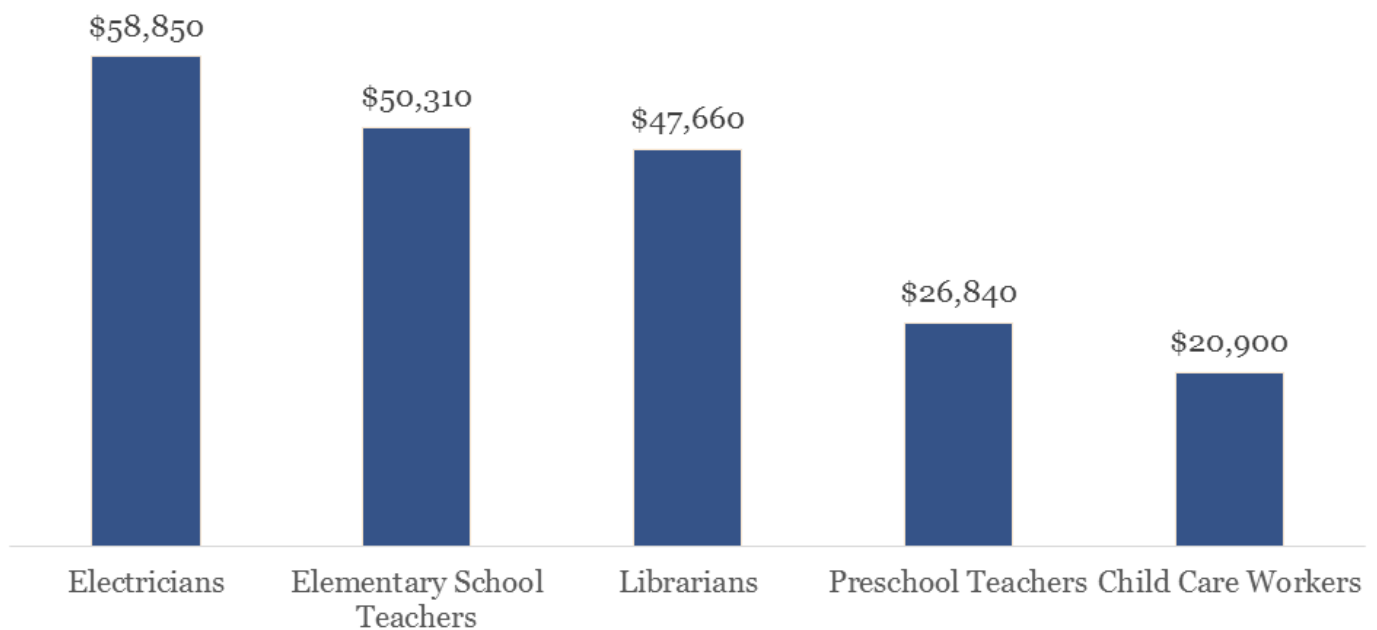
Parents are not required to have education or licensing to care for young children and the baby-sitting model of child care tends to assume that those who care for children need not have such background either. This approach suggests that a friendly, nurturing character is sufficient to provide for the needs of young children. The data on outcomes, however, has long indicated that the following features of high quality care play significant roles in supporting maximum neurological development in the first five years:

Figure 11: Average Cost of High-Quality Care by Program Type and Age, State of Indiana



Sources: Early Learning Advisory Council. 2018. “Indiana Early Childhood Interactive Dashboard: 2018 ELAC Interactive Annual Report, Affordability.” <http://www.elacindiana.org/data/2018-elac-annual-report-interactive-dashboard/>; U.S. Census Bureau. 2017. “Table B19013: Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars).” *American Community Survey 5-Year Estimates, 2012-2016*. www.census.gov

Figure 12: Mean Annual Earnings by Occupation for a Sample of occupations that require the same level of skill or training required to provide quality child care, Indiana 2017



Source: Bureau of Labor Statistics. May 2017. "State Occupational Employment and Wage Estimates Indiana."

- * Developmentally targeted activities.
- * A language-rich environment with appropriate opportunities for stimulation and social interaction.
- * Sound nutrition and appropriate sleep (in terms of frequency and duration).

Ninety percent of brain development occurs by age five.⁷⁰ Developmentally appropriate stimulation and interaction is essential to maximizing development during this crucial period.⁷¹ Creating and maintaining such environments requires child development knowledge and continual professional development to remain abreast of progress in the field. "The most critical indicator of quality child care is the level of education of the child care provider."⁷²

As noted, however, ECE offers low wage jobs that fail to attract an educated or well-trained work force. In comparison with occupations that require roughly the same amount of training, child care workers earn less than half of comparably trained peers and a third less than preschool teachers, who are also underpaid (Figure 12). "Pre-school teachers tend to be younger, less experienced, and

compensated less than teachers in kindergarten."⁷³ Child care workers' earnings are roughly equivalent to fast food workers, a labor force that requires minimal training and that is known to have very high turnover rates. In financial terms, the care of Indiana's youngest citizens is equivalent to flipping burgers in a fast food operation.⁷⁴

Engaging Providers

Paths to QUALITY™ has distinct standards for licensed homes, licensed centers, and unlicensed ministries, facilitating access for a broad range of providers. However, the majority of providers are not yet participating.

Providers in the state of Indiana are not required to participate. Those who receive CCDF vouchers are able to access CCDF certification, which has some overlap in requirements, but does not require the same focus on improvement and is roughly equivalent to Paths to QUALITY™ Level 2. In addition, based on separation of church and state, faith-based providers are exempt from licensing and regulation. This interpretation leaves many providers able to operate outside the protections and standards that regulation and the QRIS

provide. Critics argue that the separation of church and state should require that these providers meet the same standards as anyone else if they wish to serve individuals paying for care with CCDF vouchers.

Some home and faith-based providers would like to participate in Paths to QUALITY™, but note that facilities requirements keep them from being able to pursue the designation. To make structural changes and meet all requirements may be cost prohibitive for, what are often, low-budget operations paying minimal wages. The state provides some opportunities for financial support to meet such criteria, but it still may not be enough. In other cases, facility demands are simply unreachable for reasons other than finances.

The state offers small one-time incentives for each step in the Paths to QUALITY™ progression. The amounts are higher for centers, public schools, and ministries than for homes, thus encouraging the move to center-based care. Providers receive non-cash incentives for the first three levels (\$50 for 1 to 2, \$1,000 for 2 to 3, and \$1,000 for 3 to 4), a one-time \$1,500 cash award (\$500 for homes) for achieving level 4, followed by an annual \$1,000 cash award each year that a center maintains level 4 status (\$300 for homes). This is nice, but for Centers working to maintain updated equipment and supplies, and providing strong wages (that keep pace with inflation) to more highly qualified staff, these bonuses, even when combined with higher CCDF reimbursement rates, may not drive action.

Under the current system, providers recognize that pursuing quality can be a strong long term strategy, but with parents looking for inexpensive options, many see too little benefit for the effort.

Summary

Child development from birth to age five lays the

foundation for healthy productive lives. ECE has the capacity to improve opportunities for today's workers, increase labor force engagement, and develop a high quality future work force, but only if the care and education are high quality.

More neural connections are formed from birth to age five than at any other stage in the

lifespan.⁷⁵ A quality language-rich environment can close the gap between children of parents with different levels of education, an important step in leveling the playing field.⁷⁶

Quality care and education provide physical, social, cognitive, and emotional

nourishment through mentally stimulating play and activities. In addition to basic safety considerations within a facility, attention to nutrition and sleep are essential to creating a safe and healthy environment for children.

Indiana's Paths to QUALITY™, T.E.A.C.H., and CCDF voucher programs work in concert to support improvements in the quality of care and education provided to children birth to five, but more can be done:

- * Increase public awareness of the importance of high quality care from birth to age five in order to increase support for public and private investments, and improve parent engagement and demand for high quality care.
- * Increase Southern Indiana providers' participation in Paths to Quality by offering greater support for workforce development, both in terms of time and in terms of personnel support to allow time for staff to attend classes.
- * The state could have floating, highly qualified, child care workers in each region who step in to provide staffing while caregivers and teachers take time for

Child care workers' earnings are roughly equivalent to fast food workers... In economic terms, the care of Indiana's youngest citizens is equivalent to flipping burgers in a fast food operation.

education and training necessary to improve the quality of the program and the career opportunities of the staff.

- * Increase incentive for moving from Level 2 to Level 3 to increase the supply of high quality care.
- * Continue to provide higher CCDF reimbursement rates to higher quality providers. This helps offset the costs of providing quality care.
- * Expand access to vouchers for high quality care on a sliding scale that ensures no family spends more than 10% of income on care, but families also have the capacity to choose high quality care

and do not experience a cliff after which the benefit disappears.

- * Subsidize higher wages and strong bonuses for centers that employ highly qualified teachers and caregivers as well as those who support staff engaging the T.E.A.C.H. program.
- * Public and private grants for health, safety, and educational supplies.
- * Provide wage supports or for additional personnel for needed family programming.
- * Child care providers can look to share back office expenses and other resources in order to reduce their overhead and direct more of their

Access

American families employ a number of strategies for meeting child care needs. Many of these strategies operate beyond our ability to track. This means that we cannot determine their role in shaping access nor can we discern whether these are high quality arrangements that support the health and full development of the children in care. *Research, however, is clear that center-based care is generally of a higher quality and yields better outcomes than home-based care. The care we are least able to track or regulate is delivered through home-based providers.*

Lack of access to high quality affordable options that meet parents' and children's' needs leads many to seek care in the under-the-table market. The following ECE options lack full documentation and often operate without regulatory oversight:

- * Siblings
- * Grandparents
- * Other relatives

- * In-home care by a non-relative
- * Care in a provider's home not registered as a family day care.

The U.S. Census Bureau reported that roughly 40.6 percent of children under five who were in some type of child care in 2011 were cared for in such arrangements.⁷⁷ An additional 21.3 percent were cared for by a parent during times when the survey's reference parent was working.⁷⁸ These figures may reflect some residual impacts of lethargic employment rates coming out of the recovery from the 2008 recession, but there is no reason to think they've changed significantly.

Center-based care is the best documented and regulated, and it provides the highest quality care.⁷⁹ Among registered providers in SILM, 40.4% are secular center-based or school based programs and these programs serve 52.9% of children enrolled in registered programs (Figure 16).⁸⁰ These figures are encouraging, until we remember that over 50% of SILM children birth to 5 with all parents in the household working are not enrolled in registered



programs (Figure 6).⁸¹ The 52.9% of those enrolled in registered programs that are in center and school based programs likely represent around 25% of children birth to 5 who live in homes where all parents work. Moreover, the 28.0%-56.6% of providers (across the 5 counties) that deliver care in formal settings also represents a far smaller portion of all care options utilized by families in the region (Figure 16).

Availability of Child Care Slots

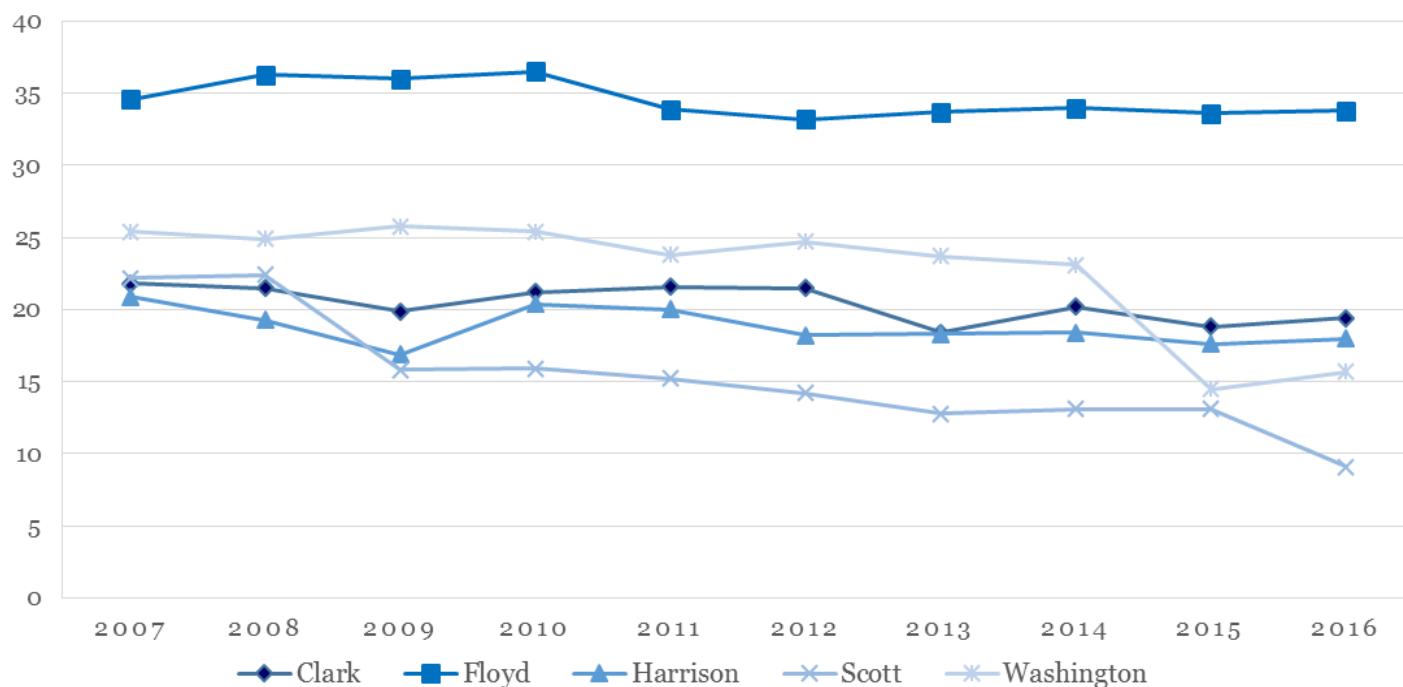
While more than three-quarters of children under 5 likely need some sort of non-parental care arrangement, SILM counties have fewer than 26 licensed child care slots per 100 children under age 5, leaving at least half of area children in largely unregulated care (Figures 13 & 14). Indiana has a voluntary certification option for Child Care Development Fund (CCDF) voucher eligibility that provides a rough equivalent to licensure, but without the full licensing procedure. This fact muddies the waters on our numbers. School based pre-school programs are also exempt from state licensure as they receive accreditation through other means. This means our figures may

understate the share of programs meeting some licensure and quality standards. Even with these data caveats, we can see that low supply of quality center-based options constrains access to high quality ECE.

Scott County has less than 10 licensed child care spots per 100 children under age 5 and Washington County has fewer than 18 (Figure 13 and 14). Both counties' economies are weak and many residents commute out of county for work. They likely seek care close to their places of employment. Commuting patterns are definitely a factor shaping demand and supply; however, lack of child care options may also shape commuting patterns.

Parents make choices based on what is available in their area or near their work and within the limits of what they can afford. Cultural biases may favor home-based care options and combine with convenience, in terms of both location and flexibility, and the cheaper price tag (excluding nanny arrangements), to produce widespread use of unlicensed providers of unknown quality that may operate beyond the oversight of health and safety regulations. This means parent choices

Figure 13: Licensed Child Care Slots per 100 Children Ages 0-5 by County, 2007-2016



Source: Annie E. Casey Foundation. 2018. "Licensed Child Care Slots per 100 Children, Ages 0-5, 2007-2016." *KIDS COUNT Data Center*. <https://datacenter.kidscount.org/>.



increase demand for a supply of informal arrangements. At the same time, dysfunctional market dynamics deter entrepreneurship in the area of high quality center-based care.

High Costs of Providing Quality Care

Access to high quality ECE is limited by supply. As noted, to achieve and document quality requires time and financial resources. In a market unable to bear those costs, most providers do not see pursuing such advances as financially feasible or worth the time.

Providing quality child care is expensive, requires expertise in child development, the ability to work well with children and parents, strong business and management skills to navigate funding streams and ensure a sustainable business model, and the capital necessary to establish and improve facilities and programs.⁸² The median family income across SILM counties ranges from \$54,862 in Washington County to \$72,466 in Floyd County, which means half of all family households are earning less than

Figure 14: Quality ECE Slots per 100 Children under Age 5 by County, 2017

	Population Under Age 5	High Quality Slots Available	Number of High Quality Slots (PTQ™ Levels 3 and 4) per 100 Children Under Age 5
Clark	7,273	515	7.1
Floyd	4,542	492	10.8
Harrison	2,279	280	12.3
Scott	1,370	56	4.1
Washington	1,577	40	2.5
Totals	17,041	1,383	8.1

Sources: U.S. Census Bureau. 2017. "Table B09001: Population Under 18 Years by Age." American Community Survey 5-Year Estimates, 2012-2016. www.census.gov; Southern Indiana Economic Opportunity Corporation, Resource and Referral data as of July 2017.

those amounts in each of those counties (Figure 17). Families with young children are likely to be in a lower portion of the income distribution than those with longer standing work histories and careers. Many, if not most, families are not in a position to pay what it costs for a provider to deliver high quality care. This reality acts as a deterrent to those who may be interested in owning and operating quality child care centers, and it limits the high quality care options available to families, thus limiting access.

Flexibility to Meet the Needs of Workers

In addition to the general shortage of child care slots, the same market dynamics that make building a viable business in high quality child care difficult, make it very hard to provide flexible care options that meet the needs of today's workforce. The standard model is child care that begins between 6:00 a.m. and 7:30 a.m. and ends at 6:00 p.m. to accommodate parents whose workdays begin at 8:00 a.m. and end around 5:00 p.m. To maintain a slot, parents pay for this schedule five days per week whether they use it daily or not. This schedule has always left some families underserved and struggling to find workable arrangements, but changes in work have likely increased the number of families affected.

Over the last 20 years, the U.S. economy has seen a significant increase in part-time and contingent labor.⁸³ Low-income families are likely to include workers who piece together multiple part-time jobs with weekly and seasonal work schedules that change frequently.⁸⁴ Work schedules may also include evening, overnight, and weekend hours.

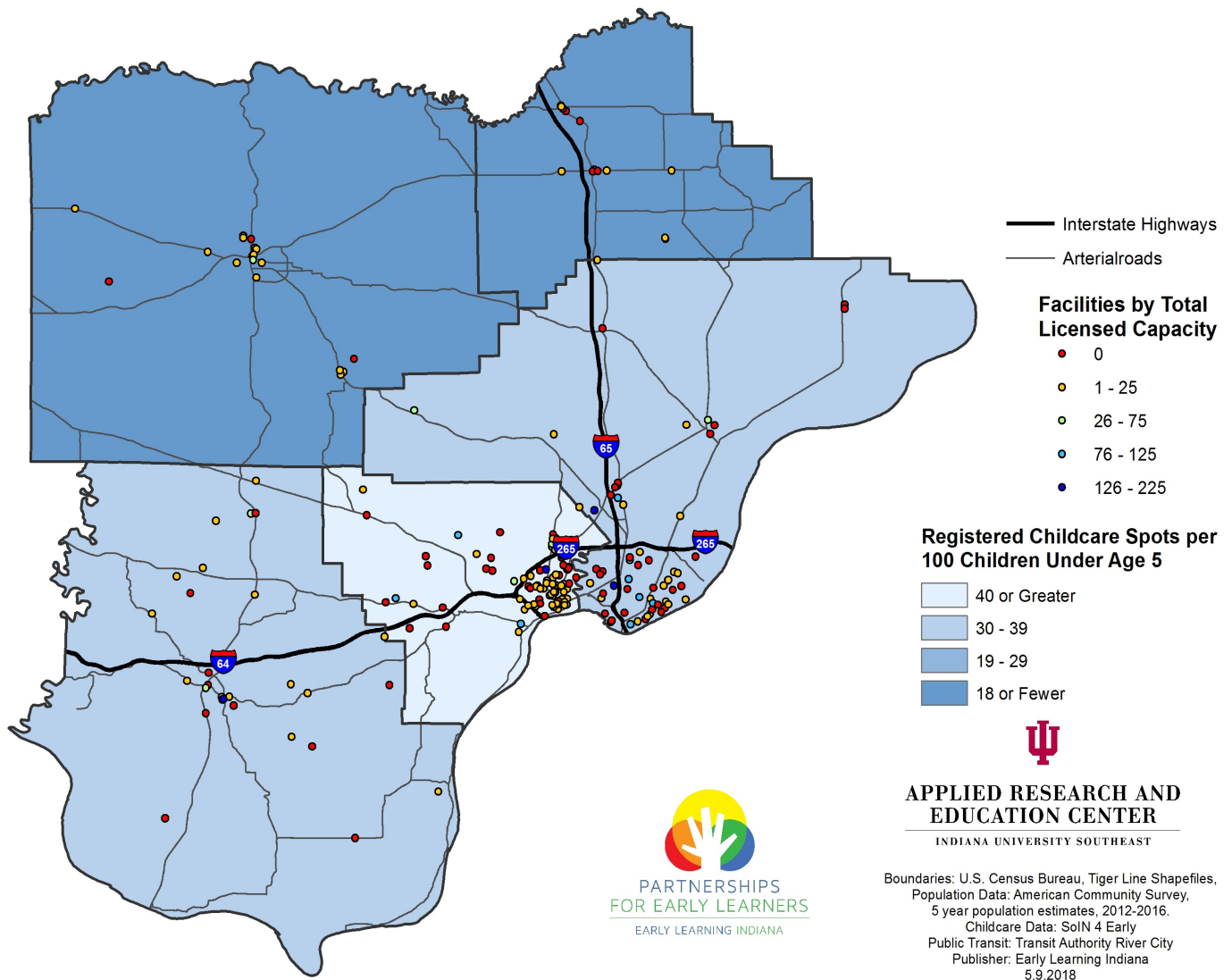
Many jobs lack stability so low-income workers' schedules frequently change. These dynamics make it difficult to find and use stable quality child care that can adapt to meet inconsistent needs that may stretch well beyond the traditional work week. Constrained by child to teacher ratio requirements and low operating margins, ECE providers find it difficult to offer options that serve inconsistent needs, part-time work, and nontraditional hours.

Location and Transportation

The SILM region is a mix of rural and suburban communities. Many low-income families face significant transportation challenges that affect both their work opportunities and their ability to access quality child care. For those living in rural parts of Clark and Floyd counties and anywhere in Harrison, Scott or Washington counties, public transportation is not available.

Low population density makes the business model for center-based care for birth to three care even more difficult (Figure 14). Among those serving

Figure 15: Licensed Spots per 100 Children under Age 5 and Licensed Capacity of Registered Providers



rural communities, many are not licensed and even fewer are on Paths to QUALITY™. A current pilot program in Harrison County includes school-based pre-K for four-year-olds and uses the public school bus system in part of the county to transport four-year-olds to all day pre-K. This works well for four-year-olds, but does not provide a viable option for children birth to age three.

In the more densely populated communities along the Ohio River, the Transit Authority of River City (TARC) provides limited routes on limited schedules (See routes in orange in Figure 18). This means parents that use public transportation may constrain their search to affordable options close to home or

close to work, with little room to concern themselves with quality. Only two Level 4 rated Centers sit directly on the public transit routes in southern Indiana (Figure 18). A handful of other providers are located right on transit routes, but the majority require significant walking or other transportation to get from transit stops to child care facilities.

Care for Children with Special Needs

Parents of children with special needs, especially poor and low-income parents, have a particularly difficult time finding care because there are simply

Figure 16: Center Based Programs as Percent of Total and Percent of Children Enrolled in Secular Care Centers as Percent of Total Children Enrolled in Known Programs

County	Percent of Registered Providers that are Secular Center or School-Based (includes Headstart)	Percent of Children enrolled in Registered Programs that are in Secular Child Care Center and School Based Programs (includes Headstart)
Washington	28.0%	29.8%
Floyd	29.9%	49.6%
Harrison	41.7%	48.4%
Scott	42.9%	34.1%
Clark	56.6%	63.3%
Totals	40.4%	52.9%

Source: Southern Indiana Economic Opportunity Corporation (SIEOC), Resource and Referral data as of July 2017.

fewer high-quality, inclusive child care settings.⁸⁵

Under Part C of the Individuals with Disabilities Education Improvement Act (IDEA, 2004), agencies providing early intervention services are to facilitate access to early care and education for children with disabilities. The Americans with Disabilities Act (ADA) requires that children with disabilities be accepted by child care centers if that can be accomplished with “reasonable modifications” (U.S. Department of Justice, Civil Rights Division, Disability Rights Section, 1997, General Information section, para 1). Yet many child care programs (both home- and center-based) simply do not accept children with disabilities (Booth & Kelly, 1999). These programs routinely argue that they cannot accept children with disabilities because they do not have adequate staff or the staff does not have specialized training (Booth & Kelly, 1998, 1999; Warfield & Hauser-Cram, 1996).⁸⁶

In response to the need for high quality inclusive care and in compliance with the ADA and IDEA provisions, the state of Indiana has a structure in place intended to increase the availability and quality of care for children with special needs.⁸⁷ The Indiana Partnership for Inclusive Child Care (IPICC) works in collaboration with the Indiana Association for Child Care Resource and Referral

to increase the quantity and quality of care available for children with special needs.

Every Indiana child care resource and referral agency has an inclusion specialist that can provide training, on-site technical assistance, resources and other disability-related services to assist providers in serving children with special needs. Inclusion specialists offer trainings throughout the state on a monthly basis and provide monthly webinars.

Time spent in these trainings counts toward licensing or Paths to QUALITY™ training hours. This means that gaining competency in these areas is at least lightly incentivized through the quality recognition and reward programs.

Formal center based care may be well positioned to meet ADA requirements and may have staff more likely to be trained to meet such needs. In less densely populated areas, however, the demand may be lower and is likely to vary from year to year. Maintaining staff and directing resources to supplies and appropriate training may be difficult.

In these contexts, trained providers who can deliver services in the child’s home offer a likely solution. This response, however, denies the child social benefits of the center-based environment and of experiences in a structured setting that prepares them for formal schooling. While the range of early child care providers who indicate they provide special need services reaches 87% in Clark County,

Figure 17: Median Family Income by County, SILM 2012-2016

	Median Family Income
United States	\$67,871
Indiana	\$62,748
Clark	\$64,568
Floyd	\$72,466
Harrison	\$64,643
Scott	\$55,040
Washington	\$54,862

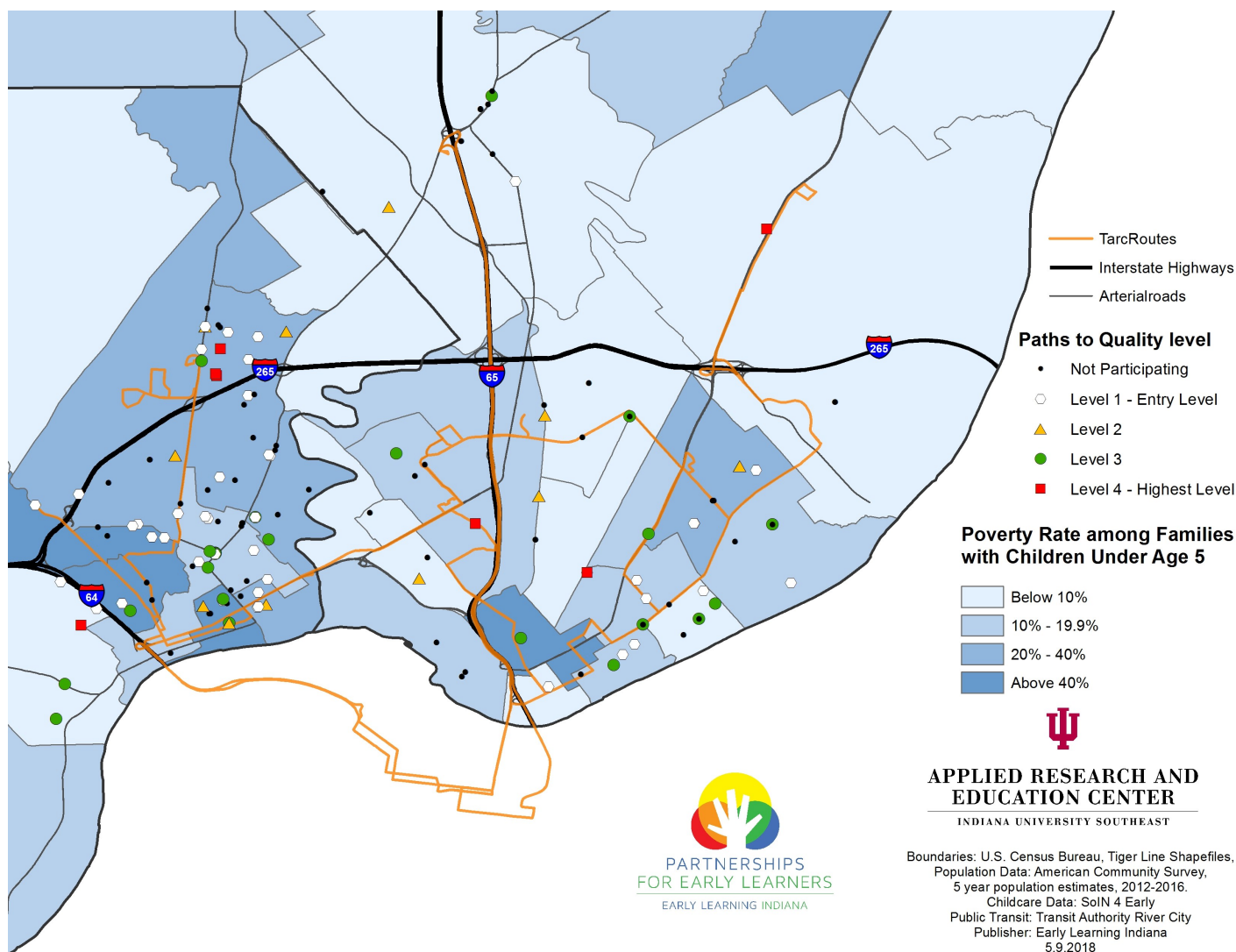
Source: U.S. Census Bureau. 2017. "Table B19113: Median Family Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars)." *American Community Survey 5 Year Estimates, 2012-2016*. www.census.gov.

it is a much lower 56% in rural Washington County.⁸⁸ Moreover, the figures reflect that they address special needs, but do not indicate more specific information on what providers can accommodate.

Sick Children

The average American working parent misses nine days of work per year. That number goes up as kids move through elementary school.⁸⁹ While some of those absences are the result of child care disruptions unrelated to illness, providers do not permit children to attend child care when they are ill. Working parents must stay home or make other arrangements to accommodate illness. For many parents, especially those working for a low hourly wage, such absences from work can lead to lost

Figure 18: Poverty and Public Transportation Access to Care by Quality Rating





wages or even termination. Professional parents in salaried positions may have more flexibility, but they also experience significant losses in productivity or disruption to their roles as the result of missing work to care for a sick child.

The negative impacts of child illness on parents' work lives mean that parents often make poor choices that are not in the best interests of their own child or others. Parents may send a mildly ill child to day care, placing others in the setting at risk of contracting the illness. At the same time physicians worry that some medical exclusion policies burden families with unnecessary doctors' visits or may incentivize problematic responses to minor illness, such as a request for antibiotics so a child can more quickly return to the care setting.⁹⁰

To avoid labor disruptions, transmission of illness in child care settings, overuse of antibiotics and physician time, home-based sick child care could be incentivized and subsidized to ensure options are available. Payroll taxes and other mechanisms of employer investment are potential finance mechanisms for such a system. Emerging community health worker models for delivering care may combine with early childhood education and care certification to develop a workforce well suited to address this need. In rural communities, individuals could earn a certification for community health work and a child development associates' degree to build a tool kit for meeting sick child care needs and facilitating telemedicine, which may help create a more viable income model for such

contingent labor.

Summary

Dozens of studies document the benefits of high quality care to children, parents, employers, communities, and the economy. Nevertheless, the majority of families still lack ready access to high quality environments for children birth to five years old, and especially for infants and toddlers from birth to age three. Market assumptions do not hold in the child care sector. Those who need the service do not earn enough to pay for high quality care and they cannot forego care for their children. Policies, funding supports, and incentives that support provider efforts to improve the quality of existing care and develop new high quality programs can expand supply. These inducements should seek to:

- * Expand the supply of ECE in child care deserts.
- * Support off-hours, part-time, and irregularly scheduled care options.
- * Develop quality care options for infants and young children with special needs.
- * Generate universal access to sick-child care.

Increasing access to high quality care requires that communities approach early care and education as a public good and an employment service, not solely a personal responsibility.

Affordability

According to the Department of Health and Human Services, affordable child care should consume no more than 10% of a family's income.⁹¹ In a 2015 report, the Economic Policy Institute (EPI) found that nearly all of the 618 communities they studied had average child care costs that exceeded this national standard. Additionally, rates for younger children are even higher, with infant care costs exceeding average tuition costs at in-state, public 4-year institutions. Child care costs as a proportion of full-time, in-state public college tuition in Indiana range from 78.0% for 4-year-olds to 100.2% for infants.

Across all types of care, average costs in the SILM region exceed 10% of Median Family Income. In Indiana, an estimated 92,402 children are enrolled in child care paid for by their families.⁹² Of the over \$1 billion spent on early education in Indiana, nearly 62% is from parents paying for the services in annual fees ranging from about \$520 to \$20,000.

The Cost of Child Care in the Context of Economic and Labor Force Changes

Increasingly since the 1960s, American families require two incomes to afford an adequate lifestyle that meets basic needs.⁹³ Despite this increase in

workforce participation, especially among women, the U.S. has failed to reorganize its institutions to deliver the needed supply of child care in a way that is also commensurate with worker wages. This combination of factors has made early care and education (ECE) affordability an important topic for communities and policy makers to address.

Minimum-wage workers have particular difficulty affording child care. In Indiana, full-time, minimum-wage workers spend 43.7% of their annual earnings on child care costs for a 4-year-old child, and 56.1% on infant care costs.⁹⁴ These proportions represent costs for care provided to only one child and



U.S. mothers have an average of 2.4 children, making ECE affordability a concern for most low-income working families with young children.⁹⁵ Child care costs are an even greater barrier among single-parent households. Single-mother families make up about 24% of U.S. families with children under age 5 and comprise 58.0% of poor families with children under age 5 (Figure 19). Affordability is a key barrier to accessing quality child care during the most important years of brain development.

Economic Profile

Clark, Floyd, and Harrison counties have median family incomes above the state's median of \$62,748 (Figure 17).⁹⁶ Of those three, only Floyd County has

a median family income above the national median of \$67,871. Scott and Washington counties fall below the state’s median by \$7,000-\$8,000. The average median family income for the five-county SILM area (\$62,316) is in line with the state median.

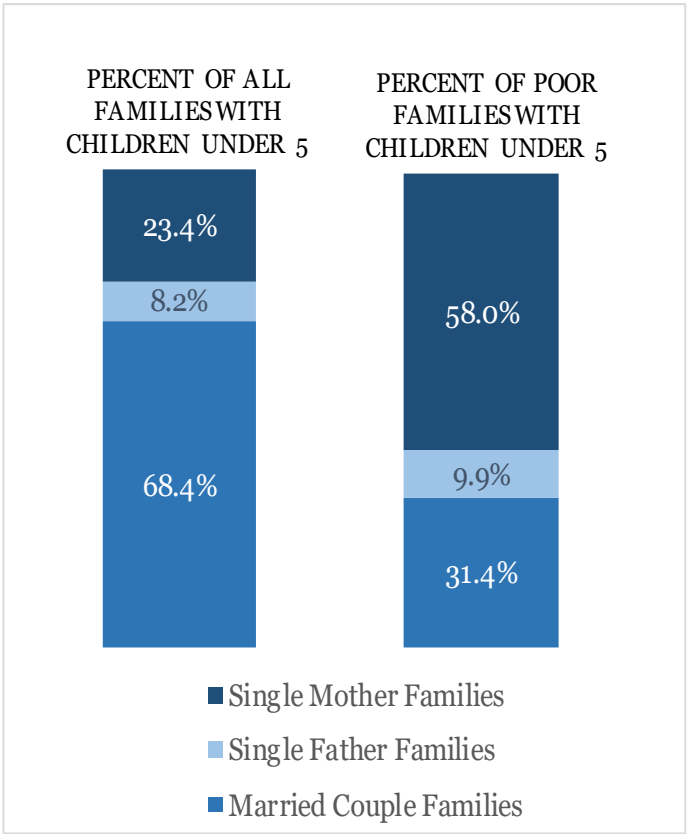
In Indiana, the average yearly cost for full-time child care for an infant is \$11,239, and \$7,957 for a preschool age child.⁹⁷ If child care costs were “affordable,” according to the Department of Health and Human Services’ definition, these costs should average roughly \$6,275 (based on Indiana’s median family income): a difference of between roughly \$1,700 and \$5,000, depending on the child’s age. The EPI indicates that the annual income required for an adequate standard of living for a two-parent, two-child family living in the Southern Indiana Louisville-Metro is \$62,651, or \$5,221 per month.⁹⁸

Poverty rates for SILM families vary from 12.8% in Clark County to 22.1% in Washington County. With the exception of Scott County, families with children under the age of five are more likely to live in poverty than families in general (Figure 19).⁹⁹ Washington County has the highest percentage of families with children under age five living in poverty with 30.7% and Clark County has the lowest at 14.8%.

Indiana reflects national figures with a 21% poverty rate for children under five.¹⁰⁰ Two of the five SILM counties have higher child poverty rates than the state’s rate. Scott County has the highest child poverty rate among these counties at 23.6%. Washington County has a slightly lower child poverty rate of 21.8% (for all children under 18), but still above the state rate of 19.1%. Clark (15.7%), Floyd (14.7%), and Harrison (13.6%), have lower child poverty rates than the state as a whole. Among children age five and under in the SILM region, 1,908 (14.1%) live in households with earnings below the federal poverty line.¹⁰¹

The disproportionate share of poor families with children under five that are headed by a single parent makes finding the funds to pay for quality care quite difficult (Figure 19). Poor and low-income single parents consistently pay more for child care than they can afford (Figure 22). Only a small portion of single parents with young children earn enough to cover quality child care without exceeding

Figure 19: Families with Children Under 5 by Family Type, All Families and Families Earning Below Poverty Level



Source: U.S. Census Bureau. 2017. “Table B17010 Poverty Status in the Past 12 Months of Families by Family Type.” *American Community Survey 5 Year Estimates, 2012-2016*. www.census.gov.

10% of income.

To be clear, child care is not too expensive. Child care workers earn very low wages and small business owners in the early care and education sector operate with very low profit margins or losses, making it difficult to provide high quality care for young children and deterring would-be entrepreneurs.¹⁰²

Given the public benefits of early care and education and its fundamental tie to K-12 and higher education success, many argue that the answer to the mismatch between the cost of providing quality care and the ability of families to pay for it should be addressed through public subsidies. Under current policy CCDF vouchers meet some of this need through public subsidies, but even among those who qualify, not all need is met.



Child Care Vouchers

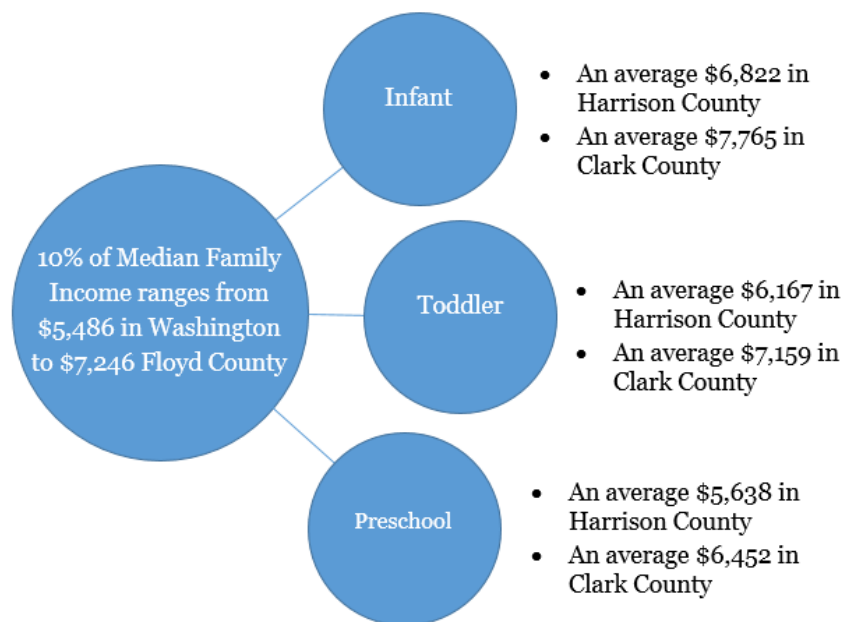
The Child Care Development Fund (CCDF) is a federal program that supports low-income families by providing assistance with child care costs through vouchers.¹⁰³ The federal government provides block grants to the states, which are required to match those funds and implement the voucher system. In addition to serving low-income families, the funds also support families who are temporarily receiving or transitioning from public assistance. Vouchers can be used for child care costs of children through the age of 12, and *whose parents are employed or enrolled in school* and are within the program's income guidelines. Parents are required to recertify their need for assistance every six months.

Not all families that are eligible for vouchers receive them. In SILM counties alone, among those who applied for vouchers, the waiting list ranged from 55 to 630 families in calendar year 2017 and by the end of the year the average wait was 198 days (Figure 23).

Indiana has a tiered reimbursement structure for CCDF vouchers. The state reimburses at different rates based on quality, licensure, and program type (family child care home, ministry, center-based care, registered, or exempt). This system is intended to encourage providers to pursue higher Paths to QUALITY™ ratings and to support access to and demand for quality care in settings they choose for families who otherwise could not afford it.

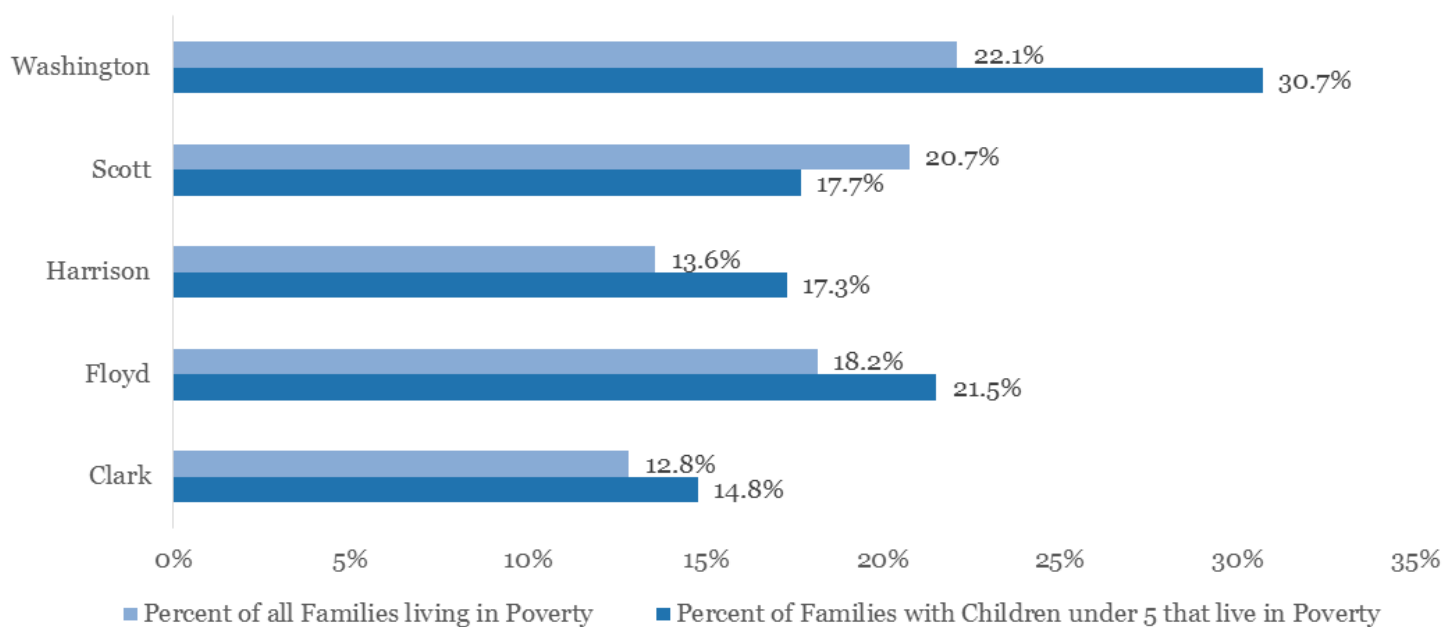
Based on the average costs reported by the Early Learning Advisory Committee (ELAC) and voucher reimbursement rates listed on the FSSA website, the CCDF tiered voucher program varies in how well it closes the gap between earnings and child care costs. In some places and for some ages the vouchers cover all or nearly all of the average cost for care in the area, but in other counties and age groups, the voucher may come up short (Figure 24). A mother of a three-month old in Washington County may receive a \$6,136 voucher for an in-

Figure 20: Median Household Income and Average Cost Ranges for SILM



Sources: U.S. Census Bureau. 2017. "Table B19013: Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars)." *American Community Survey*. www.census.gov; Early Learning Advisory Council. 2018. "Indiana Early Childhood Interactive Dashboard: 2018 ELAC Interactive Annual Report, Affordability." <http://www.elacindiana.org/data/2018-elac-annual-report-interactive-dashboard/>.

Figure 21: Families in Poverty and Families with Children Under 5 in Poverty, SILM 2012-2016



Source: U.S. Census Bureau. 2017. "Table B17006: Poverty Status in Past 12 Months of Related Children Under 18 Years by Family Type by Age of Related Children Under 18 Years." *American Community Survey 5-Year Estimates, 2012-2016*. www.census.gov

home Level 3 provider. The average cost of high quality infant care in Washington County is \$7,355 so the voucher may not cover the full cost. Given that figures are based on averages, families likely have a variety of experiences in using vouchers to successfully access quality care, depending on open slots, the amount of their voucher, and the fee structure of their preferred provider.

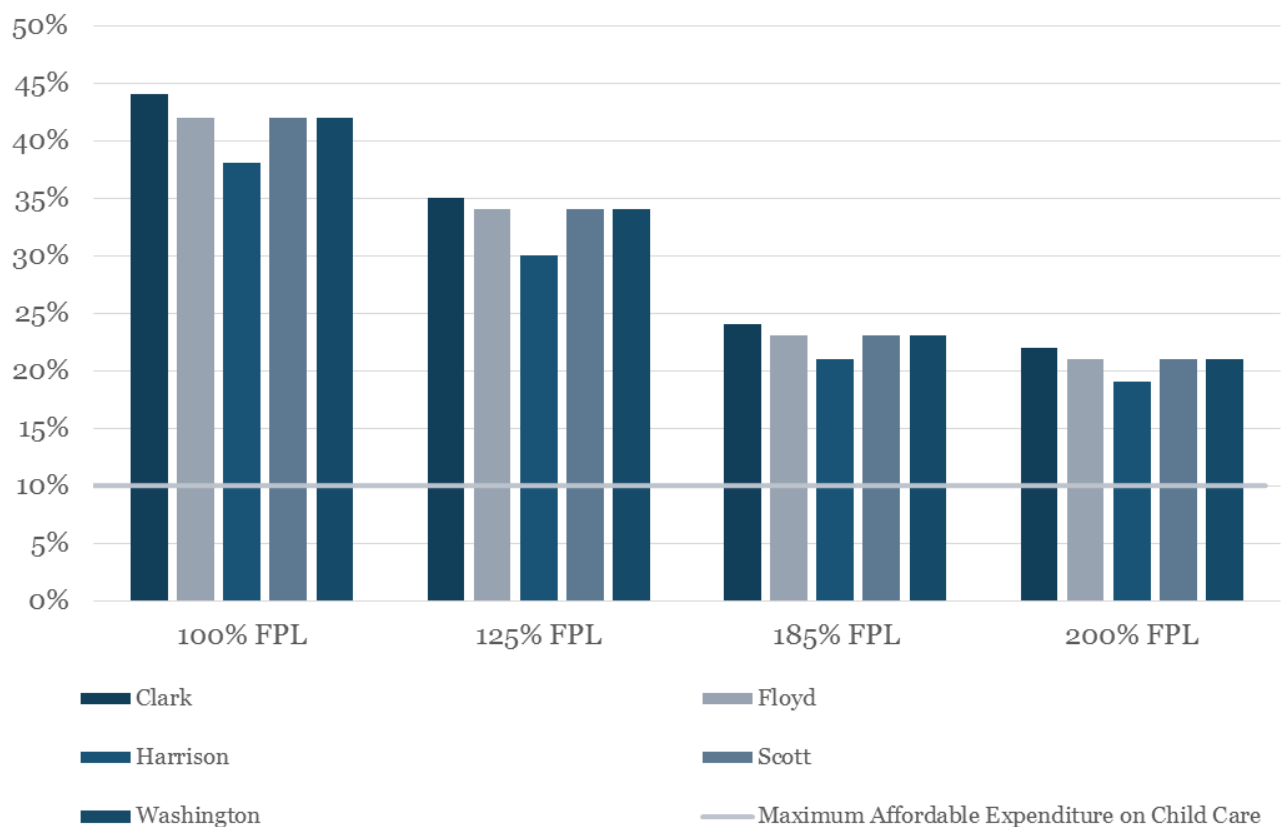
Summary

Affordability is a key barrier of high quality care. Most Southern Indiana children age birth to five, with all parents working, are not enrolled in high quality care. While some very low income families are able to access vouchers, many who qualify remain on wait lists. In addition, many families earn too much to qualify for vouchers, but do not earn enough to be able to pay for high quality care

without spending more than 10% of their income on child care. Many families spend a larger share of income on child care and still are not receiving high quality care.



Figure 22: Percent of Income Single Parent Pays for One Child to be in Care by Federal Poverty Level (FPL) Percentage Groups, SILM 2018



Source: Indiana Early Learning Advisory Committee. 2018. "How Much Does a Single Parent Pay for One Child to Attend a High-Quality Program?" 2018 ELAC Interactive Annual Report. <http://www.elacindiana.org/>. The Department of Health and Human Services states that affordable child care should consume no more than 10% of a family's income.

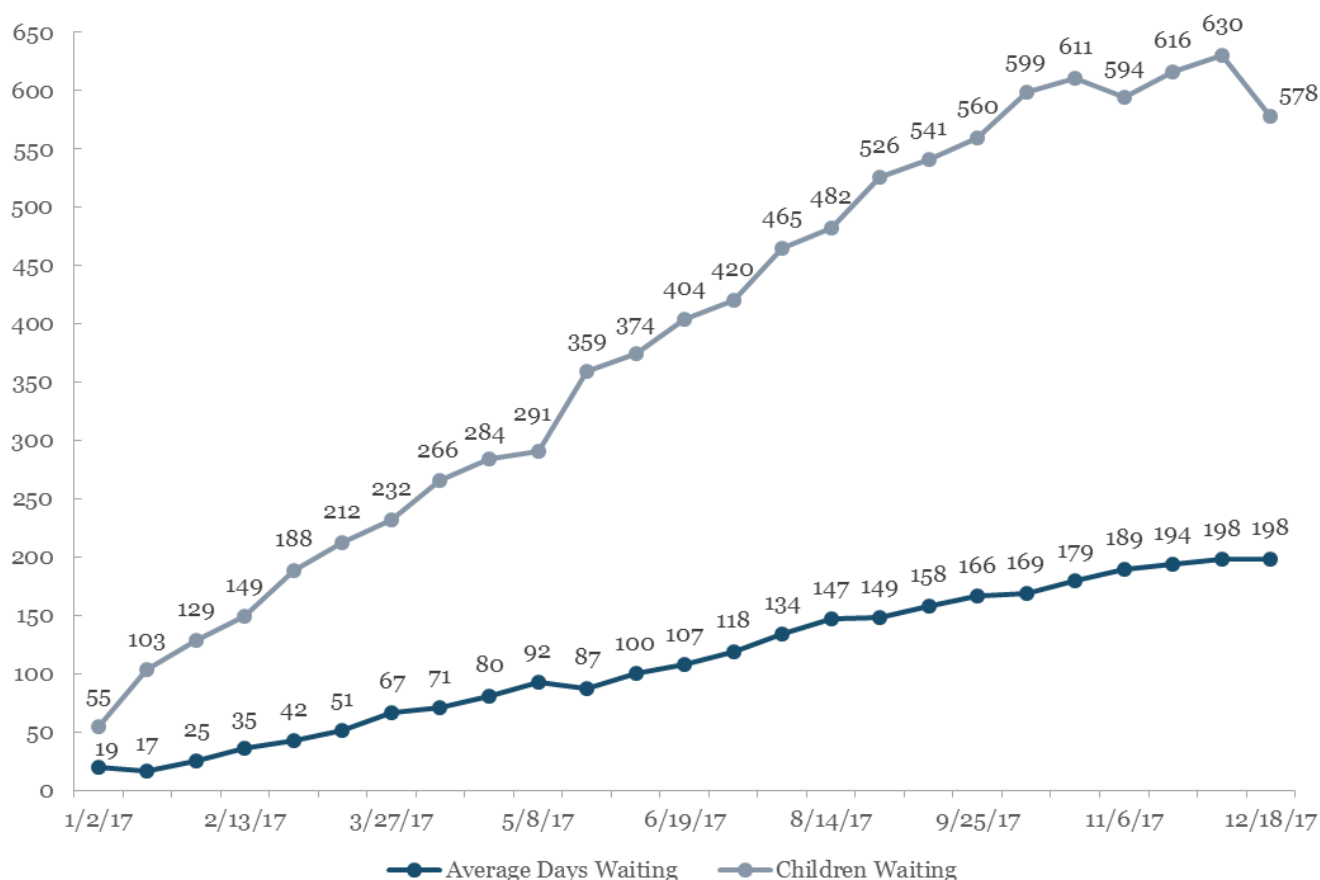
Implications

Research provides strong support for public and private investments in child care. The potential savings in public spending, the generalized benefits of quality early childhood care and education to the entire society, and the fact that the market economy is delivering wages insufficient to cover this cost of employment all provide strong arguments for public investments in ECE from birth to age five.

Industrialized countries of Western Europe have responded to studies reporting that ECE has important implications for parents' labor force participation, as well as overall positive effects on a nation's economy by establishing universal child

care systems of various sorts.¹⁰⁴ Faced with the same information, the U.S. has failed to invest in a more universal system of high quality care. ECE in America is largely provided through the private market (62% of child care services in Indiana are paid for by families)¹⁰⁵, and receives far less government investment than in most European nations.¹⁰⁶ Additionally, debates surrounding ECE in the U.S. mainly focus on the educational aspects of child care, compared to their counterparts in other industrialized countries who emphasize the education *and* well-being of *both* the child and parent.

Figure 23: Average Days Waiting to be approved for a Voucher and Number of Children Waiting on Voucher Approval, SILM 2017



Source: Indiana Family and Social Services Administration. 2017. "2017 Waitlist History." *Office of Early Childhood and Out of School Learning*. Received Upon Request August 1, 2018.

Figure 24: Average Cost of High Quality Care and Voucher Reimbursement Rates by SILM County

		Infant	Toddler	Preschool	County Average
Clark	Average Cost of High Quality Care	\$7,765	\$7,159	\$6,370	\$7,098
	Voucher PTQ™ Level 3	\$7,956 - \$10,504	\$6,760 - \$9,308	\$6,760 - \$8,112	
	Voucher PTQ™ Level 4	\$8,580 - \$11,284	\$7,280 - \$10,036	\$7,280 - \$8,736	
Floyd	Average Cost of High Quality Care	\$7,280	\$6,781	\$6,452	\$6,815
	Voucher PTQ™ Level 3	\$8,112 - \$9,828	\$7,436 - \$8,632	\$7,124 - \$7,800	
	Voucher PTQ™ Level 4	\$8,736 - \$10,556	\$8,008 - \$9,308	\$7,644 - \$8,372	
Harrison	Average Cost of High Quality Care	\$6,822	\$6,167	\$5,638	\$6,161
	Voucher PTQ™ Level 3	\$6,760 - \$8,788	\$6,292 - \$7,800	\$6,084 - \$6,448	
	Voucher PTQ™ Level 4	\$7,280 - \$9,464	\$6,760 - \$8,372	\$6,552 - \$6,916	
Scott	Average Cost of High Quality Care	\$7,355	\$6,892	\$6,450	\$6,836
	Voucher PTQ™ Level 3	\$7,800 - \$10,140	\$7,124 - \$8,580	\$6,448 - \$6,552	
	Voucher PTQ™ Level 4	\$8,372 - \$10,920	\$7,644 - \$9,256	\$6,916 - \$7,072	
Washington	Average Cost of High Quality Care	\$7,355	\$6,892	\$6,450	\$6,836
	Voucher PTQ™ Level 3	\$6,136 - \$7,384	\$5,616 - \$6,240	\$5,096 - \$5,876	
	Voucher PTQ™ Level 4	\$6,604 - \$7,956	\$6,032 - \$6,708	\$5,460 - \$6,344	

Sources: Indiana Early Learning Advisory Committee. 2018. "How Much Does High-Quality Early Childhood Care and Education Tuition Cost?" *2018 ELAC Interactive Annual Report*. <http://www.elacindiana.org/>; Indiana Family and Social Services Administration. 2018. "Current County CCDF Reimbursement Rates." Retrieved Jul. 12, 2018 (<https://www.in.gov/fssa/carefinder/2906.htm>).

Treating ECE, and particularly subsidies that provide access and support higher wages for child care workers, as economic development policy can have important implications for the children enrolled in care, parents and their role in the workforce, the ECE labor force, and regional economies.

High quality ECE leads to better academic

performance, higher graduation rates and lifetime earnings, lower use of welfare assistance, and lower crime.¹⁰⁷ Moreover, these effects are maximized when interventions are implemented from birth to age three not just four-year-old Pre-Kindergarten.¹⁰⁸

Parents, as well as their employers, experience benefits such as fewer missed days from work, less

turnover, and an increase in productivity.¹⁰⁹ In addition to being able to better engage the labor market, affordable child care allows parents to attend college, eventually leading to even greater economic opportunities in the future for their family.

One of the major challenges in increasing government spending on ECE is the struggle to get politicians and business leaders to consider such large investments when a portion of their payback will not be fully realized until two decades into the future. Researchers measure the impact of government investments in certain areas using the public finance approach which tracks the money spent (e.g. child care, health care, Social Security, public education, special education, criminal justice, and cash assistance) and gained (revenue from taxed income) for an individual throughout their lifespan.¹¹⁰

This approach suggests that during a lifetime, an individual cyclically moves from a state of dependency to being economically productive, and then returns back to dependency in later life. In general, most Americans will generate a positive return to the government. Data on ECE investments suggest the likelihood of this outcome is higher when we invest in the first five years.

The Economic Impacts of Investing in Early Childhood Education in Indiana (2016) estimates savings of up to \$48 million in lifetime spending on special education, remediation, and grade repetition for each student cohort. In addition, the study estimates the lifetime earnings return on investments of \$2.79 and \$3.09 per dollar invested for high and low-income participants, respectively, in early childhood programs.¹¹¹ With additional savings in crime reduction, the study estimates a return of \$3.83 to \$4 for each dollar invested in Indiana's early care and education.¹¹²

An approach that treats children as a public resource for investment might encourage a different political dialogue about how and why the state should make ECE affordable for all.

Employers whose workers access high quality reliable child care enjoy lower absenteeism and

turnover rates. Workers who place their children in quality care enjoy job and income stability. Investments in quality ECE will professionalize the child care sector, improve job quality, and increase earnings in the sector, generating greater economic activity and additional tax revenue that can help fund a high quality ECE system.

Because high quality birth to five care benefits families, employers, and the larger community and economy, all sectors have both individual and system roles to play in ensuring access to high quality affordable care and education. Research and advocacy efforts point to a wide range of strategies for increasing access to high quality affordable child care.

Policy and Public Investment

- * Provide small business supports (technical assistance and business start-up subsidies) to ECE proprietors.
- * Support work force development through education and training subsidies and wage supports to professionalize ECE and increase the supply of qualified caregivers and teachers.
- * To reduce overhead expenses and transportation barriers for 4 year olds, use existing infrastructure. School bus systems and public





facilities can be provided at no cost to ECE proprietors.

- * The state can provide tax credit opportunities for businesses that renovate to provide onsite child care.
- * Expand access to vouchers to all those earning at or below 200% of poverty, using a sliding scale that keeps child care costs to no more than 10% of income as family income increases.
- * The state could contract with community health workers with some specialized training in child development to provide in-home sick child care when children are sick and parents must work.
- * Invest in improving the quality of existing providers to increase availability of and access to quality care for those using vouchers. Additional manpower for technical assistance and on-site coaching will support a larger ECE sector with high quality standards.
- * Provide support for center-based and in-home special needs care that ensures a high quality early care environment and seeks to maximize social benefit and value to the child.

Employer Support

- * Large employers might consider renovating space to host on-site high quality child care that will decrease absenteeism and turnover, and improve employee focus and productivity.

- * Some employers provide child care allowances for staff. The human resources benefit boosts morale and decreases turnover and absenteeism.
- * Employers may choose to offer premium allowances for those who enroll their children in PTQ™ Level 3 or 4 care.
- * Employers that rely on contingent labor and multiple shifts have a role to play in subsidizing drop-in, irregular schedule, and night care for their labor force, via subsidies for accessing care and/or direct support to centers and programs designed to meet these particular needs.

Community Organizations

- * Advocacy and resource and referral organizations can engage public education campaigns to increase understanding of the importance and value of high quality early care and education.
- * Resource and referral agencies can continue to provide technical support for quality improvements and referral services to help parents and families find quality care that meets their needs.
- * Resource and referral agencies can play a key role in identifying child care deserts, barriers to increasing or maintaining quality, and workforce concerns.

- * Philanthropic organizations can provide grants for equipment, supplies, or workforce development activities.
- * Local foundations might consider supporting the private child care sector with support to a collective back office service to do payroll, insurance, licensing and Paths to QUALITY™ administrative tasks for small providers in their regions.
- * Organizations that serve children and families can collaborate to provide family and community education opportunities at local libraries and other venues to increase public awareness of the value of high quality early childhood experiences.
- * Organizations serving children and families can host activities where families and care givers learn more about activities and resources for nurturing healthy early childhood development.

Parents and Families

- * Those families able to access high quality affordable care need to share the benefits of their

experiences with local business leaders, elected officials, and other families of young children.

- * Choose high quality care and where it is not accessible, make sure local business leaders, employers, and elected officials are aware of its absence.
- * Engage conversations in the community about the challenges working families face.
- * Take advantage of opportunities to learn more about early childhood development and the kinds of activities and routines that will best support child(ren) at home.

Across sectors and income levels, from remote corners of Washington County to downtown Jeffersonville, young children need to be supported by and engaged in our communities. Research suggests that investments in high quality early childhood programs pay off for employers, the public trust, families, and for the children who will become our future leaders, thinkers, parents, creators and workers

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