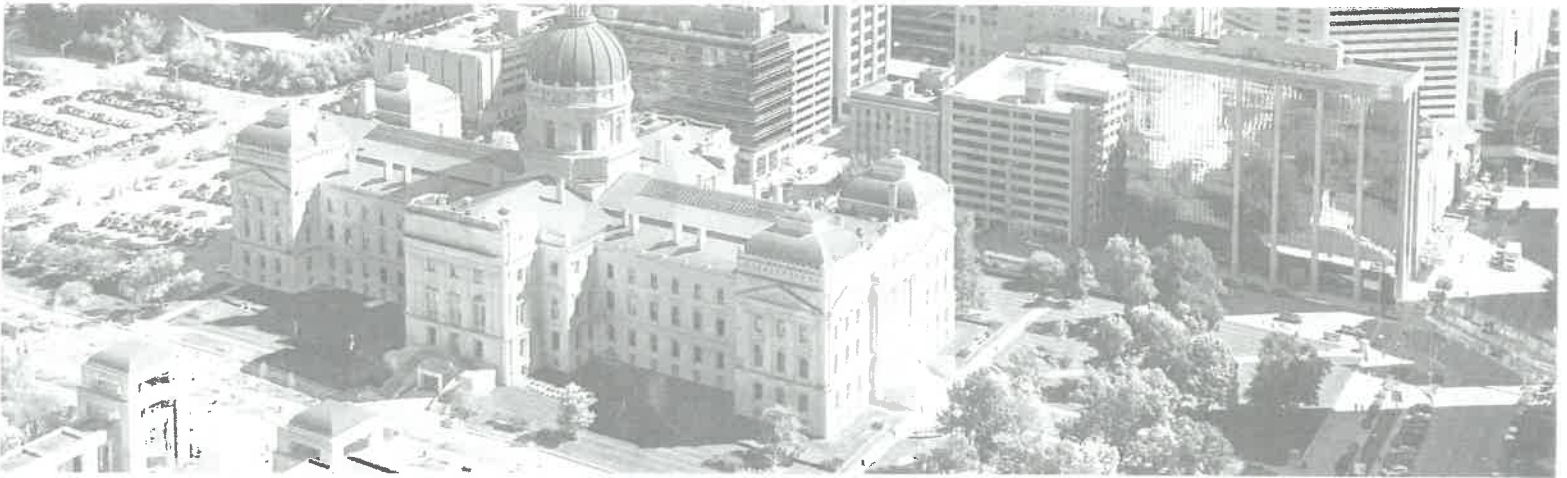




**LOST OPPORTUNITIES: The Impact of Inadequate Child Care
on Workforce Productivity & Indiana's Economy**

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AUTHOR

Laura Littlepage, MPA, Senior Researcher



INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

RESEARCH SUPPORT

Abe Roll, Graduate Research Assistant
Coley Ridge, Graduate Research Assistant

Prepared for
Early Learning Indiana



INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

334 N Senate Avenue, Suite 300
Indianapolis, IN 46204
policyinstitute.iu.edu

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EXECUTIVE SUMMARY

In March 2018, the IU Public Policy Institute (PPI) and Early Learning Indiana brought together representatives from across the state to convene the Economic Impact of Early Care and Education Research Project Advisory Board. PPI conducted research to assess economic repercussions on the state and businesses resulting from child care related work disruptions (i.e. absenteeism and employee turnover). Estimates were calculated for the state, three urban counties, and three rural counties. After reviewing the research and possible funding models, the Advisory Board made recommendations for funding voluntary early care and education (ECE) in Indiana.

ECONOMIC EFFECTS OF INADEQUATE ECE

Lack of ECE has demonstrable effects on Indiana's economy. We estimated that Indiana loses nearly \$1.1 billion in economic activity every year due to child care related absenteeism (\$580.7 million) and turnover (\$519 million). These child care related disruptions cost the state an additional \$118.8 million in tax revenue every year. Employers also have direct costs from these disruptions, nearly \$1.8 billion annually. Absences and turnover cost the rural and urban counties substantially. The three rural economies were estimated to lose \$2.1 million (Parke), \$4.9 million (Montgomery) to \$7.5 million (Jackson) in annual economic activity, while the three urban economies lost an estimated \$28.9 million (Vanderburgh), \$35.3 million (Elkhart) to \$138 million (Marion) annually. Businesses in these counties lose up to \$12.1 million (rural counties) and \$221.8 million (urban counties) as well.

This report follows the methodology outlined in similar reports conducted in Louisiana and Maryland. The opportunity costs associated with lack of ECE among the three states are presented in Table II.

TABLE I. Comparison of State-Level Population & Labor Force

	POPULATION (2017)	LABOR FORCE	PARENTS WITH CHILDREN UNDER 5
Indiana	6.7 million	3.3 million	390,884
Louisiana	4.7 million	2.1 million	272,439
Maryland	6.0 million	3.2 million	555,955

TABLE II. Comparison of Indiana to Other Estimates

	COST TO EMPLOYERS	COST TO THE ECONOMY	LOST TAX REVENUE
Indiana	\$1.8 billion	\$1.1 billion	\$119 million
Louisiana	\$816 million	\$1.1 billion	\$84 million
Maryland	\$2.4 billion	\$1.3 billion	\$117 million

ADVISORY BOARD RECOMMENDATIONS

Increasing access to high-quality ECE programs could mitigate these large costs for both the state and businesses. Previous research estimated that a high-quality Indiana program would yield a \$4 return on every dollar invested.⁷ The advisory board made four recommendations that they determined to be the most feasible for the state.

Tax Credits for Businesses which Support ECE

The most frequently recommended funding model, tax credits could be provided to businesses that donate to ECE providers or to organizations offering ECE scholarships. This would be similar to Indiana's current tax credits for donations to K-12 education scholarships.

Social Impact Bonds

Social impact bonds were identified as another feasible model. Social impact bonds involve private investors directly funding ECE programs and receiving back the investment (plus interest) if the programs meet predetermined criteria.

Shared Services Alliances

A model currently being used in some northern counties, Shared Services Alliances involve developing centralized infrastructure among smaller ECE providers. Shared Services Alliances aim to reduce costs, improve management systems, and standardize processes of ECE while allowing smaller organizations to operate independently.

Dedicated Sources

Several Advisory Board members suggested that local dedicated sources could be implemented. Members suggested that local referendums, or asking the legislature for permission to increase county food and beverage taxes, or local option income taxes might be politically feasible if the counties advocated for them.

FIGURE I. Annual Opportunity Costs of Lack of Early Care & Education in Indiana



\$1.1 billion lost in
economic activity

\$118.8 million
lost in tax revenue



\$1.8 billion in
direct cost to employers

INTRODUCTION

In Indiana in 2016 there were 506,761 children ages 6 and under, 21 percent of whom were living in poverty. Sixty five percent of children under 6 years of age had all available parents in the labor force, including four percent with at least one unemployed parent (actively seeking employment). Further, 28 percent had no parent with regular, full-time employment (i.e., working at least 35 hours per week and at least 50 weeks annually). Eight percent had no parent in the labor force.¹

Early care and education (ECE) is vital to meet the needs of the state's children and their working parents. In 2015, there were 19.9 licensed childcare slots per 100 children under age 6. In 2016, the monthly average of children on the waiting list for childcare vouchers was 5,290, with over 51,000 children receiving vouchers. The ECE workforce has a projected deficit of 8,195 workers. In addition to the insufficient workforce and open slots, affordability is a key barrier to childcare access. In 2016, a family in poverty composed of a single parent with one child would have to pay 54 percent of their income to child care.¹

In March 2018, the Indiana University Public Policy Institute (PPI) worked with Early Learning Indiana to identify and convene the Economic Impact of Early Care and Education Research Project Advisory Board (Appendix A). The Advisory Board, comprised of a wide range of representatives from around Indiana, met three times in the spring of 2018. The research, analysis and resulting recommendations presented in this report were guided by their input and knowledge of the needs of Indiana. PPI and Early Learning Indiana, in consultation with the Advisory Board, chose six counties, three urban (Marion, Elkhart, Vanderburgh) and three rural/midsized (Jackson, Montgomery, Parke) in Indiana to analyze as well as the entire state. This report estimates the economic impact in these counties of disruptions due to childcare issues on employers and the state, and then discusses options for increasing access to ECE in Indiana and presents the Advisory Board's recommendations.

Indiana is beginning to address this need for ECE with the voluntary On My Way Pre-K program and the Indy Preschool Scholarship Program (IndyPSP). On My Way Pre-K is a state funded program that awards grants to 4-year-olds from income-eligible families in 20 selected counties (Allen, Bartholomew, DeKalb, Delaware, Elkhart, Floyd, Grant, Harrison, Howard, Jackson, Kosciusko, Lake, Madison, Marion, Marshall, Monroe, St. Joseph, Tippecanoe, Vanderburgh and Vigo) so that they may have access to a high-quality pre-K program. Families who receive a grant may use it at any approved On My Way Pre-K program. To be eligible, families must have an income below 127 percent of the federal poverty level, the child must be 4 years old by August 1, 2018, and starting kindergarten in the 2019/2020 school year, and parents/guardians in the household must be working, going to school or attending job training.² A longitudinal study of the pilot program found positive results for participating families. Parents of participating children reported they had increased work or school hours, were able to obtain new employment, or begin school or job training (43, 29, and 23 percent, respectively). Fifty-three percent said the program helped them search for a job, keep their job, or improve their current work schedule.³

In addition, the city of Indianapolis, the state of Indiana, and the corporate and philanthropic community are partnering to provide almost 800 children from low-income families with quality preschool. The Indy Preschool Scholarship Program (IndyPSP) is available to both 3- and 4-year-old children whose family has an income below 185 percent of the federal poverty level, resides in Marion County; and the child is at least 3,

but younger than 5 years old by August 1, 2018. Families apply via the On My Way Pre-K application process and slots are offered through a randomized lottery process.²

In a national survey of households with young or school-aged children, approximately half reported that child care problems impacted their employment, 21 percent reported being absent from work due to problems finding child care and 27 percent reported changing their work schedule due to problems finding child care.⁴

Indiana government officials recognize and are concerned about this issue. The biennial survey by the Indiana Advisory Commission on Intergovernmental Relations was administered to 1,381 local elected officials in 2017. Of those who responded, 49 percent said that child care in their community was a major or moderate problem, an increase from 37 percent in 2014 and 36 percent in 2012. Another 78 percent reported that the state of child care in their community remained unchanged in the past year, while 13 percent of all officials reported that the condition had worsened.⁵



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PART ONE
ROI & ECONOMIC
IMPACTS STUDY

ROI & ECONOMIC IMPACT STUDIES

While the need is demonstrable, the question remains, how do we address this need and is it worth the investment? Policy makers are interested in the economic benefits of addressing the state's gap in ECE. Previous studies have estimated that the return on investment (ROI) from provision of high-quality early care and education range from \$4 to \$16 for every dollar invested.⁶ A recent study, detailed below, estimated these impacts for Indiana. Even though child care is important to parents, employers and the economy of Indiana, until recently, there was not much research on the impact that child care has on the parent's ability to be productive, reliable members of the workforce. Two recent reports, one released in 2017 by the Louisiana State University Public Policy Research Lab and one released in 2018 by the Maryland Family Network focus on the impact on the economy of lost wages and productivity because of child care issues. This section highlights these examples of the potential ROI from providing ECE in Indiana.

INDIANA⁷

While most available ROIs are for states other than Indiana, a 2016 report, *The Economic Impacts of Investing in Early Childhood Education in Indiana*, estimated the economic impacts of investing in Indiana ECE. They conducted cost-benefit analysis based on models of the voluntary ECE programs in Georgia and Oklahoma. The authors estimated that if Indiana provided universal preschool for four-year-old children, the annual cost would range from \$187 million to \$226 million. According to the authors, these costs would have only accounted for 0.8 percent to 2 percent of Indiana's spending on K-12 education (at the time of publication). While the initial costs are large, lifetime savings of \$38.8 to \$48.7 million per pre-K cohort outweigh them. These lifetime savings reflect reduction in costs associated with special education, remediation and in-grade retention.

Every dollar invested in high-quality early childcare results in an estimated 12 percent reduction in occurrence of special education, as well as an 18 percent reduction in the need of remediation/grade repetition (among students). The authors estimate that per student cohort, high-quality, state-funded early child care saves up to \$48 million in lifetime spending on special education, remediation and grade repetition. This accounts for an estimated three to eight percent decrease in the annual spending for special education and remediation.

Further, the authors estimated a return on investment related to lifetime earnings (e.g., employment gains and earnings benefits) that average \$2.79 per dollar invested to \$3.09 per dollar invested (for high- and low- income participants, respectively). If Indiana were to adopt an early education program of similar quality to those in Georgia and Oklahoma, gains in anticipated lifetime earnings are similar. It is important to note that this return on investment does not include potential reductions in poverty or use of public assistance, nor does it include likely increases in consumer spending or the state's tax base or the economic impact of lowered absenteeism and/or turnover.

A number of evaluations of state-funded pre-K programs also incorporate savings via crime reduction. The authors conducted a meta-analysis of such evaluations and estimated that, on average, high-quality early childcare resulted in cost-savings of 69 cents per dollar invested. These savings are a result of reduced cost to taxpayers and crime victims. The authors determined that a state-funded, high-quality

early childcare program in Indiana would benefit the state \$63 to \$162 million in reduction of lifetime crime costs, per school cohort.

Considering the above cost savings, Nelson and colleagues determined that “implementing a high-quality, state-funded early childhood education program in Indiana will yield an anticipated benefit of \$3.83 to \$4 per dollar invested.”⁷ The authors note that these returns on investment estimates do not include benefits from the expansion of the child care industry (e.g., improved wages and resulting tax base increases).



ROI for Indiana-Funded High-Quality Early Childhood Education Program

\$1 investment = \$3.83 to \$4 benefits

Another study estimated that by 2030 every state but one would spend less on education from pre-K through grade 12 if they met quality standards and served all children under 200 percent of the federal poverty level. Specifically, Indiana would experience a net decrease on pre-K-12 spending of \$292 million if it provided quality pre-K to all children under 200 percent of the federal poverty level.⁸

MARYLAND⁹

A 2018 report from the Maryland Family Network described the impact of a childcare system on the state of Maryland, where only half of the state’s 3- and 4-year-olds were in some form of ECE program during 2016. The report details results from a survey of parents, who had been employed in the last year, with children ages 5 and under. A number of these parents reported disruptions to employment (in the past three months) related to issues with childcare. Of these, nearly half reported short term disruptions (e.g., a sick child) and about 15 percent reported long term disruptions (e.g., dropping from full- to part-time employment) in the past year. During one year, parents reported that because of struggling to secure ECE they missed an average of 17 days of work, were late to work an average of 20 days, and left work early an average of 14 days.

This lack of ECE had significant financial impacts on the families, their employers, and the state itself. In addition to being absent or losing work, parents often turned down opportunities for education or promotion due to lack of ECE. Nearly one-quarter of the working parents reporting forgoing continued education, reflecting an opportunity cost of \$2.3 billion (based on potential wage increase from higher education). When these parents worked at businesses with 50 or more employees, 23.4 percent of them turned down promotions because of the inability to access ECE. Overall, absence and turnover due to issues accessing ECE cost Maryland employers \$2.415 billion, reduced the state’s economic output by \$1.28 billion, and reduced the 2016 tax revenue by over \$117 million. Further, the state loses an estimated 9,159 jobs annually as this lower economic activity dampens job creation.

LOUISIANA¹⁰

A similar study in Louisiana surveyed households with children ages 4 and under. Sixty-seven percent of children ages 5 and below had both parents (or their single parent) in the workforce. Among respondents, over 20 percent reported that significant decisions at work were impacted due to childcare. Specifically, parents reported having to quit a job over childcare issues and being fired over child care issues (16 percent and 7.6 percent, respectively). Others reported that child care constraints caused them to switch from full-time to part-time work, turn down a promotion, or choose to remain part time (19 percent, 14 percent, and 9.5 percent, respectively). Constraints of child care caused further issues in the productivity of employees who were parents. When asked to report on issues from the past three months, parents reported that child care issues caused them to miss work (over 40 percent), arrive late to work (nearly 33 percent) and leave work early (42 percent). It is important to note that single parents were impacted significantly more than coupled parents were.

These issues have strong negative effects on the Louisiana economy. The state's economy loses \$1.1 billion dollars each year due to child care related employment issues (absences, quitting and turnover). This was associated with nearly \$84 million dollars in lost tax revenue for the state. Employers, too, experienced negative impacts, incurring over \$714 million annually due to absenteeism related to child care issues.



PART TWO

**RESULTS: ECONOMIC
IMPACT ANALYSIS**

This report follows the methodology outlined in both the Louisiana and Maryland reports to estimate the economic impact of disruptions due to childcare issues on employers and the state. For a description of methodology and sources, see Appendix B.

According to data from the U.S Census Bureau's American Community Survey (ACS), there are 390,884 working parents of children under 5 in Indiana in 2016, representing approximately 14 percent of the state's workforce ages 18-64. This high number of workers with young children means that child care issues can add up to major economic costs for employers and the state.

Calculations and estimates of Indiana's working parents used demographic and labor force microdata from the U.S. Census Bureau's American Community Survey Public Use Microdata Sample, provided by the Indiana Business Research Center. For the estimate of the impact on the workers, the cost of absenteeism related to child care issues for workers is related to the fact that the majority of working parents in Indiana (56.9 percent) are wage workers so they may lack paid time off benefits if they must miss work due to child care issues. This absenteeism reduces their incomes, which leads to lower consumer activity and lower state tax revenues. This estimate was derived from data available from the Bureau of Labor Statistics 2016 Current Population Survey.

CHILD CARE RELATED ABSENCES AND EMPLOYEE TURNOVER COST INDIANA EMPLOYERS \$1.8 BILLION

Using an average of findings from other studies, we estimated that on average, working parents with children under 5 are absent from work 13.3 days due to child care issues. This absenteeism leads employers to pay wages to absent employees (for salaried workers), pay overtime, pay temporary workers or have reductions in productivity.¹¹ An additional 2.8 percent of working parents quit their jobs to address child care needs. When an employee quits an employer must spend time and resources to find, hire, and train a new worker.

TABLE 1. Direct Employer Costs of Absences & Turnover Due to Lack of Child Care

		ABSENCES	TURNOVER	TOTAL
INDIANA		\$ 1,660,795,115	\$107,427,180	\$1,768,222,295
Urban	Elkhart	\$53,291,607	\$3,447,124	\$56,738,731
	Marion	\$208,307,245	\$13,474,185	\$221,781,429
	Vanderburgh	\$43,518,034	\$2,814,929	\$46,332,963
Rural	Jackson	\$11,358,612	\$734,723	\$12,093,335
	Montgomery	\$7,400,472	\$478,694	\$7,879,165
	Parke	\$3,134,933	\$202,781	\$3,337,714

TABLE 2. Estimate of Full-time Equivalent Employees Lost Due to Lack of Child Care

		FTE EQUIVALENT
INDIANA		31,070
Urban	Elkhart	1,112
	Marion	4,316
	Vanderburgh	904
Rural	Jackson	205
	Montgomery	186
	Parke	70

Table 1 shows the direct costs to employers in Indiana from absenteeism (\$1.7 billion) and turnover (\$107.4 million) as well as in the selected rural and urban counties. In Marion County alone, the direct cost to employers was \$221.8 million. In the smallest county, Parke, the direct cost was \$3.3 million.

As Table 2 illustrates, if we convert the losses from absences and turnover into full-time equivalent employees, there is a loss of the equivalent of over 31,000 full time employees per year in Indiana due to child care issues. In a tight labor market, this is a substantial number of employees lost for employers.

CHILD CARE ISSUES HAVE A NEGATIVE ECONOMIC IMPACT OF \$1.1 BILLION ON INDIANA’S ECONOMY

As Table 3 illustrates, we estimate that Indiana’s economy loses almost \$1.1 billion in economic activity annually because of child care related absenteeism (\$580.7 million) and turnover (\$519 million). We estimate these losses for all of the turnovers and for absences of hourly workers. We assume that salaried workers have paid time off.

TABLE 3. Economic Impact of Child Care Related Employee Absence & Turnover in Indiana

		ABSENCES	TURNOVER	TOTAL
INDIANA		\$580,697,593	\$518,971,884	\$1,099,669,477
Urban	Elkhart	\$18,633,429	\$16,652,774	\$35,286,203
	Marion	\$72,834,701	\$65,092,679	\$137,927,380
	Vanderburgh	\$15,216,096	\$13,598,689	\$28,814,785
Rural	Jackson	\$3,971,543	\$3,549,384	\$7,520,927
	Montgomery	\$2,587,578	\$2,312,529	\$4,900,107
	Parke	\$1,096,131	\$979,616	\$2,075,747

This estimate takes into consideration that loss of workers earnings cuts into spending, which affects businesses and the state economy. We calculated this decline by using IMPLAN, a system of county-level secondary data input-output models that estimates economic effects.

ALMOST \$119 MILLION LOST IN INDIANA TAX REVENUE DUE TO CHILD CARE ISSUES

State and local governments depend on tax revenues to provide public services but child care issues lead to losses in tax revenue. As Table 3 illustrates, tax revenue losses result from declines in the earning of working parents due to both absences (\$62.7 million) and turnover (\$56 million) for a total loss of \$118.8 million for Indiana. Direct tax revenue impact of child care breakdowns was modeled using estimates for state and local tax burdens for Indiana from the Institute on Taxation and Economic Policy. This assumes that declines in earnings will lead to a decline in tax contributions from the existing tax burdens of working parents.

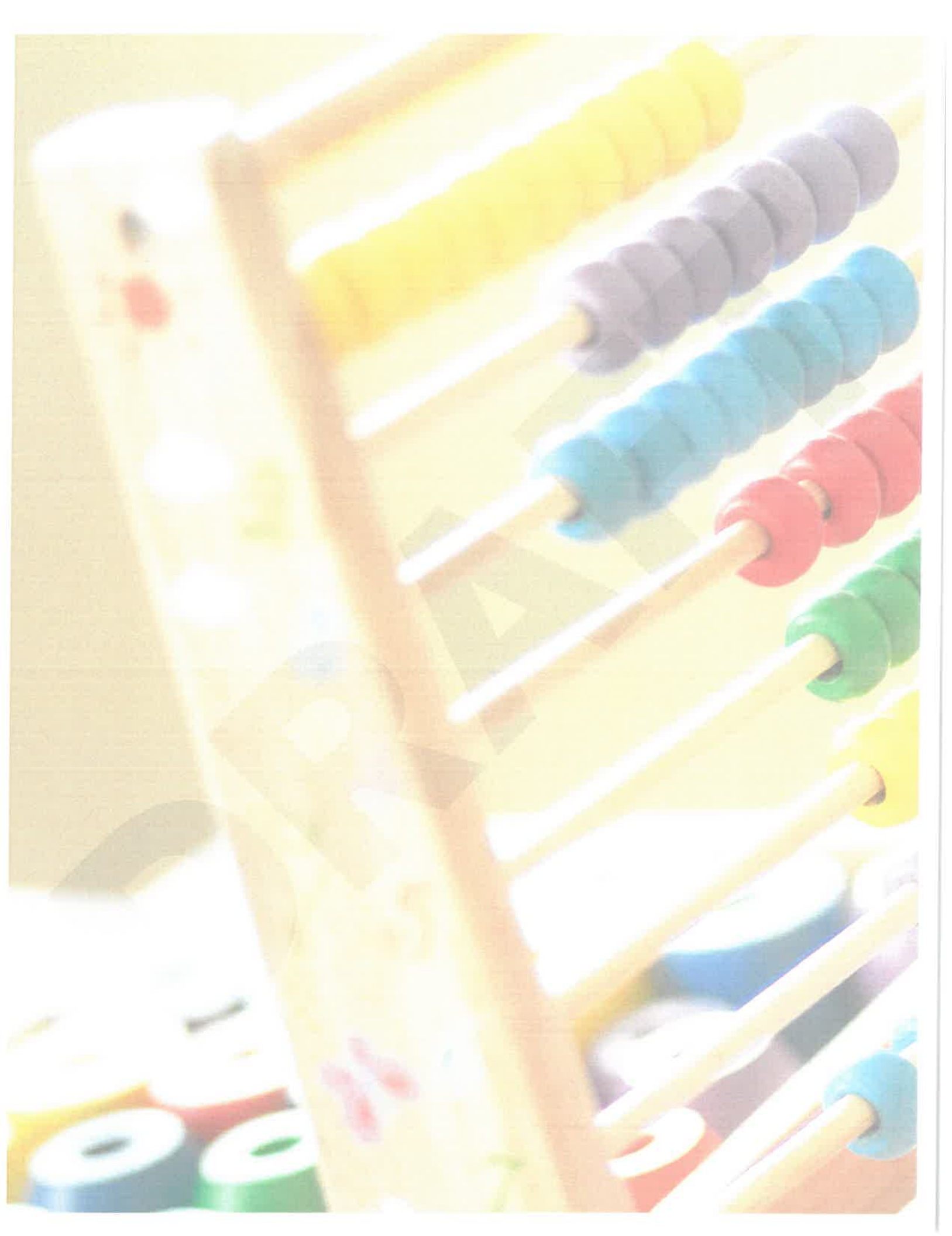
TABLE 4. Impact of Child Care Related Absences & Turnover on Tax Revenue

		ABSENCES	TURNOVER	TOTAL
INDIANA		\$62,715,340	\$56,048,964	\$118,764,304
Urban	Elkhart	\$2,012,410	\$1,798,500	\$3,810,910
	Marion	\$7,866,148	\$7,030,009	\$14,896,157
	Vanderburgh	\$1,643,338	\$1,468,658	\$3,111,997
Rural	Jackson	\$428,927	\$383,334	\$812,260
	Montgomery	\$279,458	\$529,212	\$808,670
	Parke	\$118,382	\$224,181	\$342,563

The Maryland study⁹ surveyed parents and found that 24.7 percent of all employed parents of children age 5 and under in Maryland have not pursued additional education because of child care issues. The authors estimated that this resulted in an opportunity cost of \$2.3 billion that would have come with the next level of education via higher wages, increased spending, and increased tax revenue. Several employers in Indiana have noted that lack of child care during training is a barrier for employees, leading to a deficit of trained workers, as well as the loss of higher wages for the employees.

Estimates of the economic impact of child care issues shows that child care issues affect a large number of Indiana workers, which results in major economic costs to employers, a negative impact on the state, including losses in tax revenues. These billions of dollars costs can be mitigated by increased investments in quality ECE that allow parents to fully participate in the workforce at a time when Indiana employers are facing shortages of employees.

As mentioned previously, economic benefits are in addition to academic and social benefits derived from ECE. With both short-term benefits to families and employers and these long-term academic and social benefits, investing in solutions to child care issues will more than pay for the cost. The next sections of the report presents several potential funding sources for expanding ECE in Indiana and the recommendations of the Advisory Board.





PART THREE
POTENTIAL FUNDING
SOURCES FOR EXPANDED
EARLY CARE & EDUCATION

POTENTIAL STRATEGIES FOR ENHANCING ECE IN INDIANA

SOCIAL IMPACT BONDS & PAY FOR SUCCESS

Pay for Success is also known as a Social Impact Bond (SIB) and is a results-based public funding model. Private investors provide upfront cash to ECE providers with the expectation of being repaid only if students achieve positive academic results, as opposed to a guaranteed rate. What would have been government money spent on a future problem is used to pay back investors.

Idaho¹²

The State Department of Education can enter into pay for success contracts with early childhood education providers and investors to provide financial support for services. Contracts include evidence-based research goals for the service provider to meet, along with specific ways in which those achievements will be measured. To determine if goals are achieved, an external evaluator performs multiple assessments of performance targets. In Idaho, the current pay for success initiative includes The Lee Pesky Learning Center as the evaluator. This nonprofit organization provides an evidence-based early literacy intervention for early care providers. Local Education Agencies (LEA) are chosen based on the number of children qualified for free/reduced lunch, and students not proficient in certain areas. An additional investor is involved in the contract, the Sorenson Impact Center, which is a nonprofit that supports innovative approaches such as Pay for Success.

Illinois

The Chicago SIB initiative was announced in 2014 as a coalition between Chicago Public Schools and Goldman Sachs.¹³ The \$16.9 million SIB supports the Child-Parent Center (CPC) early childhood education model, which offers wrap-around services to engage parents and families and demonstrate stronger enrollment and kindergarten readiness. Financing is from the Goldman Sachs Social Impact Fund, Northern Trust, and the JB MK Pritzker Family Foundation, all of whom are partnered with the City of Chicago, Metropolitan Family Services, and IFF70. Those supported include low-income families in communities with a shortage of affordable, high-quality pre-K education. While the SIB was widely criticized for the potential \$34.5 million in repayments over the next 18 years, it was determined to be worth it since it would save the government \$300 million in potential expenses for education if special education programs were avoided.¹⁴ According to a study performed in spring of 2017, students who were part of a CPC started school at required readiness and, by third grade, had a small decrease in special education rates.¹⁵

Utah

In 2013, Goldman Sachs formed a partnership with the United Way of Salt Lake (UWSL) and J.B. Pritzker to create the very first SIB to finance ECE. Private funds from Goldman Sachs and J.B. Pritzker allowed the Utah High Quality Preschool Program to expand. The performance targets include increased school readiness and decreased use of special education services. The Salt Lake County Council invested \$350,000 that will be repaid to private investors upon positive outcomes, while UWSL is responsible for repayments to the Council.¹⁶ This model has had promising results. For example, in a pilot phase it was found that all but 1 of the 110 students in the program were not placed in special education, resulting in a payment to investors.¹⁷ Even so, this SIB was criticized by some for the evaluation design, with many complaining of too easily attainable performance targets.

DEDICATED REVENUE SOURCES

PHILADELPHIA

Another way to fund ECE is through dedicated revenue sources. Philadelphia imposed a sales tax on sodas and dedicated all or part of the revenue to fund ECE. In Philadelphia, the tax is not generating the level of revenue first estimated (\$13 million below projections) and if it has its intended effect—curbing the consumption of sugary drinks—then the revenues would decrease over time. As a result, the city has decreased the number of pre-K seats funded by the tax to 5,500 instead of the earlier projected 6,500.¹⁸

SAN ANTONIO

San Antonio, Texas uses a one-eighth percent sales tax for the Pre-K 4 San Antonio Initiative and has done so since 2012.¹⁹ Tuition is free for financially at-risk children and is offered on a sliding scale for other families, resulting in up to 5,000 spots for 4-year-olds made available since passing the sales tax.

MEMPHIS

The city of Memphis, Tennessee, is planning to fund Pre-K in the city fully with revenue from an expiring tax incentive (PILOTS) and the current property tax (one cent of the current rate). Memphis will not be creating a new property tax. Rather, the city will be shifting one cent of the property tax rate towards ECE. The proposal would generate \$6 million of the \$16 million needed annually to have a fully funded city Pre-K program by 2022.²⁰

COLORADO

The Denver Preschool Program (DDP) connects parents to pre-K providers to increase the access to ECE in the city. It is funded by a voter-approved sales tax (.15 percent) and has allocated \$80 million of tuition support and \$10 million in quality ratings and improvements since its creation in 2006. Managed by an independent nonprofit organization (DDP Inc.), the program provides 80 percent of its funding in the form of tuition credits and quality improvement. DDP is required to cap its administrative costs at 7 percent of sales tax revenue.²¹

Preschool on Wheels, a program of the Aspen Community Foundation, is an innovative means of providing high-quality pre-school to rural communities in Colorado. Beginning in 2012, the program retrofits school busses into Pre-K classrooms that have since served over 100 children in families where transportation is a barrier to school access. The mobile project is funded through philanthropic dollars, private corporations, and individuals.²²

SEATTLE

Funded by a voter approved property tax levy of \$58 million, the Seattle Preschool Program (SPP) began in 2015 and has since expanded. In 2015, the program grew from 14 classrooms to 32 classrooms, all of which were shown to have higher quality than comparison groups. The evaluation of the program found that following the expansion, the students in the SPP improved on 70 percent of 47 indicators of children interaction. The program was found to positively affect children's vocabulary, literacy and math skills.²³

SCHOOL FUNDING FORMULA

Some states use their K-12 formulas and incorporate pre-K into that existing formula. State K-12 formulas determine how much is needed per pupil for an adequate education and how much of that funding the state will contribute to each school district.²⁴

TABLE 5. Overview of School Funding Formulas²⁴

STATE	UNIVERSAL COVERAGE	CAP ON FUNDING	FULL-TIME EQUIVALENT*	PRE-K/K-12 SPENDING RATIO**
Colorado	N	Y	0.5	0.48
District of Columbia	Y	N	1	0.97
Iowa (SVPP)	Y	N	0.5	0.32
Maine	N	N	N/A	0.67
Oklahoma	Y	N	0.92	0.88
Texas	N	N	0.76	0.53
West Virginia	Y	N	0.96	0.96
Wisconsin (4K)	Y	N	0.5	0.65

* weighted average length of day for enrollment

** estimate of the ratio of Pre-K to K-12 regular funding per pupil

COLORADO²⁵

The Colorado Preschool Program (CPP) is funded through the school finance formula. Through this program, preschoolers receive half the per-student funding as K-12 students distributed to public schools according to the half-day slot allotments for eligible children.¹⁹ Only part of the K-12 formula is used for these calculations. This does not provide universal coverage for the state and limits eligibility to at-risk children. School districts are not required to offer services to all eligible children who apply and the state caps total spending annually.

DISTRICT OF COLUMBIA²⁵

The Uniform Per Student Funding Formula is based on the DC General Education Fund and finances pre-K in exactly the same way as K-12. This formula provides universal coverage of a full day of pre-K, rather than the half day provided by many other states using formulas.

IOWA

All 4-year-olds in Iowa are eligible for the Statewide Voluntary Preschool Program (SWVPP). Funding for SWVPP is based on a school funding formula that provides 50 percent of the K-12 student aid amount to 4-year-olds.²⁵ It is calculated using the enrollment count of SWVPP students and the state cost per pupil.²⁶ In addition to the general population pre-K utilizing the funding formula, there is another program that targets children from low-income families. This funding is to help families with an income at or below 200 percent of the federal poverty level with preschool costs not covered under the SWVPP.²⁶

MAINE²⁴

In the Public Preschool Program (PPP), pre-K students are funded directly on par with K-3 per pupil spending. Schools are required to provide a local match to determine the per-pupil state subsidy, which is a part of the formula based on property values. Providers are uniquely given the choice to offer full-day or half-day pre-K, receiving funding for whichever they decide to pursue. Districts may limit pre-K eligibility based on income and are then funded based on enrollment.

OKLAHOMA²⁵

Public schools receive funding for a full day for the Early Childhood 4-year-old Program. Using a per-pupil rate based on age of the child and length of program day, districts are repaid. This serves to provide universal coverage across the state with no cap on spending.

TEXAS²⁵

The Texas Public School Prekindergarten Program requires school districts with 15 or more eligible at-risk 4-year-olds to offer pre-K. This free public pre-K is funded on a half-day basis using the K-12 funding formula, although some districts offer full-day pre-K. These programs may receive additional funding from LEAs, or otherwise must fund the remaining half day on their own. Only the foundation aid level is used to calculate funding and at-risk populations are the target of the resulting limited eligibility.

WEST VIRGINIA²⁴

There is universal coverage for 4-year-olds through the formula funded state pre-K program. Spending per pupil is on par with K-3 spending, just like Maine. However, a different blend of sources is used to fully fund pre-K, which incorporates Head Start and ECE revenue in addition to education dollars.

WISCONSIN²⁵

The 4K program is a voluntary pre-K education program that receives funding at 50 percent of that for other grade levels through the school funding formula. There is an additional incentive for districts to provide more parent outreach with the receipt of 60 percent of full day funding.

OPTIONS FOR BUSINESSES THAT PROVIDE EARLY CARE & EDUCATION FOR EMPLOYEE'S CHILDREN

LOUISIANA²⁷

Businesses that support quality care by constructing, renovating, or expanding facilities are eligible for a tax credit. It is also applicable to businesses who purchase ECE slots provided for children of employees, or payments made to the facility to support employees. The credit is for a percentage of expenses but cannot exceed \$50,000 or \$5,000 for employee support. This amount is also dependent upon the quality rating of the facility.

PENNSYLVANIA²⁸

Pennsylvania's Educational Improvement Tax Credit Program offers credits for donating to organizations that provide families private school and kindergarten scholarships. These credits are also offered to organizations that support innovative public school programs. The tax credit amount is up to 75 percent of the contribution, and 90 percent can be claimed if the corporation commits to two consecutive annual contributions. Scholarship amounts are determined by each organization and children are eligible if their household incomes are less than \$77,648, plus \$15,530 per child. While these credits are limited to \$750 thousand per donor, this restriction is null from October 1 to November 30 if the overall cap of \$135 million is unreachd (72 P.S. §§ 8701-F through 8708-F and 9902E).

VERMONT²⁹

The Permanent Fund (a philanthropic organization that partners with other early childhood organizations that promote access to high-quality, affordable early care and learning in Vermont) has two pilots in Burlington and Montpelier of a Business Consortium Model. This model involves multiple companies (5 to 20) pooling resources to provide employees with childcare. Each employer provides an annual fund commitment to maintain reduced costs of high-quality childcare.

OPTIONS FOR PARENTS

LOUISIANA²⁷

Louisiana School Readiness Tax Credits (SRTC) are provided for parents and families in relation to ECE services. Those with children under the age of 6 in early care services during the year are allowed an SRTC in addition to the regular Child Care Expense Credit (CCEC). The state's Quality Rating and Improvement System (QRIS) is known as Quality Star and is easily accessible to families through their website. The ECE facility's number of stars earned determines the amount of the SRTC through percentages of the CCEC. For example, the minimum star quality rating is two stars and allows for 50 percent, while five stars allows for 200 percent of the CCEC. With an income at or below \$25,000, the SRTC is refundable, while those who earn above that amount may apply the credit to their tax liability.

This credit is a market-based incentive for parents to choose higher quality centers since the higher rating results in a higher tax credit.

VERMONT²⁹

In an effort to encourage higher quality ECE, Vermont's tax credit is 24 percent of the federal child and dependent care tax credit. Families must be eligible for and receive the federal tax credit to qualify for the state credit.

In addition, families may qualify for the low-income child and dependent care credit on state income taxes if they use a qualifying provider. This means they must have a minimum of three stars on the state QRIS. The amount is 50 percent refundable credit based on one's federal CDCTC.

OPTIONS FOR PROVIDERS

SHARED SERVICES³⁰

Shared services alliances bring together small early care and education businesses to create a centralized infrastructure that ultimately reduces costs, strengthens management systems, creates standardized processes and eliminates duplication of services. They pull together these small businesses into a larger shared structure that enables them to continue operating independently while benefiting from the cost-savings and resources an alliance can offer.

COST SAVING SUPPORT

Through reduction of costs, alliances who provide services in this model focus on specific goals. Efforts include arranging for shared staff, specialized support staff and organizing bulk and joint purchasing.

California³¹

Early Learning Alliance

In central and south central Los Angeles County, the Early Learning Alliance consists of 12 private nonprofit ECE providers who meet monthly to determine and implement shared services programs. Members are all state funded ECE programs who serve income-eligible families and children. The purpose of this collaboration is to help free up resources to provide higher quality care and share information. Initial funding came from the First 5 LA, followed by the California Community Foundation and the Nonprofit Sustainability Initiative. The main areas of cooperation are professional development, workers' compensation packages and the creation of a substitute pool.

Colorado

Early Learning Ventures

Early Learning Ventures (ELV) is a Colorado-based nonprofit organization that consists of public and private partnerships to provide a web-based platform known as Alliance CORE.³² The focus of this organization lies in affordable, high-quality ECE programs. ELV is a business model designed to help

providers meet licensing regulations through online sharing mechanisms. Members participate based on a three-tier system that includes adjusted cost of membership and different levels of access. Tier one offers group purchasing, professional development and access to the web-based platform.³² Tier two adds business and management services followed by tier three's financial services; both come with an increase in yearly cost.³² ELV is supported by a number of philanthropic partners and public and private investors.³² The platform also provides tools for enrollment management, group purchasing, marketing and human resources.³² Tier three services in particular include a full back-office finance service solution.³²

A 2017 ROI study found that providers using ELV services saved an average of \$22 per child.³³ Through compiled direct and indirect savings, and fees paid, ELV providers saved an average net annual savings of \$24 per child.³³

Georgia³⁴

Alliance for Quality Child Care

Georgia's Alliance for Quality Child Care (GAQCC) is an online web portal with tools and resources for licensed ECE programs. These shared services are state-customized and available in the Atlanta area. This independent nonprofit ECE resource and referral agency aims to encourage collaborations between communities.³⁵ Services are focused on cost savings, human resource tools, and staff development. Annual membership fees are \$225 for early education centers and \$50 for family care programs, with additional services available such as monthly director-to-director support meetings. New applicants get one year of services free.

PERSONNEL SUPPORT

These shared services alliances are defined by shared capacities with specific clientele in mind. Some of the goals include managing shared recruitment tasks, having centralized resources, coordinating a professional development strategy and other efforts towards providing for the staff and families of these organizations.

California

Wonderschool

Wonderschool is a for-profit company that has supported in-home ECE providers in San Francisco, Los Angeles, and other US metro areas since 2016.³⁵ The website serves 72 providers as a tool for their program, as well as parents who may use it for program details and enrollment tasks. Experienced educators and care providers are given the support they need to start a program out of their own home. Some of these supports include licensing, program setup, marketing and operational needs.³⁵ Revenues with each program are shared to maintain ongoing support, such as collecting 10 percent of the educators' monthly tuition fees.³⁵ Other sources of funding are partnerships with Cross Culture Ventures, SoftTech VC, Lerer Ventures, Fundersclub, and Edelweiss.³⁶ After being accepted into the network, programs receive assistance with the startup process. Other further assistance is then provided through marketing, enrollment management, billing, mentoring, liability insurance, technology support, and staff recruitment.³⁵

According to the company, Wonderschool teachers are making double the average \$38,000 income for teachers in California. With a seed round of \$2 million, led by First Round Capital, the organization is

prepared to continue expansion of early childhood education assistance.³⁶ Highlighted benefits of the program include personal freedom in teaching philosophy, higher income and schedule flexibility.

Foothill

In 2016, an alliance was formed to enable ECE providers to become stronger and more efficient through shared costs and information.³⁸ This alliance, Foothill Shared Services, currently has six member organizations in the Pasadena area of California.³⁹ Rather than having individuals represent organizations, membership is held by the organization as a whole. Member organizations share costs and information in an effort to streamline ECE services to children ages 0-5.³⁸ Foothill receives funds from First 5 LA, along with the California Community Foundation and the Nonprofit Sustainability Initiative.⁴⁰ There are four main areas of shared services. Anti-bias education is a promotion of culture and practice that evaluates how implicit assumptions and biases may affect education.³⁹ Shared professional development encompasses raising funds for the implementation of workshops and other training elements. Other elements of services that are shared include joint purchasing and fund development.³⁹

Colorado

Early Connections Learning Centers

Early Connections Learning Centers in El Paso County, Colorado, consist of a network of 41 family ECE homes operated in addition to full-day learning centers, school-based preschools and one drop-in facility.⁴⁰ This independent ECE agency is the oldest nonprofit early care organization in the state.⁴¹ The shared services framework is used to increase efficiency, capacity and quality at all program levels. Services are offered through a tiered system, also associated with unique fees per tier.⁴¹ Early Connections receives funding from other nonprofit organizations in the state, resource development funds, endowment income, partnerships and member fees.⁴¹ Services may include professional development, centralized enrollment, partnership opportunities and on-site assistance.⁴¹ In addition to these offered services are required development plans, curriculum, training participation and accreditation by the NAEYC or NAFCC.

The organization has worked at the state level to influence an increase in the Colorado Child Care assistance Program (CCCAP) reimbursement rate, along with 66 percent of the children served being eligible for CCCAP.⁴⁰ Other indicators of success from 2016 included professional staff pay increases, improved community engagement and expansion of partnerships.⁴¹

Connecticut

All Our Kin

All Our Kin (AOK) is a nonprofit organization who trains, supports and sustains community ECE providers to increase quality of care. Goals revolve around providers having access to training opportunities, livable wages and benefits and respect for a difficult job.⁴⁴ Through this program, ECE professionals are given the resources to succeed as business owners. With an increase in the number of options for ECE, working parents can access educationally sound care for their children. While they are an independent ECE agency, AOK receives funding from many sources on a federal, state, and community level.⁴² Support also comes from the communities served through private foundations, individual donors and corporations.⁴⁸ Primarily low-income parents and providers are served, with 98 percent of them being single-parent, female headed households.⁴² Providers serving the lowest-income children are supported by the organization, too. Financial support is included in services with supplements for children in the

Connecticut Care4Kids subsidy program.⁴² The Family Child Care Tool Kit Licensing program helps caregivers with the many requirements in obtaining licensure. The Family Child Care Network offers mentoring, development, advocacy and leadership services to providers upon licensure. Both programs are designed to increase the number of providers in the state who can administer high-quality ECE that is affordable and accessible.

The Tool Kit Licensing program was found to return \$15-20 to society for every \$1 spent by the program.⁴³ AOK providers scored up to 53 percent higher on measures of provider quality than non-AOK providers.⁴⁴ Survey findings also indicated that compared to other providers, those in AOK had poor social support.⁴⁴ This implies that the networking provided by the organization has much room for improvement.

ADMINISTRATIVE SUPPORT

These alliances have been designed with a specific focus of centralizing targeted administrative duties, such as fiscal management. Back-office services are provided, including enrollment management, funds organization and collection, licensure applications and coordination of services.³⁰

California

The San Francisco Early Learning Alliance

The San Francisco Early Learning Alliance (SFELA), launched in 2015, is sponsored by the California Child Care Resource and Referral Network. It consists of 9 agencies operating 12 ECE sites that serve 600 low-income children, as of 2017.⁴⁵ By providing back-office services, this alliance believes leaders and staff can better focus on the children and families whom they serve.⁴⁶ The alliance is focused on providing full back-office services to all members over time.⁴⁵ Other goals include identifying shareable resources based on strengths and needs of individual centers and standardizing processes across those centers. An Advisory Board has representatives from each care center and works towards creating a method of evaluation. The alliance has access to a shared back-office and online shared services. Philanthropy is the main source of public funds, notably including the Mimi and Peter Haas Fund, which fully funded the first year of operations.⁴⁵ The online services are currently free to ECE providers, but to receive back-office services a membership fee applies. Fees after the first month are based on a percentage of the cost of services, dependent upon subsidized or private enrollment. SFELA provides many financial services, assisting in subsidy or grant management, accounting, financial reporting, audits and tax returns.⁴⁶ They also provide services in enrollment management, data management and employee benefits.⁴⁵

Child360

Child360 is a nonprofit organization that supports the development of children through a qualified and diverse workforce.⁴⁸ This organization is also referred to as the Los Angeles Urban Project (LAUP) from previous years. There are five providers currently in partnership, and the organization engages in advocacy for policy related to quality early education. These early education providers primarily serve children from low-income families receiving subsidies.⁴⁷ Since 2005, they have helped over 700 early learning providers with back-office administrative support.⁴⁸ Through assessments and professional development, ECE providers are given incentives and support to improve efficiency. Child360/LAUP is funded by First 5 LA, who received commissions from a 50 cent-per-pack tax on cigarettes and other tobacco products for ECE programs.⁴⁷ There is a noticeable focus on fiscal management services such

as accounting, billing, budgeting, financial reporting, grant compliance and data entry.⁵¹ The back-office administrative duties are continued with assistance in employee management, payroll processing and quality assessments.⁴⁷

In partnership with other California supporters, the creation of a QRIS for the state has entered the beginning stages of development.⁴⁹ LAUP results also revealed that “student attending a program [they] supported were three times as effective at recognizing and naming letters at the beginning of kindergarten than if they had not attended preschool.”⁴⁹

Florida

Liberty City Early Learning Alliance

The Liberty City Early Learning Alliance was formed in 2017 between four small, privately owned ECE centers in high-poverty neighborhoods in Miami.⁵¹ The alliance contracts with a local nonprofit, Miami Children’s Initiative (MCI), to develop a pedagogical leadership style. MCI staff provides leadership and coordination to assist with business and learning aspects of professional development. Shared Services on the web are also available to all ECE providers in Miami and Liberty City.⁵⁴ Pedagogical leadership is performed through monthly meetings of leaders representing the organizations, who will then serve as coaches at their sites. Some services come from center-members, including peer support for automated fiscal management.⁵⁴ Business leadership services include enrollment management, fee collection and costs associated with children and staff. The Miami Children’s Trust contributed a planning grant, along with start-up funding. Participating centers receive funds from multiple sources and MCI is funded by public and private entities.⁵⁴

SCHOOL READINESS TAX CREDITS FOR PROVIDERS

LOUISIANA²⁷

Tax credits are targeted to providers to help offset costs of improving services. Those who provide care for foster children or children who participate in the subsidy assistance program are eligible. The amount is dependent upon the number of low-income children served, along with the number of stars in quality rating that the ECE center has received. It can range from \$750 for two stars, to \$1,500 for 5 stars.

MAINE⁵⁴

Maine’s Child Care Investment Tax Credit is meant to help providers as they invest in their centers/homes to improve the quality of ECE. If an individual provider spends \$10,000 in one year for expenses that significantly improve the quality of care, then they are eligible for a \$1,000 tax credit for the next 10 years and a \$10,000 credit at the end of 10 years.

NEBRASKA⁵³

One of the tax credits targets ECE professionals who have attained the minimum qualification of a Child Development Associate Credential, a one-year certificate/diploma in ECE or child development, and who are employed in ECE programs participating in the state’s Quality Rating and Improvement System (QRIS). The amount of the refundable credit ranges from \$500 to \$1,500 depending on qualifications.

The second tax credit is nonrefundable and is available to ECE programs participating in the QRIS with at least a step-three quality rating. The amount of the credit is determined by the program's rating and the number of children served who receive subsidies. It ranges from \$250 to \$750 per eligible child. Nebraska's Act is modeled after the Louisiana tax credits.

LOW INTEREST RATE LOANS FOR PROVIDERS

VIRGINIA⁵⁴

The Child Care Financing Program (CCFP) is meant to help providers obtain financing for fixed asset needs and educational materials. Direct low-interest rate loans are offered to regulated providers for quality enhancement projects, or to meet ECE standards. The Virginia Small Business Financing Authority offers the loans and funding for the program is provided by the Virginia Department of Social Services (VDSS). Early childhood education centers are eligible if they are licensed, and if not licensed they must be regulated religious-exempt centers or VDSS certified preschools. The amount is up to \$150,000 for up to 7 years with interest rates starting as low as 2.44 percent.

Family home providers are eligible if VDSS licensed, local ordinance homes, voluntarily registered, part of a licensed family day care system, or participating in the USDA Food Program. They may receive up to \$10,000 for up to 7 years with the same interest rates.

MUNICIPAL & NONPROFIT BONDS

State and local governments usually issue municipal bonds for long-term financing of capital projects. The types of these projects vary but they can include construction of schools, public housing and other public benefit projects. Interest income on these bonds are usually exempt from federal income tax, which can encourage private investment in public good projects and could be a way to draw financing for ECE capital projects. A 501(c)(3) nonprofit bond is a municipal bond issued through a state or local government on behalf of a nonprofit.¹⁶

In Indiana a 501(c)(3) organization can apply to the Indiana Finance Authority if the project to be financed fits under the applicable Indiana Code Sections, such as an educational facility project under IC 5-1-16.5. In these arrangements, the IFA acts as a "conduit issuer" of bonds on behalf of the 501(c)(3) borrower, which essentially allows the borrower to access the tax-exempt bond markets. The net result is a lower interest rate and less financing costs to the 501(c)(3) borrower to finance the project.⁵⁵

PART FOUR RECOMMENDATIONS



After reviewing potential funding models for Early Care and Education (ECE), the Advisory Board discussed implications of each model for Indiana. Members considered each model's feasibility of implementation, likely public, private, and political support, and potential benefits or concerns. Below are summaries of the board's four most highly recommended funding models for ECE in Indiana, as well as board-identified benefits and concerns.

TAX CREDITS FOR BUSINESSES THAT SUPPORT EARLY CARE & EDUCATION

Providing tax credits for businesses supporting ECE presents a viable option for increasing overall access to ECE. Advisory Board members were specifically interested in Pennsylvania's Opportunity Scholarship Tax Credit Program. Corporations receive tax credits for donations to organizations that provide scholarships (including pre-K) to families demonstrating financial need. Tax credits may be valued up to 75 percent of the donation or 90 percent if the donor promises two successive annual contributions. While these credits are limited to \$750 thousand per donor, this restriction is null from October 1 to November 30 if the overall cap of \$135 million is unreached (72 P.S. §§ 8701-F through 8708-F and 9902E). This program resulted in nearly 30,500 scholarships in 2016.²⁸

Advisory Board members reported that implementing similar credits in Indiana could be politically feasible with potential for public support. The state currently offers a 50 percent credit for donations to "scholarship granting organizations" with no cap on donor contributions; however, the program caps the total number of credits at \$12.5 million and does not include donations for pre-K scholarships (I.C. 6-3.1-30.5). Programs receiving donations are both statewide and county/region specific.

Board members identified a few issues regarding implementation of such tax credits. Specifically, equity of access across communities was a concern. Credits would be limited to communities housing organizations large enough to afford substantial donations. As such, rural communities lacking large businesses may receive a disproportionately small amount of scholarships compared to more urban communities. Members also voiced concern about the stability of such a model and questioned whether economic downturns would negatively influence funding. Finally, members noted that for such a model to be feasible, corporations would have to be "sold" on the exact rate of the credit and the credit cap would have to be increased.

SOCIAL IMPACT BONDS

Advisory Board members determined that social impact bonds (SIB) are another potentially viable method of funding ECE in Indiana. In the SIB model, private investors provide direct funding to programs. If these programs meet pre-established outcomes, the investors receive the investment, plus interest, from the government.¹³ Idaho, Illinois and Utah offer examples of SIBs as a means of funding ECE. In Idaho, the SIB utilizes an external evaluator to conduct multiple assessments of evidence-based goals for the service provider, as well as predetermined measures for these achievements.¹¹

Goldman Sachs was a major participant in the Illinois and Utah SIBs, two models that stress the importance of thorough and rigorous evaluation. While the Illinois SIB in Chicago received criticism for the \$34.5 million expense, participating students started school at required readiness and experienced a decrease in special education costs that saved an estimated \$300 million.^{14,15} In Utah, though only 1 of the 110 students in the pilot program was placed in special education, the SIB received criticism for evaluation design that many said included low standards of assessment.⁷

Though Advisory Board members suggested that SIBs would be more politically feasible than other options, they voiced concerns regard the funding model. Most concerns focused on the evaluations that would determine if bonds were repaid. Members identified essential features such as well-defined outcomes, an evaluative process conducted with a common language, as well as metrics and evaluations beyond standardized testing, which they described as already controversial topics in Indiana legislature.

SHARED SERVICES ALLIANCES

The final recommended funding model is shared services alliances (SSAs). SSAs involve creating centralized infrastructure among smaller ECE organizations to ease management and logistics of operation. For smaller organizations that opt into SSA participation, typically for a predetermined fee, there are a number of benefits. SSAs allow participating organizations to operate independently while benefiting from reduced costs, improved management systems, and standardized processes.³⁰

Advisory Board members noted a number of similar benefits to Tax Credits and SIBs, as well as the fact that in northern counties of the state, SSAs are already part of ECE funding. Identified benefits were added business expertise for smaller ECE organizations that may have limited business or management training. This benefit was mentioned as particularly beneficial for small organizations, some of whom have previously closed down due to overwhelming “back room work” and logistics. Fees can vary from alliance to alliance and also level of participation. For example a Tier one in Colorado is \$100 a year for access to group purchasing, professional development and the web-based platform. They have a higher tier that adds more services. In Georgia, its \$225 for child care centers and \$50 for family child care centers and new applicants get one year free.³⁰ It was also noted, however, that depending on the required participation fee, some small organizations may be unable to leverage the necessary funds and be disadvantaged compared to SSA participants. To mitigate this, Advisory Board members suggested the use of tax credits to facilitate participation among smaller organizations.

DEDICATED REVENUE SOURCES

Finally, several Advisory Board members suggested that local dedicated sources could be implemented. Members suggested that local referendums, or asking the legislature for permission to increase county food and beverage taxes, or local option income taxes might be politically feasible if the counties advocated for them. One member noted that, following future legislative changes, it might also be possible to use sports betting taxes. Another member noted, however, that one county has been unable to pass similar referendums despite support from a large corporation.

CONCLUSION

This report is among the first to detail opportunity costs associated with Indiana's inadequate ECE system. Child care issues affect both Indiana's families and the state's economy. We estimated that Indiana loses nearly \$1.1 billion in economic activity every year due to child care related absenteeism (\$580.7 million) and turnover (\$519 million). These child care related disruptions cost the state an additional \$118.8 million in tax revenue every year. Employers also have direct costs from these disruptions, nearly \$1.8 billion annually. Absences and turnover cost the rural and urban counties substantially. The three rural economies were estimated to lose \$2.1 million (Parke), \$4.9 million (Montgomery) to \$7.5 million (Jackson) in annual economic activity, while the three urban economies lost an estimated \$28.9 million (Vanderburgh), \$35.3 million (Elkhart) to \$138 million (Marion) annually. Businesses in these counties lose up to \$12.1 million (rural counties) and \$221.8 million (urban counties) as well.

Investments in improving the ECE system should have a positive return on investment, particularly when academic and social results are added (which have ROI estimates of a yield of \$47 for every dollar invested), to the reduced costs for employers and increased earnings and tax revenue from parents. These investments can be public, private, or a combination of the two, as the Advisory Board identified four potential funding sources to improve this system: tax credits for ECE-supporting businesses, shared services alliances, social impact bonds, and dedicated revenue sources.

APPENDIX A

Economic Impact of Early Care and Education Research Project Advisory Board (as of June 13, 2018)

NAME	ROLE OR ORGANIZATION
*Madeleine Baker	Early Childhood Alliance
*Greg Ballard	Former Indianapolis Mayor
Rep. Bob Behning	Indiana House of Representatives
Andrew Berger	Indiana Manufacturers Association
Anthony Bridgeman	PNC Bank
Shannon Doody	University of Indianapolis Center for Excellence in Leadership of Learning
Christina Hage	United Way of Central Indiana
Christy Householder	Cass County Economic Development
Taylor Hughes	United Way of Central Indiana
Lee Lewellen	Indiana Economic Development Association
Sen. Eddie Melton	Indiana State Senate
Pastor Clarence Moore	New Era Church
Stacey Rickman	Imagine This Career Journey, LLC
Sen. Jeff Raatz	Indiana State Senate
Jeff Scott	Ivy Tech Community College – Muncie
Mike Tinsley	Cummins, Inc.
Stephanie Wells	Indiana Manufacturers Association (IMA)

* Indicates Co-Chair role

APPENDIX B

Methodology for Economic Impact Estimates

The cost of absenteeism from hourly workers is estimated at an effective payroll rate of 150 percent because the employer has to replace them or have another worker work overtime. For salaried workers the cost of absenteeism is from employers paying their full salary when they are absent.⁶³

Child care related absenteeism (33.5 percent) was calculated using an average of the Triton Polling and Research data from the Maryland study⁹ (34.1 percent), a national survey of parents⁴ (21.4 percent), and an estimate from Bright Horizons⁵⁶ (45 percent). Annual child care related turnover (2.8 percent) was calculated using an average of Triton Polling and Research data from the Maryland study⁹ (1.7 percent), data from the Louisiana study¹⁰ (4 percent) and data from a national survey of parents⁴ (2.8 percent). Days missed due to child care issues (13.3 days) was calculated using an average of Triton Polling and Research data from the Maryland study⁹ (16.9 days), data from the Louisiana study¹⁰ (14 days), and an estimate from Bright Horizons⁵⁷ (9 days).

We use a conservative estimate for the per worker cost of turnover due to child care issues (20.7 percent)⁵⁸ in contrast to some estimates that argue the full cost is 1.5 times the annual salary, including benefits of salaried workers, and 0.75 times the annual salary of hourly workers.¹⁰

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DESIGN BY

Karla Camacho-Reyes, Communications & Graphic Design