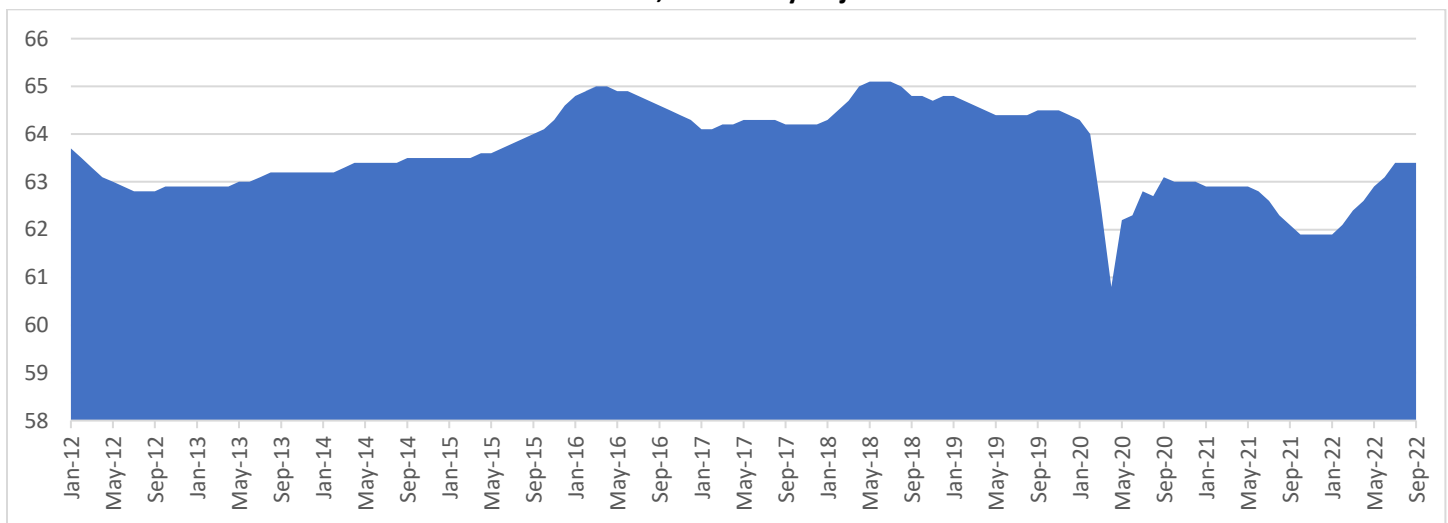


## Executive Summary

Thomas P. Miller and Associates, in concert with Ambassador Enterprises and the Regional Chamber of Commerce of Northeast Indiana, is pleased to present this inductive analysis of the potential impact of an expanded childcare program in the region. Through a thorough, data-driven process, in the pages that follow we illustrate the scale of the potential impact returning parents to the workforce, by providing affordable childcare options, can have on Northeast Indiana.

The region, of course, is not alone in facing significant shortages of workers in the labor force. Labor Force Participation rate, perhaps the best measure of a region's economic vitality, has continued to fall in the region, a trend already in place, but accelerated by the COVID-19 pandemic. In December 2019, the percentage of work-eligible individuals actively engaged in the labor force (either employed or unemployed, but actively seeking employment) nationally stood at 63.9%. As of September 2022, that rate has not yet reached pre-COVID levels, and as reported by the US Bureau of Labor Statistics, is hovering at 62.3%- nearly 2 percentage points lower than the pre-COVID high water mark. The recovery in Indiana has been marginally better - represented graphically in the figure below - with the pre-COVID December 2019 rate at 64.4% and the latest September data pegging the current rate at 63.4%, or 1 full percentage point behind the pre-COVID mark.

**State of Indiana, Labor Force Participation Rate by Month,  
2021-2022, Seasonally Adjusted<sup>1</sup>**



This dip in labor force participation translates into thousands of missing workers regionally. Employers in Northeast Indiana are clamoring for the staff they need, across all industry sectors and occupational families. Without an adequately sized workforce, additional economic investment in the region, as well as expansion and growth options for established businesses, prove exceedingly challenging.

But more than that, the lost wages and earnings, production drop offs, and lagging sales figures translate into millions of dollars for lost revenue for the state of Indiana and county governments that rely, in part, on payroll taxes. In an effort to quantify this impact, specifically with regard to parents who are willing to return to the workforce full-time, if only affordable child care was readily available, in the pages that follow we highlight the scale of the problem- and measure the financial impact that returning these “work willing” parents of young children into the labor force can have on employers, parents, and the state of Indiana.

<sup>1</sup> Data for National and State-level Labor Force Participation rates from the Current Population Survey, conducted by the US Bureau of Labor Statistics in concert with Census. Accessible at: <https://www.bls.gov/data/home.htm>

Should the identified beneficiaries of returning these work willing parents to the labor force, namely the state of Indiana, employers, and the parents themselves, choose to support and implement a cost-sharing model of child care- where each partner pays 1/3 of the total cost, the financial benefits each can realize are substantial. Through a rigorous process that brings to bear data from myriad agencies and sources- including Census, the US Bureau of Economic Analysis, and the US Bureau of Labor Statistics- we estimate that these benefits- in terms of increased GRP, higher sales/import and payroll taxes and worker wages- far outweigh the potential costs to employers, parents, and the state of Indiana affiliated with implementing a cost-sharing childcare model in the region. As part of the process, we purposely chose to use conservative estimates of the potential financial benefits, and liberal estimates when calculating the costs. Based on this restrained approach we find, in short, returning 8,987 “work willing” parents in NE Indiana back to the labor force will increase **payroll taxes** by just **over \$21 million** (\$9.8 million to the state, \$10.3 million to local governments in the region), and sales/import taxes collected from the industries employing these workers by approximately **\$20.2 million**. These figures are based on the “perfect scenario” of returning all “work willing” parents in the region back to the labor force. To facilitate a scaled approach and provide rationale for a pilot program in the region to prove the validity of these estimates, we also include scaled estimates of financial impact. These estimates, based on returning between 897 and just under 5,400 parents to the workforce, result in a **net gain** for the state of between **\$700,000** and **\$4.3 Million**, respectively.

## Introduction and Overview

This analysis, inspired by a pilot model of affordable childcare already available in MSD Wabsash, brings life to a scenario wherein every “work willing” parent of a young child living in Northeast Indiana returns full-time to the workforce. Childcare- especially high-quality, easily accessible childcare- can be a significant barrier to parental labor force participation and can play a decisive role in keeping these potential workers on the sidelines of the labor market. These parents- which we refer to throughout this analysis as “work willing”- are those that are eager, willing, and able to rejoin the workforce on a full-time basis, should affordable, high-quality childcare for their young child(ren) become available.

In the pages that follow, we utilize a rigorous, data-supported approach to estimate real, hard numbers of what an ideal childcare environment- one where every “work willing” parent finds the care they need to work full-time- would cost to provide. To illustrate the benefits of making this sizable investment, we also apply deductive, largely linear logic to estimate these benefits- in extra earnings, taxes, and GRP generated, that parents, the state, and employers would reap if this model were to become fully funded.

Following a quick overview ([Section 1](#)) of the general state of childcare in the nation, and Indiana specifically, before, during the peak of, and now, in our post-COVID environment, we proceed logically through a series of sections designed to quantify the scope, benefits, and cost of providing reliable options to all “work willing” parents of children under the age of 6, living in the Northeast Indiana region. In [Section 2, Modeling the “Work Willing Population”](#), we estimate the number of parents of young children (under the age of 6), by county and by age of child, in the entire Northeast Indiana region. Next, based on this count of nearly 9,000 “work willing” parents, we distribute them across the industry sectors in the region, based on existing employment and staffing patterns in [Section 3, “Measuring the Economic Impact”](#). Using these industry employment distributions, we apply data from the US Census Bureau, US Bureau of Economic Analysis, US Bureau of Labor Statistics, and proprietary financial models from LightCast™ to estimate the gains in earnings, Gross Regional Product (GRP), sales and import taxes, and state and local income taxes that would be generated should these “work willing” parents find affordable, high-quality childcare.

Next, in [Section 4](#), we model the total cost of providing childcare solutions to these “work willing” parents in NE Indiana, using current, age-differentiated childcare rates for high quality programming, county-by-county. With this cost data in hand, we pair it with the benefit numbers calculated in [Section 3](#) to show that the financial benefits for employees, employers, and the state far outweigh the potential cost to subsidize and ensure ready access to affordable, high-quality childcare. To conclude the section, we lay out two cost sharing models:

1. Employer, Parent, State, and Local School District each contribute 25% of the total annual cost of the employee's full-time childcare
2. Employer, Parent, and State share the cost of childcare, splitting the annual expense into 3 equal parts (33.3%)

Both models highlight the financial gains for the State of Indiana- a principal beneficiary of in terms of taxes generated by these “work willing” parents. Based on these alternative cost distribution models, we highlight the net gains for each partner in the cost-sharing arrangement.

Finally, in [Section 5](#), we conclude our analysis with some general challenges/potential roadblocks to fully realizing the reintroduction of nearly 9,000 “work willing” parents to the labor pool and scale the cost/benefits for the partial realization of this lofty re-employment goal. This highlights the potential of a “scaled-up approach”, one that could be realized with a series of pilots across the counties to develop processes and eligibility criteria of such a model and prove the return-on-investment potential, which we argue clearly exists, prior to full-scale adoption.

## Section 1: Childcare Before, During, and After the Pandemic

With the first five years of a child's life as critical to developing educational, emotional, and social foundations upon which future development is built, access to childcare opportunities remains imperative – even more so for the 14 million working families in the United States who rely on childcare centers to participate in the labor force.<sup>2</sup> But more than the vital impact on developing young minds, the childcare industry is an important driver of the American economy, in ways both direct and indirect. In 2021 alone, the industry accounted for **\$40.8 billion** in Gross Regional Product (GRP) nationwide, and **\$64.9 million** in GRP<sup>3</sup> for the Northeast Indiana<sup>4</sup> region. Moreover, the strength of the childcare industry impacts the strength of every other industry sector that relies on working parents as part of their labor force (or, all other sectors!) Despite its vital place in the American economy, major barriers exist that limit parental access to childcare, namely, a shortage of high-quality options and a price tag that makes full-time childcare beyond the reach of a significant percentage of parents of young children.

**Reliable Childcare.** While the gap between childcare needs and market supply has been laid bare in the wake of the COVID pandemic, the underlying impact of inadequate childcare options was detectable long before 2020. Research from the National Center for Education Statistics and its National Household Education Surveys series showed that in 2016, 43% of all parents surveyed reported at least some difficulty finding reliable childcare in their communities.<sup>5</sup> As a result, nearly 2 million American parents had to make career sacrifices (in the form of less hours, passed up promotions, passed up new career opportunities, and/or left the workforce entirely) due to lack of adequate childcare.<sup>6</sup> By 2019, that percentage held steady, with the parents who reported difficulty in finding childcare citing cost (37%), lack of open slots (27%) and lack of quality options (18%) as the top three reasons behind their childcare challenges<sup>7</sup>. These findings

<sup>2</sup> US Chamber of Commerce Foundation. 14 December 2020. Piecing Together Solutions: The Importance of Childcare to U.S. Families and Businesses. Available at: [https://www.uschamberfoundation.org/sites/default/files/EarlyEd\\_Minis\\_Report6\\_121420\\_Final.pdf](https://www.uschamberfoundation.org/sites/default/files/EarlyEd_Minis_Report6_121420_Final.pdf)

<sup>3</sup> Data extracted from LightCast™, with data provided by the US Bureau of Economic Analysis. Gross Regional Product is defined by LightCast™ as: “the final market value of all goods and services produced in a region. This figure is the sum of earnings, property income, and taxes on production.”

<sup>4</sup> Throughout the remainder of this paper, when we refer to the NE Indiana Region, we are referring to the counties of Adams, Allen, DeKalb, Huntington, Kosciusko, LaGrange, Noble, Steuben, Wabash, Wells, and Whitley.

<sup>5</sup> Corcoran, Lisa, Katrina Steinley, and Sarah Grady. 2019. “Early Childhood Program Participation, Results from the National Household Education Surveys Program of 2016.” *US Department of Education, National Center for Education Statistics, Institute of Education Sciences*. Available at: <https://nces.ed.gov/pubs2017/2017101REV.pdf>

<sup>6</sup> Schochet, Leila and Rasheed Malik. 13 September 2017. “2 Million Parents Forced to Make Career Sacrifices Due to Problems with Child Care,” *Center for American Progress*. Available at: <https://www.americanprogress.org/article/2-million-parents-forced-make-career-sacrifices-due-problems-child-care/>

<sup>7</sup> Cui, Jiashan, Luke Natzke, and Sarah Grady. 2021. “Early Childhood Program Participation: 2019 National Household Education Surveys Program First Look.” *US Department of Education, National Center for Education Statistics, Institute of Education Sciences*. Available at: <https://nces.ed.gov/pubs2020/2020075REV.pdf>

are echoed in a report issued in December 2017 by the Trump Administration’s Council of Economic Advisors. This report cited unaffordable childcare options as **the** primary barrier to a greatly improved rate of labor force participation among working parents. With the analysis taking place amongst the backdrop of a booming labor market- which saw the number of prime-age individuals (16 to 64) entering the labor force increase by 2.1 million between January 2017 and November 2019- the researchers estimated that an additional **3.8 million**, non-disabled, prime-working-age, parents with children under the age of 6 were not active participants in the labor force<sup>8</sup>. The CEA goes on to estimate that, in 2019, there were an additional **6.6 million** parents of children under the age of 13 were working less than full-time because of childcare challenges and limitations.

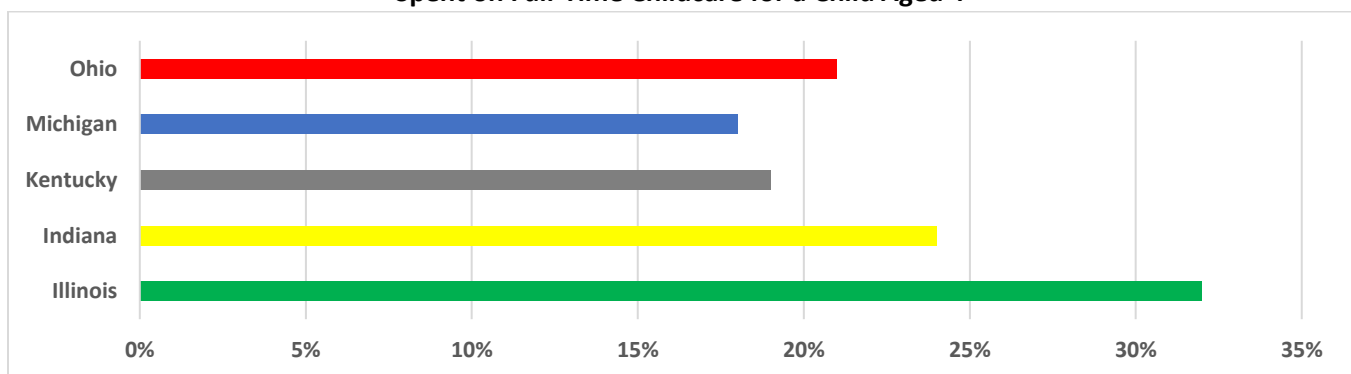
## The Cost of Childcare

A median salary earning parent in the United States, on average, spends **26 percent** of their gross pay on full-time childcare for a single 4-year-old. If the same parent has an infant that requires full-time childcare, this percentage jumps to **33 percent** of gross pay, on a state median salary.<sup>9</sup> In Indiana specifically, **24 percent** of the state’s median salary is spent on childcare – less than the national average, but one of the highest rates vis-à-vis Indiana’s neighbors. For perspective, according to Forbes, the recommended percentage of income that should be dedicated to one’s rent/mortgage payment is 28 percent- adding financial strain to young parents trying to afford their own home **AND** pay for childcare.<sup>10</sup> Taken together, parents of young children earning the state median salary devote **almost 60%** of their gross pay to mortgage and childcare payments.

Utilizing costs for childcare, collected and distributed by national non-profit Child Care Aware of America (<https://www.childcareaware.org/about/child-care-aware-of-america/>), and median salary information provided by the Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)), the same Council for Economic Advisors white paper highlighted the percentage of gross pay a typical, median-salary earning parent would pay for full-time child care for a single 4 year dependent (circa 2019).

**Figure I** below reproduces this data for Indiana and its neighboring states. Indiana’s rate is slightly better than the national average (24% vs. 26% in the United States as a whole), but does come in higher than 3 of its 4 contiguous neighbors. Only Illinois, where full-time childcare for a single 4 year old costs an eye-popping **32%** of gross pay on the state median salary, has a higher rate than Indiana in the immediate region.

**Figure I: Percent of Median Salary, by State, Spent on Full-Time Childcare for a Child Aged 4**



<sup>8</sup> “The Role of Affordable Child Care in Promoting Work Outside the Home”. December 2019. *The Council of Economic Advisors, Executive Office of the President*. Available at: <https://trumpwhitehouse.archives.gov/wp-content/uploads/2019/12/The-Role-of-Affordable-Child-Care-in-Promoting-Work-Outside-the-Home-1.pdf>

<sup>9</sup> Ibid.

<sup>10</sup> Zinn, Dori and Jamie Young. 18 August 2022. “What Percentage Of My Income Should Go To Mortgage?” Forbes Advisor. Available at: <https://www.forbes.com/advisor/mortgages/mortgage-to-income-ratio/>

In addition to the baseline challenges of affordability and quality, a study published in December of 2018 found that over **HALF** of all Americans live in “Child Care Deserts” where childcare options- regardless of quality or affordability- simply do not exist on the scale required to accommodate all interested parents. This problem is exacerbated in rural areas, where nearly **60%** of these communities exist in these childcare deserts. The estimated impact on labor force participation is powerful: in these childcare desert communities, female labor force participation is a full 3 percentage points lower than the national average<sup>11</sup>.

### Childcare During the Pandemic

As an “in-person” service industry, the childcare sector was, of course, hit hard by the COVID-19 pandemic, something still fresh in the minds of everyone. Moreover, the impact of childcare closures had a wide-ranging, ripple effect across all other industry sectors, where employees relied on childcare centers to be able to work full-time. “Stay-at-Home” mandates and other COVID-19 related guidance and the resultant shutdowns had direct impact on all employees, across almost all industries– but were felt most acutely by workers with school-aged and younger children. As telework increased and workers adapted to at-home work, households with school-aged and younger children were also met with school closures and radically reduced childcare options. Working parents with younger children saw increases in the number of hours spent attending to children in support at-home schooling or other needs, forcing many to adopt more unconventional workhours, often extending into evenings and the weekend.<sup>12</sup> This shift even led to an increase in labor force exits, with data indicating that one in five working-aged adults left the workforce as COVID-19 disrupted childcare arrangements.<sup>13</sup> The impact was even deeper for working-age women with younger children. While historically, economic downturns have a larger effect on the male workforce, the pandemic demonstrated that women with children had the highest levels of volatility for two reasons: higher levels of engagement in service-related jobs and responsibilities as the primary caretakers for children.<sup>14</sup> As a result, approximately **3.5 million** women with children ages 13 and under left the workforce between March and April of 2020.<sup>15</sup>

As the pandemic forced shutdowns in March of 2020, some of the hardest hit industries, of course, were those that require high levels of in-person contact with customers (e.g., restaurants and retail). Historically, these industry workforces are made up of a larger than average percentage of women, and saw unemployment jump by 12 full percentage points between February and April of 2020.<sup>16,17</sup> Further, only 17 percent of women reported having a job with the flexibility to adapt to at-home work.<sup>18</sup> Ultimately, a considerable number of women were faced with the tradeoff of participating in labor force or tending to childcare when options and availability for safe and affordable care disappeared.

Indiana’s workforce has an added layer of complexity when it comes to accounting for the impact of the COVID-19 pandemic on access to childcare. While restaurants and service industry may come to mind first as acutely impacted by the pandemic, the state’s large manufacturing sector also requires an almost exclusively in-person workforce. While

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<sup>11</sup> Malik, Rasheed, Katie Hamm, Leila Schochet, Cristina Novoa, Simon Workman, and Steven Jessen-Howard. December 2018. “America’s Child Care Deserts in 2018”. *Center for American Progress*. Available at: <https://www.americanprogress.org/wp-content/uploads/2018/12/AmericasChildCareDeserts20182.pdf>

<sup>12</sup> Heggeness, Misty and Fields, Jason. 18 August 2020. Working Moms Bear Brunt of Home Schooling While Working During COVID-19. Available at: <https://www.census.gov/library/stories/2020/08/parents-juggle-work-and-child-care-during-pandemic.html>

<sup>13</sup> Ibid

<sup>14</sup> Shome, Shreya. 2020. "Impact of School Closures on Female Labor Force Participation in the Covid-19 Pandemic." Available at: [https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=3942&context=cmc\\_theses](https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=3942&context=cmc_theses)

<sup>15</sup> Haggeness, Misty, Fields, Jason, Trejo, Yazmin, and Schulzetenerg, Anthony. 3 March 2021. Tracking Job Losses for Mothers of School-Age Children During a Health Crisis. Available at: <https://www.census.gov/library/stories/2021/03/moms-work-and-the-pandemic.html>

<sup>16</sup> Heggeness, Misty and Fields, Jason. 18 August 2020. Working Moms Bear Brunt of Home Schooling While Working During COVID-19. Available at: <https://www.census.gov/library/stories/2020/08/parents-juggle-work-and-child-care-during-pandemic.html>

<sup>17</sup> US Bureau of labor Statistics. Civilian Unemployment Rate. Available at: <https://www.bls.gov/charts/employment-situation/civilian-unemployment-rate.htm>

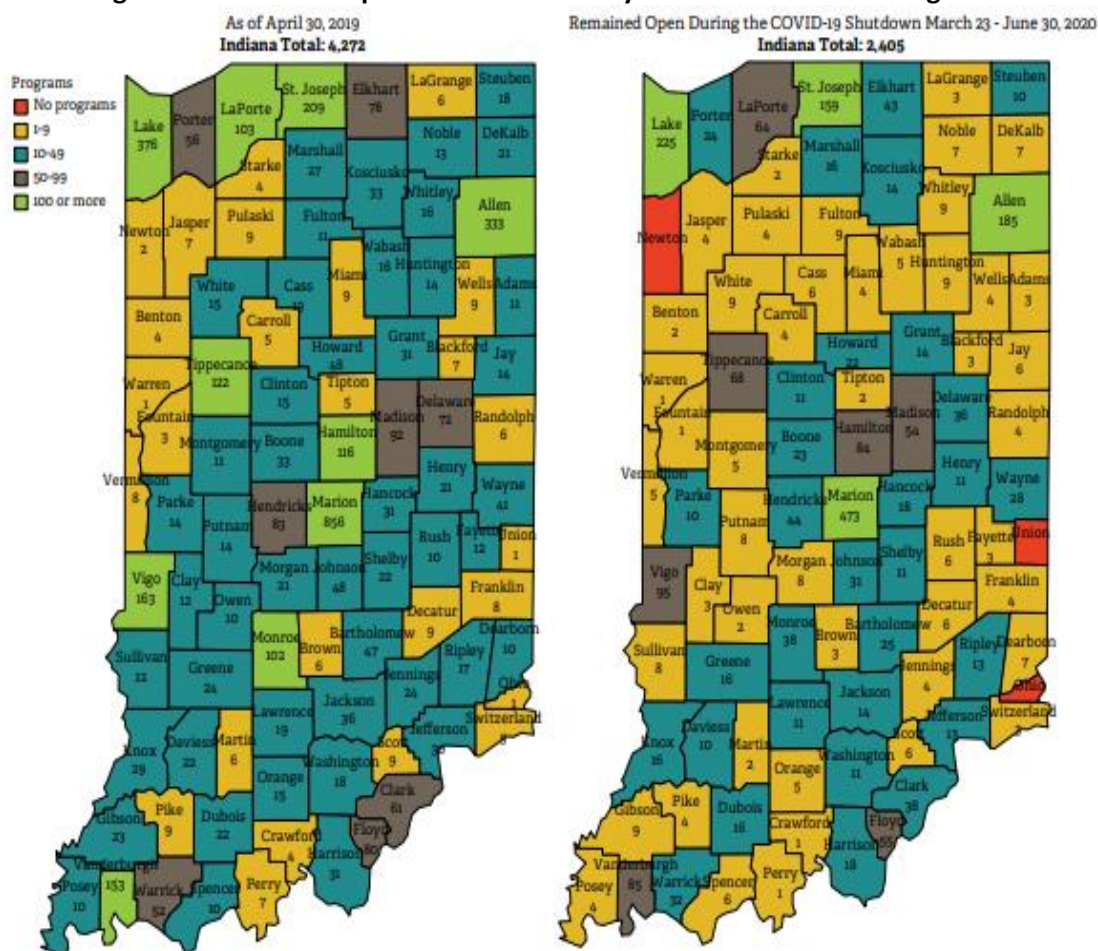
<sup>18</sup> Shome, Shreya. 2020. "Impact of School Closures on Female Labor Force Participation in the Covid-19 Pandemic." Available at: [https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=3942&context=cmc\\_theses](https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=3942&context=cmc_theses)



initially many manufacturing companies shut down temporarily in alignment with state mandates, social distancing and safety measures were quickly put in place to allow for a full return to on-site work. Once again, women in the manufacturing sector were disproportionality impacted, and 9,525 women were forced to leave the sector due, in no small measure, to the lack of childcare options.<sup>19,20</sup>

As childcare centers reduced the number of children served to limit COVID-19 exposure, this impacted many centers' abilities to remain open altogether. Across the nation, the childcare industry sector saw the workforce cut by over 373,000 jobs between February and April of 2020.<sup>21</sup> In Indiana (see Figure 1), only 2,405 of the state's 4,272 centers remained open between March 23 and June 30, 2020. While childcare access in Northeast Indiana specifically, as we show in Section 4 below, has obviously improved post-COVID, overall enrollment rates still remain below pre-COVID, 2019 totals.

**Figure II: COVID-19 Impact on Indiana's Early Care and Education Programs<sup>22</sup>**



Source: FSSA Office of Early Childhood and Out-of-School Learning, April 30, 2019 and March 23, 2020 - June 30, 2020.

<sup>19</sup> Yavorsky, Jill, Qian Yue, and Sargent, Amanda. 12 November 2020. The Gendered Pandemic: The Implications of COVID-19 For Work and Family. Available at: <https://compass.onlinelibrary.wiley.com/doi/epdf/10.1111/soc4.12881>

<sup>20</sup> Conexus Indiana. 2022. The State of Indiana's Advanced Manufacturing Workforce. Available at: <https://www.conexusindiana.com/wp-content/uploads/2022/07/AMW-FINAL-PDF-1.pdf>

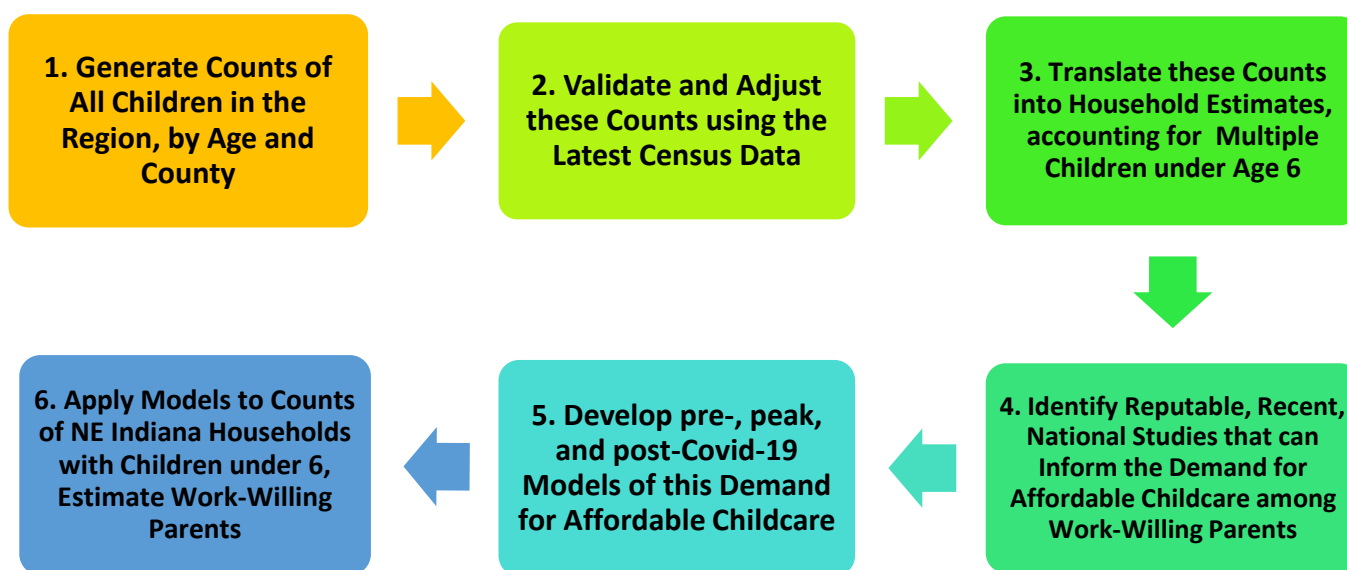
<sup>21</sup> Ewing-Nelson, Claire and Vogtman, Julie. June 2021. One in Eight Child Care Jobs Have Been Lost Since the Start of the Pandemic, and Women are Paying the Price. Available at: <https://nwlc.org/wp-content/uploads/2020/08/ChildCareFS2021-6.9-v2.pdf>

<sup>22</sup> Indiana Early Learning Advisory Committee. November 2020. How COVID-19 Has Impacted Indiana's Child Care System. Available at: <http://www.elacindiana.org/elacindiana/wp-content/uploads/2021/01/2020-How-COVID-19-Has-Impacted-Indiana%E2%80%99s-Child-Care-System.pdf>

## Section 2: Modeling the “Work Willing” Population of NE Indiana

As highlighted above, there is an abundance of evidence that the lack of affordable childcare has had a measurable impact on the available workforce, but the question remains, *what is the scale in Northeast Indiana?* In this section, we take the trends captured at the national level and apply them specifically to the population in Northeast Indiana, ultimately yielding a count of the number of parents who could re-enter the workforce with ready access to affordable childcare. We’ll accomplish this through a series of logical steps, using known information about the population and industry workforce in the 11 counties. **Figure III** below provides a snapshot overview of the steps we will follow to estimate the number of impacted parents- or what we refer to as “work willing” parents: *those who would rejoin the workforce if affordable, accessible, high-quality childcare was made available.*

**Figure III: Steps in Estimating the Number of “Work Willing”, Affordable Childcare Challenged Parents in Northeast Indiana**

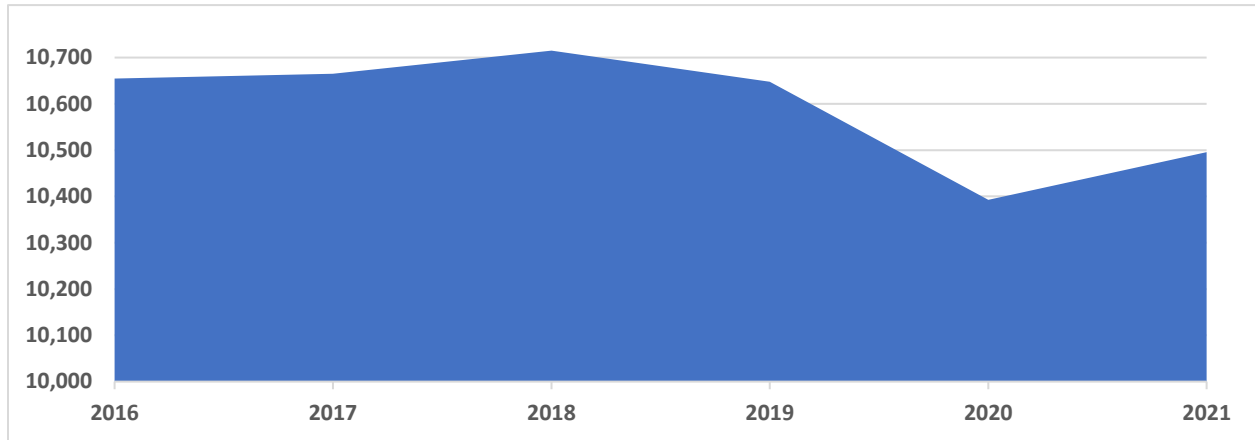


### Step 1: Children by Age and County in Northeast Indiana

To start our localized analysis, we first need a solid count of the number of children in the region, broken down into annual cohorts (aged 1, 2, 3, 4, and 5). Fortunately, vital statistics from the Indiana Department of Health<sup>23</sup> provide an accurate census of the number of births by year in the region, through the year 2020. Using year-over-year trends in birth rates for the years 2016 through 2020, and supplemental information on the national birth rate for 2021, the team estimated the number of births in the year 2021 to round out the count of all children, aged 5 or under in the region, circa the year 2022.

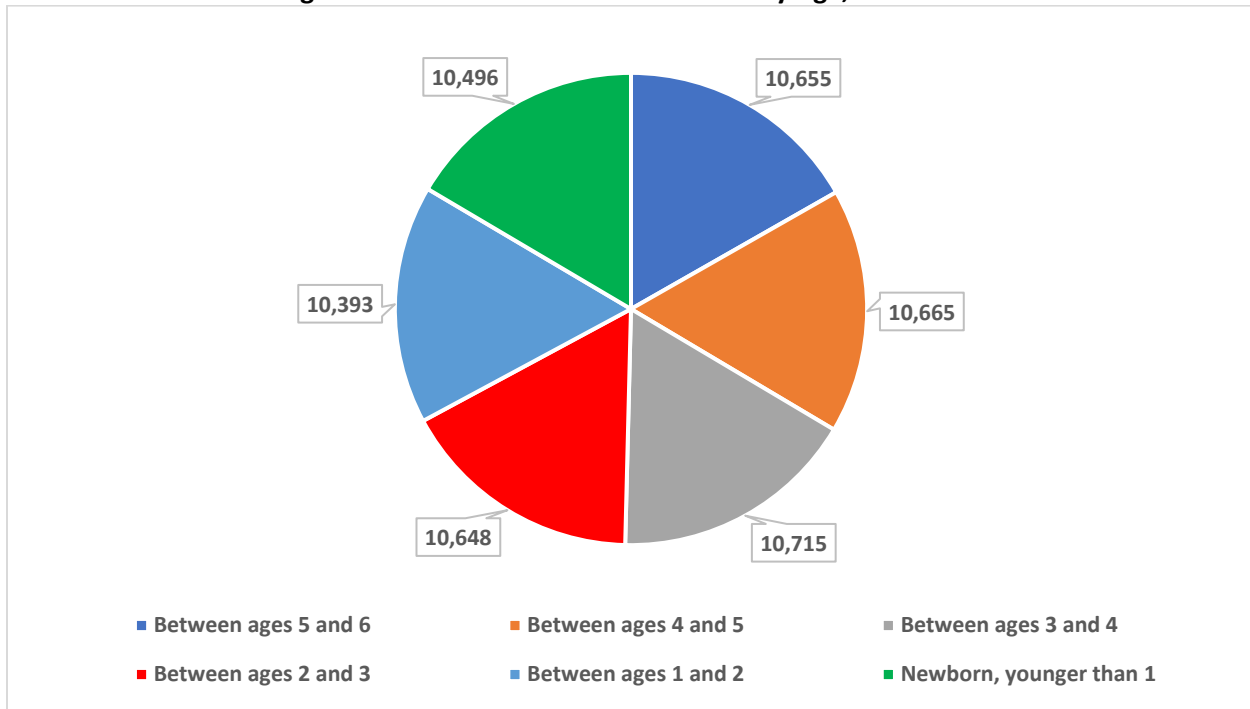
<sup>23</sup> Indiana Department of Health, Office of Data Analytics, Data Analysis Team; Vital Records. Available at: <https://www.in.gov/health/vital-records/vital-statistics/>

**Figure IV: Births by Year, Northeast Indiana, 2016-2020**



Consistent with reported national trends, birthrates in the region did indeed slow in 2020, making us confident that the modest rebound in 2021 births reported at the national level is indeed applicable to Northeast Indiana as well. Overall, between 2016 and 2021, the number of newborns has remained remarkably consistent in the counties of Northeast Indiana, ranging from a low of 10,393 (in 2020) to a high of 10,715 (2018). Based on the birth years of these children, we can estimate the current age distribution of the 5-and-under population, highlighted in **Figure V** Below.

**Figure V: Children in Northeast Indiana by Age, Circa 2022**



## Step 2: Validate and Adjust Birth Counts with Census Data

As the pie chart above shows, the early-learning-aged population in the region is divided into 6 roughly equally sized groups, based on birth year cohorts of 2016 through 2021. There are some potential limitations in using only birth records to estimate the region's 5 and under population. For example, children whose families have left the area since their birth are not accounted for, nor, conversely, are children born out of the region whose families have since moved into the region captured in the data. As a check on the utility of the birth data as an approximate count of children by



specific age, we added in the latest data from the 2021 American Community Survey and adjust our estimates accordingly in **Table I**.

**Table I: Live Births/ACS Adjusted Population Estimates, by County**

County	2017-2021 Live Births	2021 Census Population Under 5	Census MINUS Births	Adjustment Direction
Adams	3,295	3,317	22	↑
Allen	26,178	26,158	-20	↓
DeKalb	2,688	2,625	-63	↓
Huntington	2,039	2,061	22	↑
Kosciusko	4,881	5,078	197	↑
LaGrange	3,734	3,574	-160	↓
Noble	3,224	3,072	-152	↓
Steuben	1,755	1,924	169	↑
Wabash	1,538	1,624	86	↑
Wells	1,691	1,834	143	↑
Whitley	1,894	2,032	138	↑
<b>Total in Region</b>	<b>52,918</b>	<b>53,299</b>	<b>381</b>	<b>↑</b>

To align with the population age categories utilized by the Census Bureau in its American Community Survey series, it should be noted that the table above includes only the birth cohorts 2017 through 2021: children who would be **under** the age of 5. We will account for birth year 2016 in the final tally of children in the region who are childcare eligible, but for now, the 2017-2021 cohort provides an important check against the Census data. Overall, the Census estimates line up extremely well with the live birth totals, indicating a largely stable under 5 population in the region. All told, the Census estimates exceeded the Live Birth totals for the region by a net of **381**, or a **mere 0.7%** of the original count of children. Nonetheless, to ensure the most accurate estimate of the child-care eligible population, we adjust our birth year cohorts appropriately to reflect the updated Census estimates in **Table II** below<sup>24</sup>.

**Table II: Census Adjusted, Final Estimates of Children Under the Age of 6, by County, Circa 2022**

County	2016 (Aged 5 to 6)	2017 (Aged 4 to 5)	2018 (aged 3 to 4)	2019 (Aged 2 to 3)	2020 (Aged 1 to 2)	2021 (Aged 0 to 1)	All Children, Aged 5 AND Under
<b>Adams</b>	676	697	653	687	636	643	3,993
<b>Allen</b>	5,140	5,196	5,241	5,295	5,187	5,239	31,298
<b>DeKalb</b>	535	497	539	534	524	530	3,160
<b>Huntington</b>	417	428	428	393	403	407	2,478
<b>Kosciusko</b>	1,017	1,096	1,063	988	960	970	6,095
<b>LaGrange</b>	738	721	751	707	694	701	4,312
<b>Noble</b>	589	599	610	602	628	634	3,661
<b>Steuben</b>	416	377	426	409	355	358	2,340
<b>Wabash</b>	353	333	335	340	306	309	1,977
<b>Wells</b>	369	357	364	364	374	377	2,203
<b>Whitley</b>	405	440	381	405	402	405	2,437
<b>Total in Region</b>	<b>10,655</b>	<b>10,741</b>	<b>10,791</b>	<b>10,724</b>	<b>10,469</b>	<b>10,573</b>	<b>63,954</b>

<sup>24</sup> Please refer to Appendix A to see original, county-level, Live Births data from the Indiana Department of Health.

Given the more-or-less equal distribution across the age groups (see **Figure V** above), we distributed the overages/underages (“Census MINUS Births” column in Table I above) equally across the 5 cohorts born between 2017 and 2021. The 2016 birth data, which falls outside the scope of the American Community Survey (children would be older than under 5 in 2021) was left unadjusted.

### Step 3: Translating Counts of Children to Household Estimates

Having collected and validated the number of children eligible for childcare services in the region, we need now to translate these counts into households and, ultimately, parents who could rejoin the workforce if affordable, high-quality childcare was to become available. This ratio, of course, is not 1-to-1, that is, we cannot assume that for each additional child placed in a childcare program there will be one unique, additional parent (re)joining the workforce. To ensure we are not overestimating the number of potential parents who would rejoin the workforce, we have to carefully control for households with more than one child aged 5 or under. To do this, we again return to American Community Survey data from the US Census Bureau to triangulate our estimates.

**Table III: Distribution of Households with Children Under 6, by Number of Children Under 6 in Same Household, United States<sup>25</sup>**

	Count	Percentage
<b>Households with Children Under 6</b>	14,196,000	100.00%
<b>One Child Under 6</b>	10,039,000	70.72%
<b>Two Children Under 6</b>	3,613,000	25.45%
<b>Three or More Children Under 6</b>	544,000	3.83%

Based on the national level distribution of children under the age of 6, **Table III** tells us that 70.72% of all children under 6 live in a home with no other children in the same age category, 25.45% of all children under 6 live in a household with one other child in the same age group and 3.83% of all children under 6 live in a household with 2 or more other children, also aged under 6. Applying these percentages to our counts of children in the region, we get the estimates in **Table IV** below. The bottom-line total gives us the ratio we need to estimate the full universe of households with children aged 6 and under, controlling for those with more than one child in this age group. In short, for each child aged 6 or under in the region, there is 0.847 households that could utilize early childhood learning/childcare services. Translated into real numbers, in Northeast Indiana there **63,954 children** aged 5 and under, living in **54,182 unique households**.

**Table IV: Northeast Indiana Region, Children Under 6, Household Estimates**

	Children	Households	Child to Household Ratio
<b>With Only 1 Child Under 6 in Household</b>	45,226	45,226	1 : 1
<b>With 2 Children Under 6 in Household</b>	16,277	8,138	1 : 0.5
<b>With 3 or more Children Under 6 in Household</b>	2,451	817	1 : 0.33
<b>All Children, Under 6</b>	<b>63,954<sup>26</sup></b>	<b>54,182</b>	<b>1: 0.847</b>

Though not essential for a solid estimate of the final number of households in need of childcare services for a parent to re-enter the workforce (we assume it requires only 1 parent to provide full-time, care to a child under 6), it is also useful to consider the breakout of single parent vs. two parent households in the region when gauging the potential financial

<sup>25</sup> National level data, extracted from Census Table F1. “Family Households,1 by Type, Age of Own Children, Age of Family Members, and Age of Householder: 2021”, accessible at <https://www.census.gov/data.html>

<sup>26</sup> From Census-Adjusted, final regional count of Children aged 5 and Under, in **Table II**.

impact of expanded programming. Turning again to more accurate and complete national-level trends, the American Community Survey<sup>27</sup> shows us that for all children under the age of 6 in the United States, nearly **23 percent** of them live with only a single parent (18.8 percent mother only, 3.9 percent father only).

#### Steps 4, 5 & 6: Develop Pre-, Peak, and Post-Pandemic Models of Unmet Childcare for NE Indiana

In this section, we quantify/develop 3 separate models of the unmet demand for childcare among “work willing” parents throughout the stages of the pandemic. While ultimately we will use the post-pandemic, “Residual Impact” model to derive 2022 estimates of work willing parents in the region for use later in this study, it is important to ground the estimates in reputable, national level studies that track the impact the lack of available, affordable childcare has on the workforce over time.

While it would be cleaner to break out this collection of steps into separate sections, it is much more useful to present the final results FIRST (**Table V** below), then back into the logic used to derive them using real numbers and supplemental, validating data from Census and BLS. With that in mind, the pre, peak, and post models we developed estimate that the number of households with at least 1 “work willing” parent unable to rejoin the workforce due to childcare challenges range from **13.6% to 18.79%** of all households with children under the age of 6. The 2021 estimate, which captures the lingering impact of staffing shortages post-COVID lockdowns, settles at **16.59%** of all households with children under the age of 6. Based on population estimates for the Northeast Indiana region, this 16.59% equates to **8,987** working age adults unable to enter the region’s workforce.

**Table V: Estimates of Unrealized Workforce, by Households impacted by Lack of Childcare, Northeast Indiana (Population Circa 2022)**

	Households with Children Under 6	2019, CEA Impact Ratio, “Pre-Covid” Model (13.60%)	2020, “Peak” Impact Model (18.79%)	2021, Residual “Post” Impact Model (16.59%)
<b>2016 (Aged 5 to 6)</b>	9,025	1,227	1,696	1,497
<b>2017 (Aged 4 to 5)</b>	9,098	1,237	1,709	1,509
<b>2018 (aged 3 to 4)</b>	9,140	1,243	1,717	1,516
<b>2019 (Aged 2 to 3)</b>	9,083	1,235	1,707	1,507
<b>2020 (Aged 1 to 2)</b>	8,867	1,206	1,666	1,471
<b>2021 (Aged 0 to 1)</b>	8,955	1,218	1,683	1,486
<b>All Children, Aged 5 AND Under</b>	<b>54,169</b>	<b>7,367</b>	<b>10,178</b>	<b>8,987</b>

**2019, CEA Childcare Impact Ratio:** A study commissioned by the *Council of Economic Advisers to the President*, released in December 2019- just before the pandemic- estimated the number of parents with children under 6 who would re-enter the workforce, full-time, if affordable childcare was available at 3.8 million<sup>28</sup>. Data reported from the US Bureau of Labor Statistics (see **Table VI** below) for the same period estimated the number of parents of children under the age of

<sup>27</sup> US Census Bureau, 2021 American Community Survey, Table C2, “Household Relationship and Living Arrangements of Children Under 18 Years, by Age and Sex: 2021”, technical documentation available at: <http://www2.census.gov/programs-surveys/cps/techdocs/cpsmar21.pdf>

<sup>28</sup> “The Role of Affordable Child Care in Promoting Work Outside the Home”. December 2019. *The Council of Economic Advisors, Executive Office of the President*. Available at: <https://trumpwhitehouse.archives.gov/wp-content/uploads/2019/12/The-Role-of-Affordable-Child-Care-in-Promoting-Work-Outside-the-Home-1.pdf>

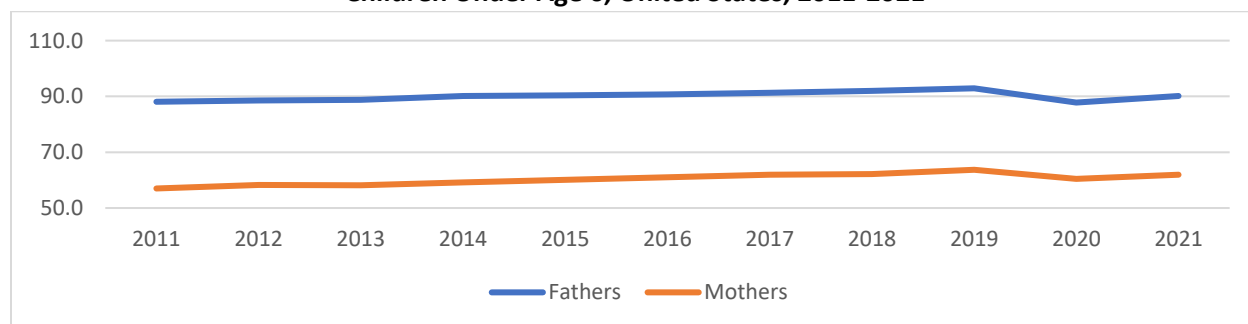
6, eligible to join the workforce<sup>29</sup>, at **27,932,000**. Dividing this population number (**27.932 million**) into the number of parents the CEA reports as not working due to childcare constraints (**3.8 million**) yields a percentage of **13.60%**. Stated another way, 13.6% of all parents of children under the age of 6 were unable to enter the workforce due to childcare constraints in 2019.

In **Table V** above, we use this percentage (13.6%) to determine the number of households with children under the age of 6 in Northeast Indiana who were willing, but unable, to join the workforce, due primarily to childcare barriers. In real numbers, across all age groups, in **2019**, this meant that the workforce of the region was missing out on a potential **7,367** full-time employees who were not in the workforce due to childcare limitations.

**Table VI: Bureau of Labor Statistics, Annual Estimates,  
Parents of Children under the Age of 6 and the Labor Force<sup>30</sup>**

	2019 All	2019 Women	2019 Men
<b>Civilian Noninstitutional Population</b>	27,932,000	12,672,000	15,260,000
<b>Civilian Labor Force</b>	22,175,000	12,042,000	10,133,000
<b>Participation Rate</b>	79.4	95	66.4
<b>Employed</b>	21,502,000	11,777,000	9,725,000
<b>Full-Time</b>	18,695,000	11,319,000	7,376,000
<b>Part-Time</b>	2,807,000	458,000	2,349,000
<b>Employment Population Ratio</b>	77	92.9	63.7
<b>Unemployed</b>	673,000	265,000	408,000
<b>Unemployment Rate</b>	3.0	2.2	4.0
<b>Additional Potential Employed<sup>31</sup></b>	3,800,000	N/A	N/A
<b>As Percent of Labor Force</b>	17.14%	N/A	N/A
<b>As Percent of Population</b>	13.60%	N/A	N/A

**Figure VI: Labor Force Participation Rate, Mothers vs. Fathers,  
Children Under Age 6, United States, 2011-2021**



<sup>29</sup> Referred to as Civilian Noninstitutional Population, this number excludes individuals in the armed services, incarcerated individuals, and individuals who are institutionalized.

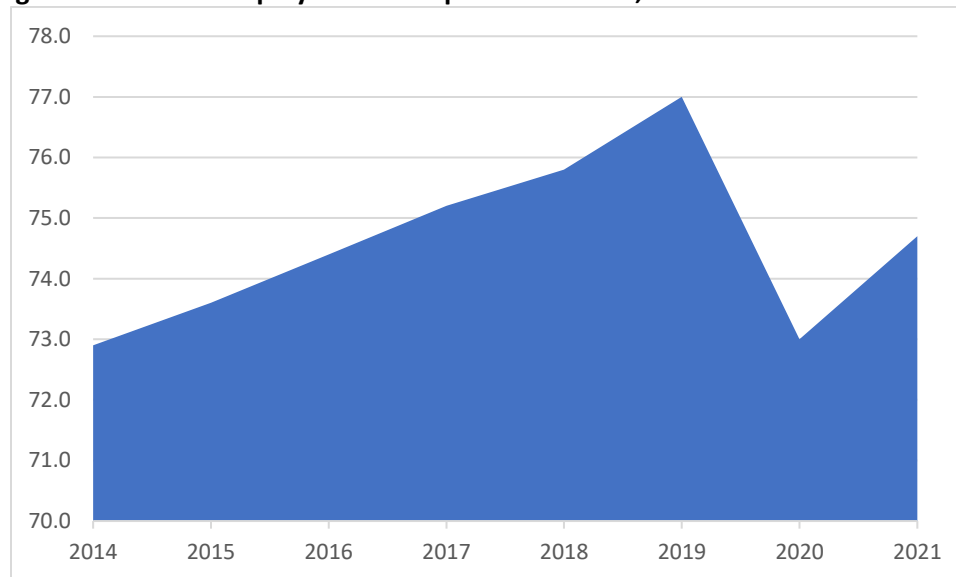
<sup>30</sup> "Employment Characteristics of Families, 2019". 21 April 2020. News Release, Bureau of Labor Statistics, available at: [https://www.bls.gov/news.release/archives/famee\\_04212020.pdf](https://www.bls.gov/news.release/archives/famee_04212020.pdf)

<sup>31</sup> As reported by The Council of Economic Advisers, December 2019.

**2020 Peak Impact Adjustment:** As the short overview of COVID-19 and childcare included earlier in this report highlights, the pandemic clearly forced more parents out of the workforce. To capture this impact- beyond the 13.6% application we used to estimate the impact in 2019- we looked at the year-over-year labor force participation for parents of children under age 6. To quantify a defensible measure of this specific impact, again standardized as a national percentage we can use in Northeast Indiana, we again looked to the Bureau of Labor Statistics data series for guidance.

The Current Population Survey tracks labor force participation for parents of children under 6 and reports this data annually. As Figure VI below highlights, the ratio of these parents who were employed to the population of all work-eligible parents fell sharply in 2020 and, rebounded only partially in 2021. Based on these ratios- reported in **Table VII** below as well- 2020 saw this ratio (73.0) fall by 5.19% from the 2019 ratio (77.0). We can use this percentage, 5.19, to estimate the additional impact of childcare constraints on parents in the Northeast region as well. Having estimated the 2019 impact at 13.6% of the population, we can add this additional 5.19% on to the pre-covid impact, yielding a total impacted population in 2020 estimate of **18.79%**. In practical terms, in the year 2020 we estimate that 18.79% of all parents of children under the age of 6 were not able to work due to childcare limitations. This 18.79% translated into **10,178** workers NOT in the Northeast Indiana labor force.

**Figure VII: Annual Employment to Population Ratio<sup>32</sup>, Parents of Children Under 6**



**Table VII: Annual Change in Employment/Population Ratio, Parents of Children Under 6**

	2014	2015	2016	2017	2018	2019	2020	2021
<b>Employment/Population Ratio</b>	72.9	73.6	74.4	75.2	75.8	77.0	73.0	74.7
<b>Percent Change from Prior Year</b>	1.53%	0.96%	1.09%	1.08%	0.80%	1.58%	-5.19%	2.33%
<b>Change from 2019</b>	N/A	N/A	N/A	N/A	N/A	N/A	-5.19%	-2.99%

**2021 Residual Impact Adjustment:** Finally, to measure the number of parents not in the workforce due to childcare constraints in 2021, we again utilize the employment to population ratios in **Table VIII** above. Both common sense and our review of the literature above would imply that childcare access conditions in 2021 were better than 2020, yet still more challenging than pre-COVID in 2019. This is exactly the trend the BLS data shows: the employment to population ratio in 2021 marked a 2.33% improvement over 2020 but remained 2.99% lower than 2019. We can add the last

<sup>32</sup> From the Current Population Survey, as reported by the US Bureau of Labor Statistics, accessible at: <https://www.bls.gov/data/home.htm>



percentage (2.99) to our original 2019 Impact Estimate (13.6), yielding a total estimated impact of **16.59%**. Translated into lost workers in Northeast Indiana, in the year 2021, an estimated **8,987** parents of children under the age of 6 were unable to join the workforce due to childcare barriers.

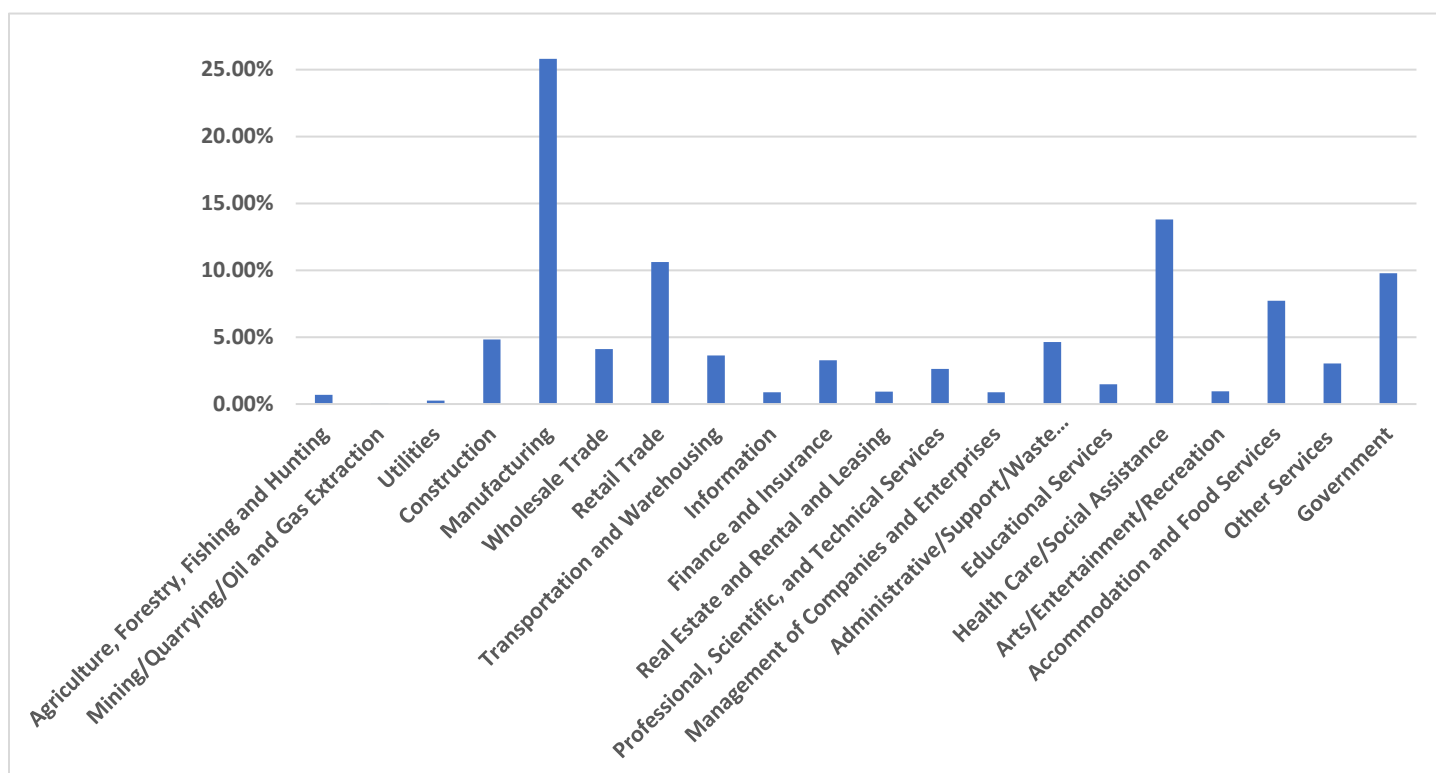
Armed with our ratio of children under 6 to household ratio (1 to 0.847), we can estimate the number of households with children under 6, by age cohort in the Northeast Indiana region<sup>33</sup>. Next, utilizing national estimates of parents who are unable to work due to childcare barriers, we can estimate a reliable range for the number of parents who are not in the labor force in Northeast Indiana, due primarily to their inability to access reliable, affordable childcare.

### Section 3:

## Measuring the Economic Impact of the Missing, “Work Willing” Parents

After working through the exercise in the previous section to identify an approximate number of parents who could return to the workforce if affordable childcare is made available, the team settled on the latest estimate from 2021: **8,987** parents. Because the economic impact of any given job is driven, in no small measure, by the industry in which it is situated, the next step in our analysis was to break down employment in the 11 county, NE Indiana region by industry sector. Based on the latest available annual data from the Bureau of Labor Statistics, we generated percentages of total regional employment by industry sector, represented graphically in **Figure VIII** and in **Table VIII** below.

**Figure VIII: Regional Employment Distribution by 2-Digit Industry Sector**



While the number remains in constant flux, as employment levels change month-over-month, we are most interested in the overall distribution of employment across the industries, (the percent of the total workforce by industry). We generated the number of parents willing to rejoin the workforce IF affordable childcare in the entire 11 county region at 8,987, based on our model for the year 2021. By combining this number with the industry employment percentages, we

<sup>33</sup> For a full breakout of households by age cohort and county, please see Table A2 in the Appendix.

can distribute these returning parents across the industries in the region. Without any additional information on the skills, education, and preferred occupations of these parents, we must assume that this distribution would mirror the pre-existing distribution of all workers, across all industries in the 11-county region. The column labeled “Parent Potential Employees, All Counties” in **Table XII** below contains these industry distributions of parents able to re-enter the workplace with affordable childcare. Additional data on earnings and sales/import taxes by industry was added from Lightcast™, using their proprietary model based on data reported from the US Bureau of Economic Analysis and Labor Statistics. These figures are explained in greater detail below.

**Table VIII: New Employees, Earnings, and Sales/Import Taxes by Industry**

Industry Sector	Percent of 11 County Region Employment	Average Annual Earnings	Parent Potential Employees, All Counties	Additional Earnings by Workers	Industry Sales and Import Taxes, per Worker	Low Range, Additional Sales and Import Taxes Generated	High Range, Additional Sales and Import Taxes Generated
Agriculture, Forestry, Fishing and Hunting	0.68%	\$ 49,185	61	\$3,012,897	\$22,131	\$677,828	\$1,355,656
Mining, Quarrying, and Oil and Gas Extraction	0.08%	\$ 89,404	7	\$606,330	\$31,776	\$107,751	\$215,502
Utilities	0.25%	\$ 144,282	23	\$3,252,691	\$96,534	\$1,088,133	\$2,176,266
Construction	4.82%	\$ 72,118	434	\$31,265,737	\$1,330	\$288,232	\$576,465
Manufacturing	25.81%	\$ 79,271	2,320	\$183,873,070	\$4,810	\$5,578,454	\$11,156,908
Wholesale Trade	4.11%	\$ 82,540	370	\$30,511,198	\$56,915	\$10,519,426	\$21,038,853
Retail Trade	10.63%	\$ 41,245	955	\$39,392,391	\$14,202	\$6,781,921	\$13,563,841
Transportation and Warehousing	3.62%	\$ 65,333	326	\$21,273,208	\$2,805	\$456,638	\$913,276
Information	0.87%	\$ 65,074	79	\$5,113,976	\$14,612	\$574,152	\$1,148,304
Finance and Insurance	3.28%	\$ 89,326	295	\$26,344,572	\$9,953	\$1,467,684	\$2,935,368
Real Estate and Rental and Leasing	0.92%	\$ 56,792	83	\$4,705,581	\$30,744	\$1,273,654	\$2,547,307
Professional, Scientific, and Technical Services	2.62%	\$ 73,562	235	\$17,296,969	\$3,093	\$363,689	\$727,378
Management of Companies and Enterprises	0.89%	\$ 123,329	80	\$9,878,773	\$3,254	\$130,338	\$260,675
Administrative and Support and Waste Management and Remediation Services	4.62%	\$ 51,401	416	\$21,362,617	\$1,583	\$328,861	\$657,721
Educational Services	1.49%	\$ 44,701	133	\$5,967,552	\$1,993	\$133,018	\$266,036
Health Care and Social Assistance	13.79%	\$ 68,180	1,240	\$84,517,112	\$1,770	\$1,097,238	\$2,194,475
Arts, Entertainment, and Recreation	0.96%	\$ 24,378	86	\$2,104,413	\$5,528	\$238,620	\$477,240
Accommodation and Food Services	7.72%	\$ 21,441	694	\$14,873,982	\$5,277	\$1,830,267	\$3,660,534
Other Services (except Public Administration)	3.03%	\$ 37,823	273	\$10,316,210	\$5,361	\$731,163	\$1,462,326
Government	9.79%	\$ 62,504	880	\$54,995,673	\$0	\$0	\$0
<b>TOTALS</b>	<b>100%</b>	<b>N/A</b>	<b>8,987</b>	<b>\$570,664,955</b>	<b>N/A</b>	<b>\$33,667,066</b>	<b>\$67,334,131</b>

As the data included in the cells of this table will be vital in calculating the lost taxes and wages that the state of Indiana and the counties of NE Indiana are losing via their “work willing, childcare challenged” population, it’s worth walking through the columns, what they measure, and how the numbers are calculated in greater detail.

### **Column Explanations**

**Industry Sector:** 2-Digit North American Industry Classification System (NAICS) Sectors present in the 11-county region.

**Percent of 11-County Region Employment:** Percentage of employment, by industry, in the 11-county region, based on annual employment counts for the year 2021 from the US Bureau of Labor Statistics

**Average Annual Earnings:** The average industry wage paid in the 11-county region, for year 2021, as produced by the US Bureau of Labor Statistics

**Parent Potential Employees, All Counties:** Based on the total, final estimate of parents who indicate they would re-enter the workforce if affordable childcare was made available (8,987), these industry totals are calculated by multiplying the Percent of 11-County Region Employment (Column 2) by the number 8,987. Based on this formula, this number represents the number of parents who would rejoin a specific industry sector.

**Additional Earnings by Workers:** Total annual wages these new workers would earn, based on the number of new employees in the industry (Column 4) multiplied by the Average Annual Earnings (Column 3) for the given industry. Number does not include benefits or account for independent contractors (1099 employees).

**Industry Sales and Import Taxes, Per Worker:** Based on data from the US Bureau of Economic Analysis, as reported by Lightcast™, this figure represents the “contribution” each additional employee in an industry makes to the sales and import taxes levied on the products and services produced by an industry and the components the industry had to procure to produce the final product. Calculated by dividing the total sales and import taxes paid by the industry sector in the 11-county region in 2021 by the Annual Average Employment in the industry (numbers not shown in Table XII)

Recognizing, of course, that a variety of factors beyond employee count can and do contribute to sales, industry purchases and, consequently, the import and sales taxes generated by an industry, we next wanted to create a range of the potential tax impact that returning these **8,897** parents to the workforce could have. The logic for their impact is straight forward, however: each employee contributes their time, energy, and productivity to both consuming and generating products and services that are subject to import and sales taxes, be they at the federal, state, or local level. Therefore, adding additional employees will increase, in a direct but not exclusively causal fashion, the import and sales taxes generated by industry purchases and consumer receipt of finished products. Factors such as the cost of supply-chain goods, consumer demand, inflation, and state/federal tax code changes, for example, also impact the employee-to-tax-generated ratio. Although their explicit inclusion is beyond the scope of this analysis, these ancillary factors must also be accounted for. We further temper and restrict the possible range of tax revenue generated in **Table IX** on the next page, but in **Table VII** above, we highlight a “mid” and “high” estimate of impact.

### **Mid-Range, Additional Sales and Import Taxes Generated:**

**Step 1:** In this scenario, we calculate the taxes generated by multiplying the tax/employment ratio (“Industry Sales and Import Taxes, per Worker”, Column 6 in Table XII) by the number of new parents entering the industry workforce (Column 4).

**Step 2:** Next, we assume that an employee’s effort in consuming and producing goods and services has only a partial impact on the final taxes paid, in this scenario, we assume that to be HALF. That is, 50% of the change in taxes is due to the additional employee, the other 50% is the result of other, unmeasured, and often uncontrollable factors. To adjust for the reduced impact, we multiplied the initial number generated in Step 1 by .50.

**High-Range, Additional Sales and Import Taxes Generated:** In the “best-case” scenario, in terms of employee productivity and its direct impact on sales/import taxes, for the high range we assume a pure, 1-to1 relationship between each additional employee and changes in sales/import taxes. The high range is calculated in the same manner as Step 1 described above, Sales/Import Taxes per Worker (Column 6) multiplied by parents entering the industry (Column 4).

As the two columns illustrates, the impact of these additional employees on the tax revenue generated through sales and imports is substantial. And, of course, the precise impact will vary widely based on the industry a returning parent enters, a nuance we felt important to capture and highlight. For example, as expected, the 880 parents who can be expected to rejoin the workforce in the Government services sector will contribute precisely \$0 to import/sales taxes. On the other side of the spectrum- given the very function of the industry is the procurement and selling of goods on the international market- the 370 new employees in the Wholesale Trade sector will generate between \$10.5 and \$21 million dollars annually in sales and import taxes. Taking a closer look at the potential range of gains in sales/import taxes across the industry sectors, **Table IX** below isolates worker/tax impact ratios at the .20 to .60 levels- again allowing us to utilize a more conservative estimate of the sales/import tax gains in our final model.

**Table IX: Impact of Returning Parents on Sales/Import Taxes Collected,  
by Industry Sector, NE Indiana Region**

Industry Sector	Re-entering Parents, All Counties	.20 Impact	.30 Impact	.40 Impact	.50 Impact	.60 Impact
Agriculture, Forestry, Fishing and Hunting	61	\$271,131.20	\$406,696.80	\$542,262.40	\$677,828.00	\$813,393.60
Mining, Quarrying, and Oil and Gas Extraction	7	\$43,100.32	\$64,650.48	\$86,200.64	\$107,750.80	\$129,300.97
Utilities	23	\$435,253.16	\$652,879.74	\$870,506.32	\$1,088,132.90	\$1,305,759.48
Construction	434	\$115,292.92	\$172,939.38	\$230,585.84	\$288,232.30	\$345,878.76
Manufacturing	2,320	\$2,231,381.67	\$3,347,072.50	\$4,462,763.33	\$5,578,454.17	\$6,694,145.00
Wholesale Trade	370	\$4,207,770.53	\$6,311,655.79	\$8,415,541.06	\$10,519,426.32	\$12,623,311.59
Retail Trade	955	\$2,712,768.27	\$4,069,152.41	\$5,425,536.55	\$6,781,920.68	\$8,138,304.82
Transportation and Warehousing	326	\$182,655.20	\$273,982.80	\$365,310.40	\$456,638.00	\$547,965.60
Information	79	\$229,660.76	\$344,491.14	\$459,321.51	\$574,151.89	\$688,982.27
Finance and Insurance	295	\$587,073.57	\$880,610.36	\$1,174,147.15	\$1,467,683.93	\$1,761,220.72
Real Estate and Rental and Leasing	83	\$509,461.42	\$764,192.13	\$1,018,922.84	\$1,273,653.55	\$1,528,384.26
Professional, Scientific, and Technical Services	235	\$145,475.62	\$218,213.43	\$290,951.24	\$363,689.05	\$436,426.86
Management of Companies and Enterprises	80	\$52,135.01	\$78,202.51	\$104,270.01	\$130,337.51	\$156,405.02
Administrative and Support and Waste Management and Remediation Services	416	\$131,544.29	\$197,316.44	\$263,088.58	\$328,860.73	\$394,632.87
Educational Services	133	\$53,207.29	\$79,810.93	\$106,414.58	\$133,018.22	\$159,621.87
Health Care and Social Assistance	1,240	\$438,895.07	\$658,342.61	\$877,790.14	\$1,097,237.68	\$1,316,685.22
Arts, Entertainment, and Recreation	86	\$95,447.97	\$143,171.95	\$190,895.93	\$238,619.91	\$286,343.90
Accommodation and Food Services	694	\$732,106.73	\$1,098,160.10	\$1,464,213.47	\$1,830,266.83	\$2,196,320.20
Other Services (except Public Administration)	273	\$292,465.21	\$438,697.81	\$584,930.42	\$731,163.02	\$877,395.63
Government	880	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>TOTALS</b>	<b>8,987</b>	<b>\$13,466,826.21</b>	<b>\$20,200,239.31</b>	<b>\$26,933,652.41</b>	<b>\$33,667,065.51</b>	<b>\$40,400,478.62</b>

Academics have largely been focused on the relationship between sales/import taxes and employment growth- and look at the relationship in reverse. That is, studies focus on how many employees may be added, or new businesses attracted, when a state, region, or county offers tax cuts. As a result, no readily accessible studies were found on the what happens to taxes when employees are added to the workforce, but a series of non-academic impact studies frequently examine the potential impact of new jobs on taxes on a case-by-case basis. In fact, *Lightcast™* (formally EMSI/Burning Glass™) has developed an input/output model to estimate the full array of taxes (sales, import, income, construction/permit, etc.) that is frequently used in economic impact studies to measure, in dollars, what a business expansion or relocation into a region would mean in additional state revenue. However- as the *LightCast™* model is proprietary and the formulae utilized not made publicly available, it is impossible to disaggregate sales, import, and personal income taxes when modeling the new jobs to tax ratio- important distinctions that must be made for state and local officials to see how the tax revenue may be distributed.

With those caveats aside, and returning to the task at hand, the data presented in **Table IX** above allows us to zero in on a more precise range of the impact adding these **8,987** workers back into the workforce will have on import and sales taxes, specifically. While **Table XII** above shows us what happens in a “perfect world” when we assume that the number of additional employees added is SOLELY responsible for increases in collected taxes, we can reject this number out of hand as merely illustrative. A more realistic and conservative range, important to ensure credibility in our estimate, is likely along the lines of a **30% to 40%** impact ratio. Said another way, we know that additional employees consume additional resources, and produce additional goods/service for sale, both of which are subject to sales/import taxes. This additional consumption/production, we posit, is 30% to 40% responsible for additional revenue generated for states in the form of sales and import taxes. Reasonable and conservative numbers, we believe, that leave room for the possibility that the impact we estimate here can, in reality, be surpassed with the addition of these parents to the workforce, which lead us to the conclusion that:

***Across all industry sectors in the Northeast Indiana Region, we estimate that the total gain in import and sales tax revenue that will result from the re-employment of 8,987 parents in need of affordable childcare, ranges between \$20.2 and \$26.9 million dollars annually.***

The impact on the economy of the region and the potential tax revenue for the state hardly stops with sales/import taxes, however. Next, we need to estimate how much additional income tax revenue can be generated for the state with the re-introduction of these “work willing” parents into the labor force.

### **Employee Earnings and Payroll Taxes**

Fortunately, calculating the gains in payroll taxes for the state of Indiana and the counties that make up the Northeast Indiana region is much more straight forward than the sales/import tax exercise above. We have already calculated the distribution of the new 8,987 employees by industry and have the average industry salaries for the region in 2021, as reported by BLS, and we know that Indiana has an income tax rate of 3.23%, less an individual exemption of \$1000. Finally, we also know the local income tax rates for the counties in question, which range from 1.00% (Kosciusko) to 2.90% (Wabash), with an average for the region of 1.80% (see **Table X** on the next page for all local tax rates). Armed with this information, we can readily estimate the additional income taxes that can be generated by adding these parents back into the workforce with the region-wide results reported in **Table XI** below.



**Table X: Local Income Tax Rates by County**

County	Tax Rate		County	Tax Rate		County	Tax Rate
Adams	1.62%		Kosciusko	1.00%		Wabash	2.90%
Allen	1.48%		LaGrange	1.65%		Wells	2.10%
DeKalb	2.13%		Noble	1.75%		Whitley	1.48%
Huntington	1.95%		Steuben	1.79%		<b>AVERAGE</b>	<b>1.80%</b>

After applying the standard deduction to income taxes owed, we estimate that these returning parents will generate **\$9,840,182 in state income taxes** annually, based on industry average salaries. Without the \$1000 deduction at the local level, and using a rate of 1.80%, which represents the average of each of the 11 counties in the region, we estimate that these returning parents will generate **\$10,271,969 in local income taxes** annually.

**Table XI: Estimated State and Local Income Taxes Generated by Returning Parents to the Workforce, by Industry, Northeast Indiana Region**

Industry Sector	Re-Entering Parent Workers, All Counties	Average Annual Earnings	Aggregate Earnings by Re-Entering Parents	Indiana State Income Taxes (3.23%)	Aggregated \$1000 Standard Deduction per Employee	Final State Income Tax Generated	Local Income Tax Generated (1.80% Average)
Agriculture, Forestry, Fishing and Hunting	61	\$49,185	\$3,012,897	\$98,220	<b>\$61,000</b>	\$37,220	\$54,232
Mining, Quarrying, and Oil and Gas Extraction	7	\$89,404	\$606,330	\$19,766	<b>\$7,000</b>	\$12,766	\$10,914
Utilities	23	\$144,282	\$3,252,691	\$106,038	<b>\$23,000</b>	\$83,038	\$58,548
Construction	434	\$72,118	\$31,265,737	\$1,019,263	<b>\$434,000</b>	\$585,263	\$562,783
Manufacturing	2,320	\$79,271	\$183,873,070	\$5,994,262	<b>\$2,320,000</b>	\$3,674,262	\$3,309,715
Wholesale Trade	370	\$82,540	\$30,511,198	\$994,665	<b>\$370,000</b>	\$624,665	\$549,202
Retail Trade	955	\$41,245	\$39,392,391	\$1,284,192	<b>\$955,000</b>	\$329,192	\$709,063
Transportation and Warehousing	326	\$65,333	\$21,273,208	\$693,507	<b>\$326,000</b>	\$367,507	\$382,918
Information	79	\$65,074	\$5,113,976	\$166,716	<b>\$79,000</b>	\$87,716	\$92,052
Finance and Insurance	295	\$89,326	\$26,344,572	\$858,833	<b>\$295,000</b>	\$563,833	\$474,202
Real Estate and Rental and Leasing	83	\$56,792	\$4,705,581	\$153,402	<b>\$83,000</b>	\$70,402	\$84,700
Professional, Scientific, and Technical Services	235	\$73,562	\$17,296,969	\$563,881	<b>\$235,000</b>	\$328,881	\$311,345
Management of Companies and Enterprises	80	\$123,329	\$9,878,773	\$322,048	<b>\$80,000</b>	\$242,048	\$177,818
Administrative and Support and Waste Management and Remediation Services	416	\$51,401	\$21,362,617	\$696,421	<b>\$416,000</b>	\$280,421	\$384,527
Educational Services	133	\$44,701	\$5,967,552	\$194,542	<b>\$133,000</b>	\$61,542	\$107,416
Health Care and Social Assistance	1,240	\$68,180	\$84,517,112	\$2,755,258	<b>\$1,240,000</b>	\$1,515,258	\$1,521,308
Arts, Entertainment, and Recreation	86	\$24,378	\$2,104,413	\$68,604	<b>\$86,000</b>	\$0	\$37,879
Accommodation and Food Services	694	\$21,441	\$14,873,982	\$484,892	<b>\$694,000</b>	\$0	\$267,732
Other Services (except Public Administration)	273	\$37,823	\$10,316,210	\$336,308	<b>\$273,000</b>	\$63,308	\$185,692
Government	880	\$62,504	\$54,995,673	\$1,792,859	<b>\$880,000</b>	\$912,859	\$989,922
<b>All Sectors</b>	<b>8,990</b>	<b>\$1,341,890</b>	<b>\$570,664,955</b>	<b>\$18,603,678</b>	<b>\$8,990,000</b>	<b>\$9,840,182</b>	<b>\$10,271,969</b>

Table XI Column Descriptions

**Industry Sector:** 2-Digit NAICS sectors in region

**Re-Entering Parents:** Estimate of Parents rejoining workforce if childcare is available and affordable

**Average Annual Earnings:** Average earnings per employee, per industry in 2021, as reported by BLS

**Aggregate Earnings:** Re-Entering Parents (Column 2), multiplied by Average Annual Earnings (Column 3)

**Indiana State Income Taxes:** Aggregate Earnings (Column 4) multiplied by 3.23%

**Aggregated \$1000 Standard Deduction:** Re-entering parents (Column 2) multiplied by \$1,000

**Final State Income Tax:** Indiana State Income Tax (Column 5) minus Aggregated \$1000 Deduction (Column 6)

**Local Income Tax:** Aggregate Earnings (Column 4) multiplied by 1.80%

In summary, when we distribute these 8,987 parents across the 2-digit industry sectors in NE Indiana, our models estimate a major windfall in both sales/import and personal income taxes. All told, the reintroduction of these employees to the workforce can be expected to yield between **\$40.32 and \$47 million** annually in additional sales, import, and personal income taxes. **Figure IX** summarizes the impact by level of government and income source.

### Income Taxes

- Local: \$10.3 Million
- State: \$9.8 Million

### Sales & Import Taxes (State of Indiana)

- High Range: \$26.9 Million
- Low Range: \$20.2 Million

Of course, returning these parents to the workforce and realizing the tax gains their employment generates will require expanded access to affordable childcare, something for reasons explained in detail earlier in this report, is not available as the industry is currently situated. In the next section, we lay out the state of the childcare industry in NE Indiana, the costs, by age group, of full-time childcare per year, and the monetary contributions that may be required from public and private partnerships to provide these working parents with affordable, high-quality options.

## Section 4: Modeling the Cost of Childcare for the “Work Willing” Population

Early childhood education programs have a long track record of improving labor force participation, particularly among women. In an analysis of the impact of the rise of (near) universal kindergartens in the 1960s, researchers estimate that nearly 4 out of 10 mothers of kindergarten-eligible children returned to/entered the workforce as a direct result of this expansion of childhood education<sup>34</sup>. Similarly, a study on the impact of pre-K options, namely the Head Start program,

<sup>34</sup> Cascio, Elizabeth. February 2009. “Maternal Labor Supply and the Introduction of Kindergartens into American Public Schools.” *The Journal of Human Resources* 44(1).

ties the launch of the program to a slow, steady increase in the number of women in the labor force. This impact is particularly impressive, the author argues, because: a) there is no parental work requirement attached to program eligibility and b) financial eligibility for the program is determined pre-enrollment and remains in effect for 2 years, with no need for additional certification of income. Stated another way, there is no program-related incentive to seek employment and no financial penalty for not doing so- meaning, by inference, that parents of Head Start students

voluntarily enter the labor force without prompting when childcare-related barriers to employment are removed<sup>35</sup>. To borrow a well-known phrase from the Field of Dreams, evidence shows that when it comes to childcare capacity, “if you build it, they will come”.

In terms of the current operational capacity of childcare centers in the Northeast Indiana region, despite some limitations in Indiana’s childcare enrollment and cost data (self-reported), what is available provides some insight into pre/post COVID enrollments and general cost trends. In 2019, *ELAC Indiana* reported there were 14,714 enrollments for children ages six and under. By 2022, the number of self-reported enrollments (provided by *Brighter Futures Indiana*) had dropped to 6,806 (Adams, LaGrange, and Wells did not receive enough responses to provide public data, accounting for just over 1,000 enrollments in 2019). These changes are not surprising when considering childcare closures in the region and some centers unable to reopen fully, with reduced classroom size and social distancing measures left in place. Even with these reduced capacities, the latest reported counts from the *Brighter Futures Indiana* Supply/Demand Dashboard (see <https://brighterfuturesindiana.org/scholarships/enrollment>) account for **only 63.15%** of all facilities. Indeed, based on conversations with local childcare and education experts as part of this project, the need to adjust numbers upward to represent the “true” enrollment/capacity estimates for the region was confirmed. To account for this under-reporting, the Tables below adjust 2022 enrollment counts by a factor of **1.3685**. This number is derived from the 63.15% reporting rate among providers in the latest wave of reports, and assumes a linear relationship between reporters and enrollees, that is, we assume 63.15% of providers account for 63.15% of children enrolled. Using these adjusted numbers, **Table XII** below highlights the changes in reported enrollments in 2019 vs. 2022 while **Table XIII** highlights the percentage of children enrolled in “high-quality”, PTQ 3 or 4 programming. The original, reported numbers appear in Tables A3 and A4 in the Appendix.

**Table XII: Estimated Enrollments,  
2019 vs. 2022, by County**

County	2019 Enrollment <sup>36</sup>	2022 Enrollment	Change, 2019-2022
Adams*	451	307	-144
Allen	8,976	5,500	-3,476
DeKalb	921	518	-403
Huntington	504	784	280
Kosciusko	1,101	434	-667
LaGrange*	205	139	-66
Noble	675	244	-431
Steuben	589	708	119
Wabash	319	536	217
Wells*	406	276	-130
Whitley	567	590	23

\*No data available for 2022, numbers estimated based on average regional change, 2019 to 2022 (↓32%)

**Table XIII: Estimated Enrollments and Percent of  
Enrollees by PTQ 3 or 4 Programming, 2022, by County**

County	2022 Enrollment <sup>37</sup>	% Enrolled in High-Quality Programs	Children Enrolled in High Quality Programming
Adams	307	30%	92
Allen	5,500	46%	2,530
DeKalb	518	39%	202
Huntington	784	15%	118
Kosciusko	434	35%	152
LaGrange	139	60%	83
Noble	244	28%	68
Steuben	708	47%	333
Wabash	536	35%	188
Wells	276	33%	91
Whitley	590	35%	207

<sup>35</sup> Russo, Anna. 2017. “A Head Start for the Whole Family: Assessing the Labor Supply Response of Mothers of Head Start Participants.” *Yale University, Department of Economics*. Available at: [https://economics.yale.edu/sites/default/files/files/Undergraduate/Nominated%20Senior%20Essays/2016-17/AnnaRusso\\_SeniorEssay.pdf#:~:text=As%20Figure%201%28a%29%20illustrates%2C%20the%20female%20labor%20force,of%20a%0Bordable%20childcare%20restricts%20parents%E2%80%99%20abilities%20to%20work.](https://economics.yale.edu/sites/default/files/files/Undergraduate/Nominated%20Senior%20Essays/2016-17/AnnaRusso_SeniorEssay.pdf#:~:text=As%20Figure%201%28a%29%20illustrates%2C%20the%20female%20labor%20force,of%20a%0Bordable%20childcare%20restricts%20parents%E2%80%99%20abilities%20to%20work.)

<sup>36</sup> <http://www.elacindiana.org/elacindiana/wp-content/uploads/2020/07/2020-ELAC-Annual-Report.pdf> includes estimates of actual 2019 enrollment fully modeled based on reported numbers from a percentage of total providers.

<sup>37</sup> [Enrollment | Brighter Futures Indiana](#)

While these enrollment estimates are instructive, especially when considering the capacity needed to fill 8,987 more slots with the children of parents made able to re-enter the workforce with affordable childcare, the true utility in the enrollment data is the cost structure. We need a solid, reasonable estimate of the cost per child to calculate how large, precisely, the total bill for enhanced childcare solutions will be. Appendix A has a detailed breakdown of cost, by age group, by county, for the entire 11 county region for cross-referencing.

**Table XIV** below is the culmination of these county-level estimates, and accounts for the number of children in the county- and the different cost categories based on age- and the wide range of potential price points for high-quality programming across counties. We define “high quality” as a PTQ level 3 or 4 program and all values reported in the full county tables are for these levels which are, perhaps unsurprisingly, often the most expensive annual rates. For the counties missing PTQ 3 or 4 level data, we substituted the PTQ level 1 or 2 rates.

All told, according to our estimates, to enroll the necessary **8,987 children** needed to effectuate the changes in income, sales, and import taxes described in the previous section into full-time, high-quality programming, based on latest market rates, will cost **\$69.1 Million annually**.

**Table XIV: Estimated Cost of Childcare,  
8,987 Children of “Work Willing” Parents, NE Indiana Region**

	Count of Children	Cost Per Child	Total Annual Cost
<b>Aged 5 to 6</b>	1,498	\$6,134	\$9,187,886
<b>Aged 4 to 5</b>	1,509	\$7,465	\$11,262,574
<b>Aged 3 to 4</b>	1,516	\$7,455	\$11,306,122
<b>Aged 2 to 3</b>	1,507	\$8,378	\$12,626,570
<b>Aged 1 to 2</b>	1,472	\$8,374	\$12,324,700
<b>Aged 0 to 1</b>	1,485	\$8,374	\$12,433,323
<b>All Ages</b>	8,987	\$7,694	\$69,141,175

While the final Figures (XIV and XV on pages 27 & 28) scale the costs and benefits, in terms of earnings and tax revenue, of providing the reliable, affordable childcare needed to return these parents to the workplace, as a quick reminder- this **\$69 million investment** will yield a whopping **\$570 million in pre-tax earnings for these parents**, generate upwards of **\$20 million in sales/import taxes for the state** and federal government, provide over **\$10 million in local income taxes**, and increase **state income taxes by just over \$9.8 million**.

Perhaps most importantly, the \$69.1 million in costs for childcare, can be split between 3 or 4 paying parties, if the state endorses and supports the model currently being proposed as a pilot in the region. One potential model relies on parents, the school district, employers, and the state of Indiana each contributing 25% of the annual cost of childcare for these “work willing” parents. In MSD Wabash, a similar program is currently in operation, albeit one that exists without state support. In this three-way cost model, parents, their employers, and the local school district divide the costs of childcare into 3 equal parts. As our modeling highlights, however, and confirmed by local childcare experts familiar with the existing three-party pilot model, **the cost/return ratio is not positive for local school districts**. Even if we assume that ALL of the local income taxes generated feed directly back into the school districts, they come out behind- **by nearly \$7 million** annually, assuming universal adoption of the program in the region.

To highlight these two alternatives, the first with employers, employees, the state, and the local school districts splitting the cost, and the second relying only on employers, employees, and the state to split the cost of childcare in three equal parts, consider **Figures X and XI** below.



Figure X: Financial Cost/Benefit, Cost-Sharing Program for “Work Willing” Parents,  
4-way Split of Costs (8,987 Parents)

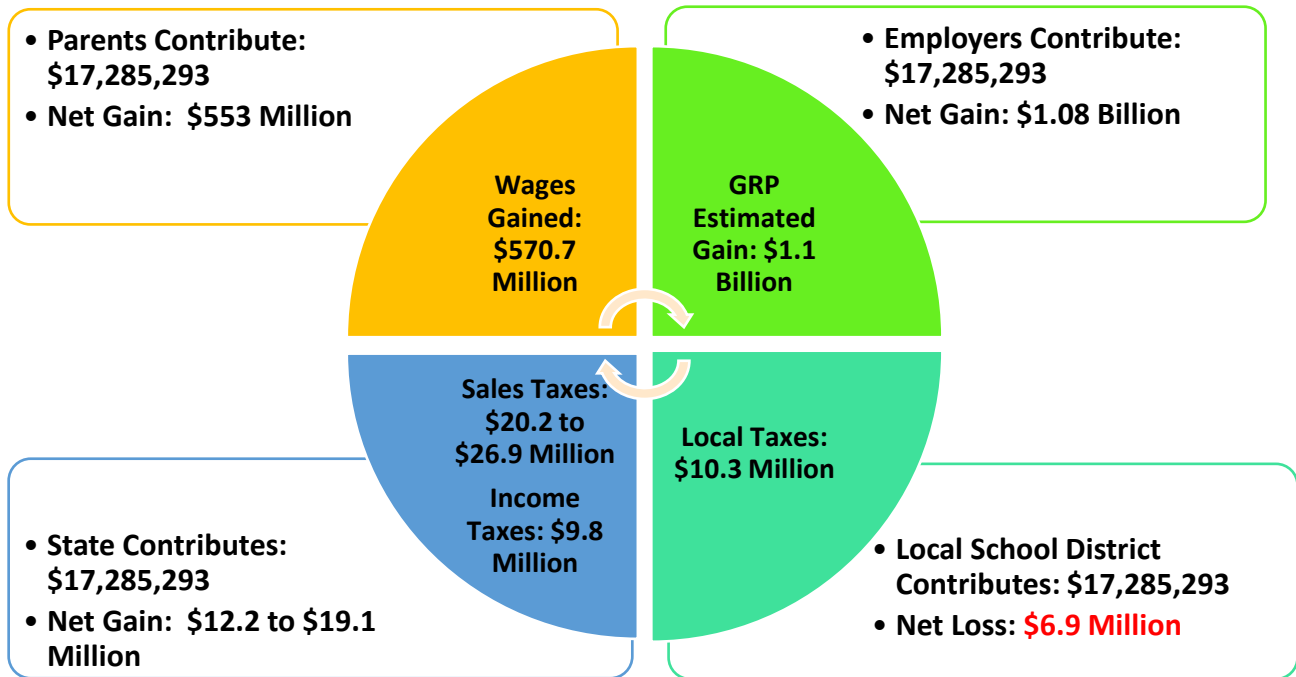
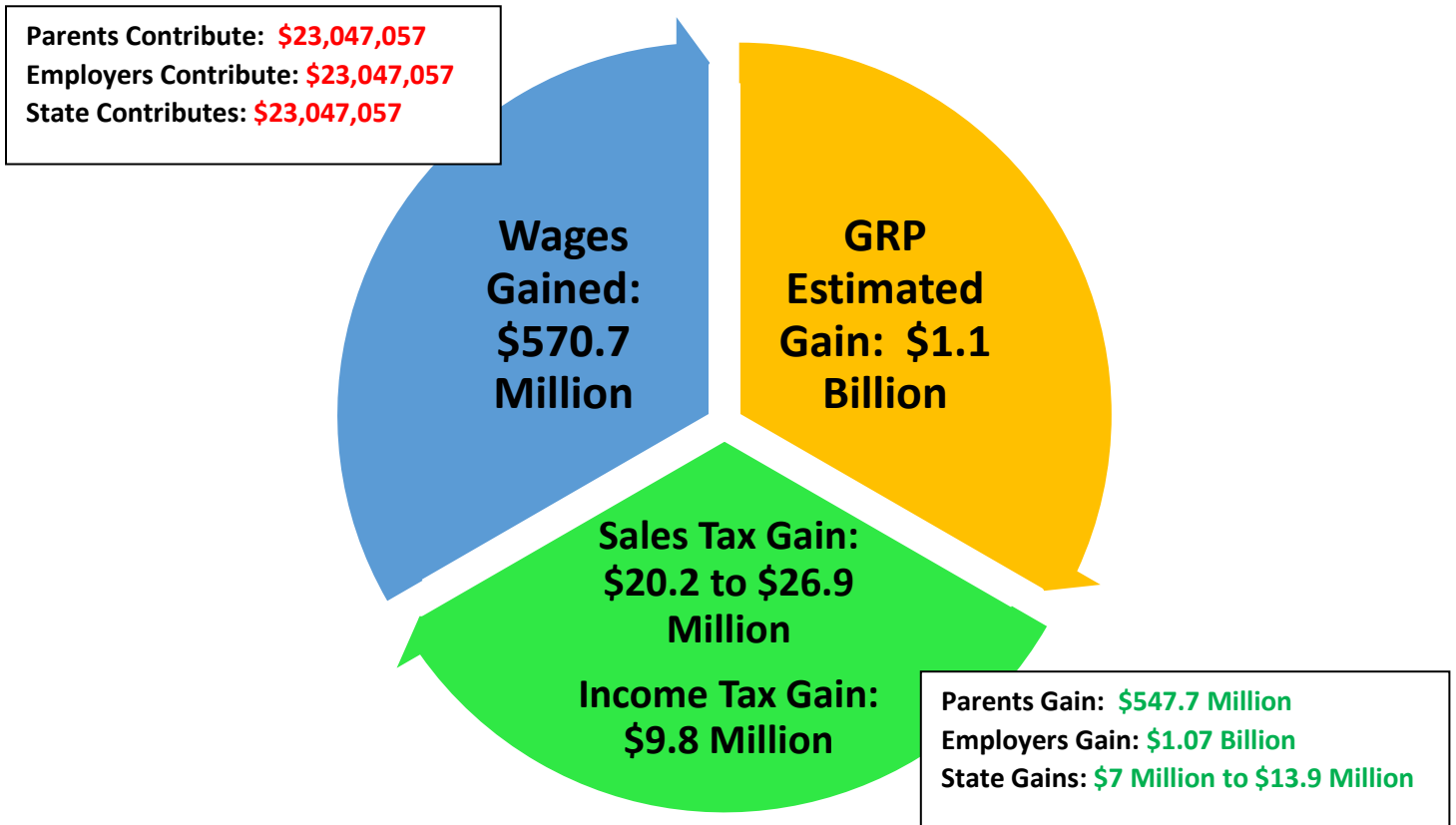


Figure XI: Financial Cost/Benefit, Cost-Sharing Program for “Work Willing” Parents,  
3-way Split of Costs (8,987 Parents)



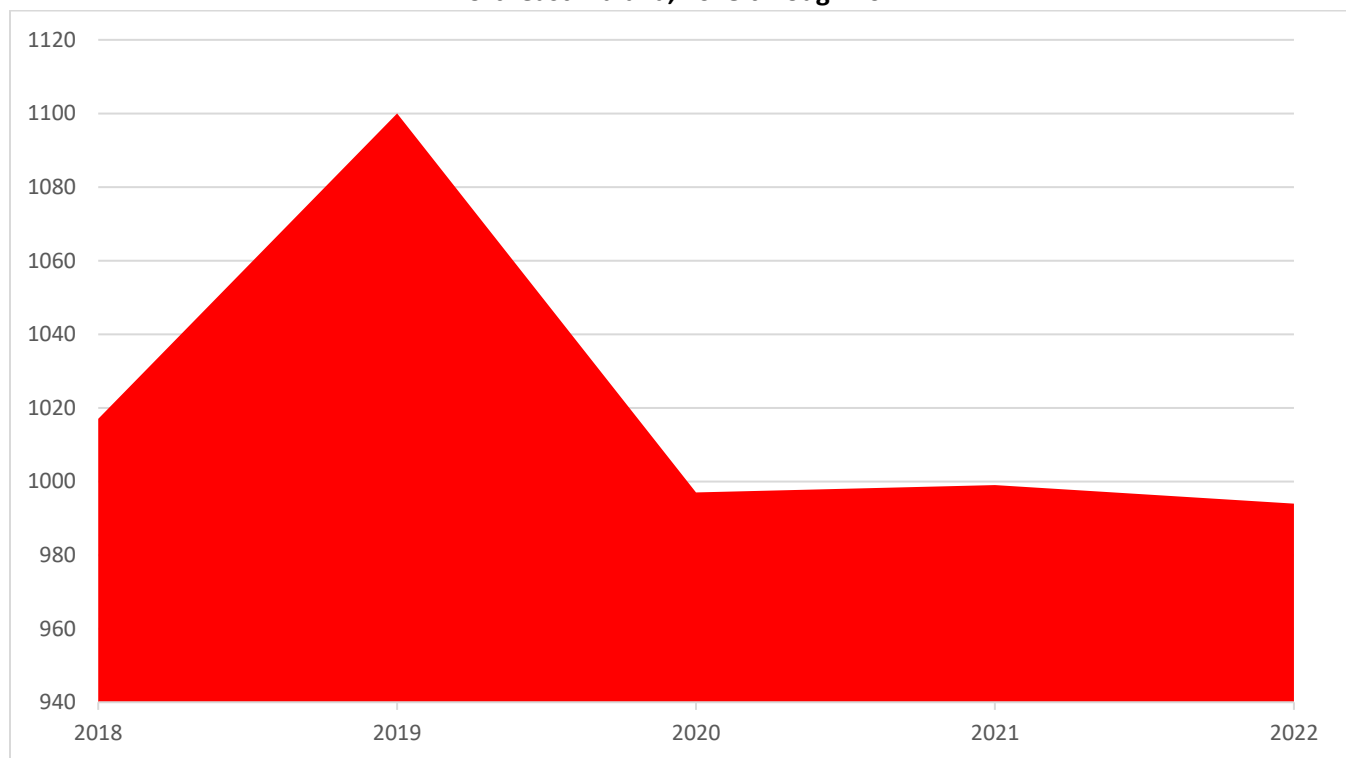
While we have highlighted the financial gains the partners can realize with this cost-sharing model, and rightfully so, it is also important to note that the impact will resonate well beyond the dollars and cents tied directly to these gains. Specifically, getting these 8,987 parents back to work will:

1. Increase the overall labor force participation rate for the region and reduce the unemployment rate, simultaneously increasing the amount of Unemployment Insurance Employer tax generated.
2. Increase the standing of the state and expand options for economic developers: recruiting new employers to the state, facilitating expansions for existing employers, and retaining employers already located in the region.
3. Decrease the region's reliance on public assistance funds.
4. Better prepare young children for academic success, bolstering and improving the region's labor force for years to come.

## Section 5: Challenges, Cost/Benefit to Scale, and Next Steps

The primary challenge associated with realizing a fully scaled model is, perhaps ironically and certainly unsurprisingly, a shortage of the requisite childcare workers needed to fully realize the benefits of the cost-sharing model. Employment in the childcare industry in the region, highlighted in **Figure XII** below, still lags rates at the height of the pandemic. In 2019, there were nearly 1,100 employees in the region, a number that fell to 997 in 2020 and remains stagnant (slightly lower) at 994 employees in 2022. Adding an additional 8,987 children to the childcare system is, as currently staffed, not possible. Based on our estimates in **Table XV** below, a fully realized model- informed by required staffing ratios by age group- would require an **additional 1,344 full-time staff** in the childcare industry. This number is more than double the employment counts for the industry in 2019.

**Figure XII: Employment<sup>38</sup> in the Childcare Industry, Northeast Indiana, 2018 through 2022**



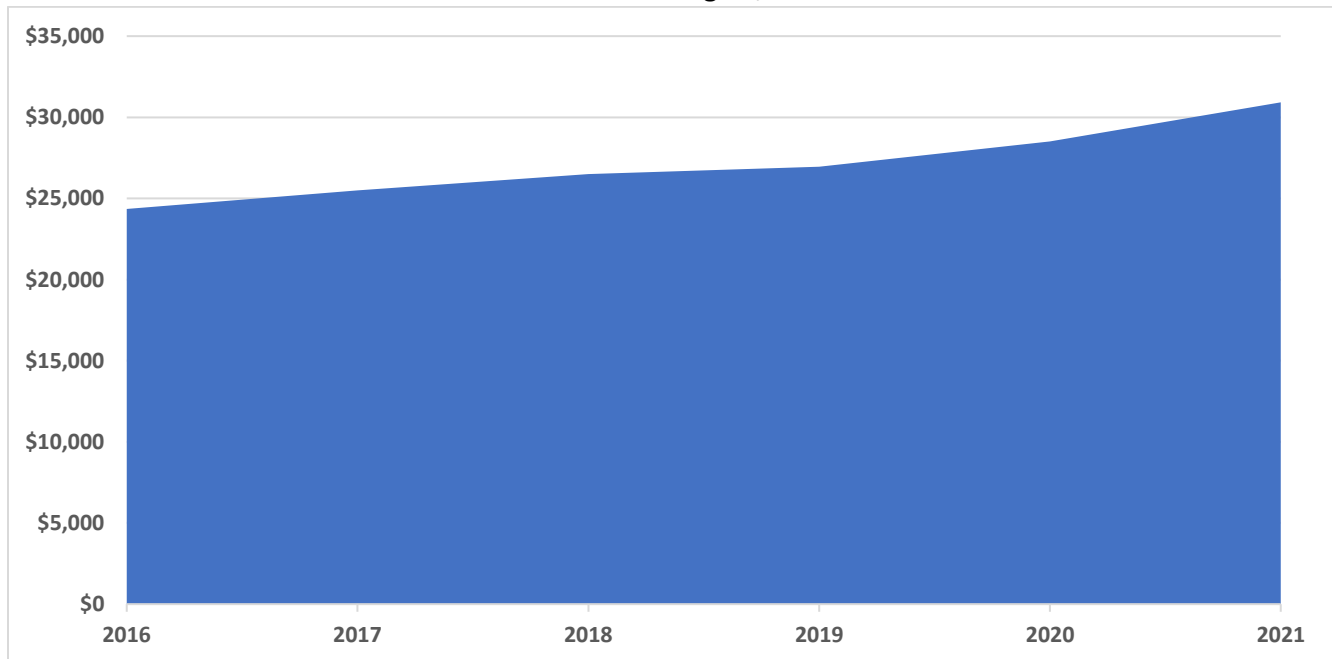
<sup>38</sup> Data for 2018 through 2021 from the US Bureau of Labor Statistics, as reported by LightCast™. 2022 estimate generated by a proprietary model developed originally by EMSI/Burning Glass™.

**Table XV: Required Staff to Fully Enroll Children of 8,987 “Work Willing” Parents**

Age Cohort	"Work Willing" Children in Region	Maximum Children to Staff Ratio	Additional Staff required
2016 (Aged 5)	1,497	15	100
2017 (Aged 4)	1,509	12	126
2018 (Aged 3)	1,516	10	152
2019 (Aged 2)	1,507	5	301
2020 (Aged 1)	1,471	5	294
2021 (Aged 0)	1,486	4	372
All Ages	8,986	N/A	1,344

An additional, but obviously related, challenge in the attraction and retention of new industry workers is the rate of pay of childcare workers. The U.S. Treasury Department noted in a September 2022 report that childcare workers earn on **average \$24,230**. More than 15% of the industry’s workers live below the poverty line in 41 states and 50% need public assistance. The sector has high levels of turnover, with 26% to 40% leaving their job each year. The developers of the cost-sharing model are well aware of the pay rate challenges in the industry and are confident that not only can the program get more parents back to work, but it can also improve the rate of pay for childcare industry employees in the region. Recent salary data for the industry, shown in Figure XII below confirms the upward movement of salaries in the region- although the average salary for these workers still falls well below the median income for the state. This upward trend will have to not only continue, but likely accelerate, if the region is to add capacity to the childcare industry.

**Figure XIII: Average Salary<sup>39</sup> of Childcare Industry Employees, Northeast Indiana Region, 2016-2021**



Given these real challenges to full implementation, which *can* be overcome but will take time to realize, we conclude with two final graphics that highlight the return on investment/cost-benefits for each potential partner in the cost sharing structure, if the program is phased in slowly and scaled-up over time. Future birth rates, salaries, and the overall

<sup>39</sup> Data from the US Bureau of Labor Statistics, Quarterly Census of Employment and Wages program.

state of the economy and employer need for workers will all impact, of course, the realization and final scale of this goal in the future and, of course, changes in any of wide variety of factors will impact need and cost. With those caveats aside, **Figures XIV** and **XV** show scaled implementation, with cost benefit calculations for both the 4-partner and 3-partner cost sharing options.

In a manner consistent with the modeling decisions made throughout this review, we deploy a conservative approach in estimating state impact in the final two figures. Earlier, we identified the “range of gain” for sales/import taxes for the state as \$20.2 to \$26.9 Million, annually. In these final estimates we use the lower \$20.2 million figure as the estimate of sales/import tax gains, which is then added to the \$9.8 million estimate of state gains from income taxes.

**Figure XIV: Scaled Cost/Benefit Relationship, Four Contributing Partners\*,  
Returning “Willing to Work” Parents to the NE Indiana Labor Force**

10% Implementation (897 "Willing to Work" Parents)	25% Implementation (2,245 "Willing to Work" Parents)	40% Implementation (3,595 "Willing to Work" Parents)	60% Implementation (5,392 "Willing to Work" Parents)
Collective Parent Contribution: <b>\$1.73 Million</b>	Collective Parent Contribution: <b>\$4.3 Million</b>	Collective Parent Contribution: <b>\$6.9 Million</b>	Collective Parent Contribution: <b>\$10.4 Million</b>
Collective Parent Gain in Wages: <b>\$57.1 Million</b>	Collective Parent Gain in Wages: <b>\$142.7 Million</b>	Collective Parent Gain in Wages: <b>\$228.3 Million</b>	Collective Parent Gain in Wages: <b>\$342.2 Million</b>
State Contribution: <b>\$1.73 Million</b>	State Contribution: <b>\$4.3 Million</b>	State Contribution: <b>\$6.9 Million</b>	State Contribution: <b>\$10.4 Million</b>
State Gain in Taxes (Sales and Income): <b>\$3.0 Million</b>	State Gain in Taxes (Sales and Income): <b>\$7.5 Million</b>	State Gain in Taxes (Sales and Income): <b>\$12 Million</b>	State Gain in Taxes (Sales and Income): <b>\$18.1 Million</b>
Local Contribution: <b>\$1.73 Million</b>	Local Contribution: <b>\$4.3 Million</b>	Local Contribution: <b>\$6.9 Million</b>	Local Contribution: <b>\$10.4 Million</b>
Local Gain in Income Taxes: <b>\$1.03 Million</b>	Local Gain in Income Taxes: <b>\$2.58 Million</b>	Local Gain in Income Taxes: <b>\$4.12 Million</b>	Local Gain in Income Taxes: <b>\$6.2 Million</b>
Employer Contribution: <b>\$1.73 Million</b>	Employer Contribution: <b>\$4.3 Million</b>	Employer Contribution: <b>\$6.9 Million</b>	Employer Contribution: <b>\$10.4 Million</b>
Employer Gain in GRP: Up to <b>\$108 Million</b>	Employer Gain in GRP: Up to <b>\$270 Million</b>	Employer Gain in GRP: Up to <b>\$432 Million</b>	Employer Gain in GRP: Up to <b>\$648 Million</b>

*\*The relationship between GRP and Employee Count, though linear, is difficult to estimate with full confidence. We use the “Up to” predicate to stress the real number is likely partially lower. However, given employer response to the pilot program in MSD Wabash, we assume employers have conducted their own cost/benefit analysis and determined it makes solid financial sense to subsidize employee childcare.*

Figure XV: Scaled Cost/Benefit Relationship, Three Contributing Partners,  
Returning "Willing to Work" Parents to the NE Indiana Labor Force

10% Implementation (897 "Willing to Work" Parents)	25% Implementation (2,245 "Willing to Work" Parents)	40% Implementation (3,595 "Willing to Work" Parents)	60% Implementation (5,392 "Willing to Work" Parents)
Collective Parent Contribution: <b>\$2.3 Million</b>	Collective Parent Contribution: <b>\$5.76 Million</b>	Collective Parent Contribution: <b>\$9.21 Million</b>	Collective Parent Contribution: <b>\$13.8 Million</b>
Collective Parent Gain in Wages: <b>\$57.1 Million</b>	Collective Parent Gain in Wages: <b>\$142.7 Million</b>	Collective Parent Gain in Wages: <b>\$228.3 Million</b>	Collective Parent Gain in Wages: <b>\$342.2 Million</b>
State Contribution: <b>\$2.3 Million</b>	State Contribution: <b>\$5.76 Million</b>	State Contribution: <b>\$9.21 Million</b>	State Contribution: <b>\$13.8 Million</b>
State Gain in Taxes (Sales and Income): <b>\$3.0 Million</b>	State Gain in Taxes (Sales and Income): <b>\$7.5 Million</b>	State Gain in Taxes (Sales and Income): <b>\$12.0 Million</b>	State Gain in Taxes (Sales and Income): <b>\$18.1 Million</b>
Employer Contribution: <b>\$2.3 Million</b>	Employer Contribution: <b>\$5.76 Million</b>	Employer Contribution: <b>\$9.21 Million</b>	Employer Contribution: <b>\$13.8 Million</b>
Employer Gain in GRP: Up to <b>\$108 Million</b>	Employer Gain in GRP: Up to <b>\$270 Million</b>	Employer Gain in GRP: Up to <b>\$432 Million</b>	Employer Gain in GRP: Up to <b>\$648 Million</b>



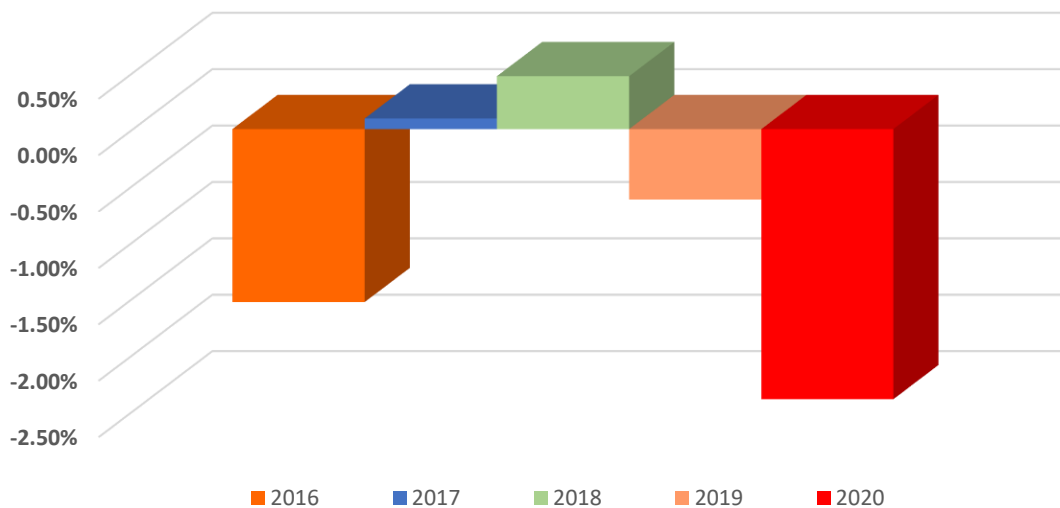
## Appendix A: Additional Data and Tables

**Table A1: Annual Live Births by County, as Reported by Indiana Department of Health**

<https://www.in.gov/health/vital-records/vital-statistics/>

County	2016	2017	2018	2019	2020	2021	All, Aged 5 AND Under
Adams	676	693	649	683	632	638	3,971
Allen	5,140	5,200	5,245	5,299	5,191	5,243	31,318
DeKalb	535	510	552	547	537	542	3,223
Huntington	417	424	424	389	399	403	2,456
Kosciusko	1,017	1,057	1,024	949	921	930	5,898
LaGrange	738	753	783	739	726	733	4,472
Noble	589	629	640	632	658	665	3,813
Steuben	416	343	392	375	321	324	2,171
Wabash	353	316	318	323	289	292	1,891
Wells	369	328	335	335	345	348	2,060
Whitley	405	412	353	377	374	378	2,299
<b>Total in Region</b>	<b>10,655</b>	<b>10,665</b>	<b>10,715</b>	<b>10,648</b>	<b>10,393</b>	<b>10,497</b>	<b>63,573</b>

**Figure A1: Year-Over-Year, Percent Change in Annual Birth Rate, Northeast Indiana**



**Table A2: Estimates of Unique Households, by County and Annual Birth Cohort, Northeast Indiana**

County	2016 (Aged 5 to 6)	2017 (Aged 4 to 5)	2018 (aged 3 to 4)	2019 (Aged 2 to 3)	2020 (Aged 1 to 2)	2021 (Aged 0 to 1)	All Children, Aged 5 AND Under
Adams	573	591	553	582	539	544	3,382
Allen	4,354	4,401	4,439	4,485	4,393	4,437	26,509
DeKalb	453	421	457	453	444	449	2,677
Huntington	353	363	363	333	342	345	2,099
Kosciusko	861	929	901	837	813	821	5,162
LaGrange	625	611	636	599	588	594	3,652
Noble	499	507	516	510	532	537	3,101
Steuben	352	319	361	346	300	303	1,982
Wabash	299	282	284	288	259	262	1,675
Wells	313	302	308	308	316	319	1,866
Whitley	343	372	322	343	340	343	2,064
<b>Total in Region</b>	<b>9,025</b>	<b>9,098</b>	<b>9,140</b>	<b>9,083</b>	<b>8,867</b>	<b>8,955</b>	<b>54,169</b>

**Table A3: Actual Reported Enrollments, 63.15% of Providers, NE Indiana Region**

County	2019 Enrollment <sup>40</sup>	2022 Enrollment <sup>41</sup>	2022 Capacity
Adams	451	*	851
Allen	8,976	4,019	9,525
DeKalb	921	379	1,098
Huntington	504	573	667
Kosciusko	1,101	317	1,475
LaGrange	205	*	166
Noble	675	178	618
Steuben	589	517	893
Wabash	319	392	617
Wells	406	*	575
Whitley	567	431	645

**Table A4: Actual Reported Enrollments & HQP Estimates, NE Indiana Region**

County	2022 Enrollment <sup>42</sup>	% Enrolled in High-Quality Programs	Children Enrolled in High Quality Programming
Adams	*	30%	*
Allen	4,019	46%	1,849
DeKalb	379	39%	148
Huntington	573	15%	86
Kosciusko	317	35%	111
LaGrange	*	60%	*
Noble	178	28%	50
Steuben	517	47%	243
Wabash	392	35%	137
Wells	*	33%	*
Whitley	431	35%	151

<sup>40</sup> <http://www.elacindiana.org/elacindiana/wp-content/uploads/2020/07/2020-ELAC-Annual-Report.pdf>

<sup>41</sup> [Enrollment | Brighter Futures Indiana](#)

<sup>42</sup> [Enrollment | Brighter Futures Indiana](#)

**Table A5: Data-Reporting Childcare Centers by PTQ Designation, by County, Circa 2022**

<b>County</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Not on PTQ</b>
<b>Adams</b>	1	0	3	0	6
<b>Allen</b>	40	6	73	49	100
<b>DeKalb</b>	7	1	9	0	6
<b>Huntington</b>	1	0	1	0	10
<b>Kosciusko</b>	6	0	6	5	14
<b>LaGrange</b>	1	0	3	1	1
<b>Noble</b>	1	0	4	1	7
<b>Steuben</b>	7	1	9	0	2
<b>Wabash</b>	5	2	7	0	7
<b>Wells</b>	0	1	3	0	5
<b>Whitley</b>	4	3	5	1	4
<b>Total</b>	73	14	123	57	162

**Table A4: County-by-County Estimates, Prospective New Enrollees, By Cost and Age Cohorts**

	Adams				Allen				DeKalb		
	Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost
Aged 5 to 6	95	\$5,785	\$549,575		722	\$6,205	\$4,480,010		75	\$4,160*	\$312,000
Aged 4 to 5	98	\$8,021	\$786,058		730	\$7,402	\$5,403,460		70	\$6,799	\$475,930
Aged 3 to 4	92	\$8,021	\$737,932		736	\$7,402	\$5,447,872		76	\$6,799	\$516,724
Aged 2 to 3	97	\$8,914	\$864,658		744	\$8,324	\$6,193,056		75	\$7,921	\$594,075
Aged 1 to 2	89	\$8,914	\$793,346		729	\$8,324	\$6,068,196		74	\$7,921	\$586,154
Aged 0 to 1	90	\$8,914	\$802,260		736	\$8,324	\$6,126,464		74	\$7,921	\$586,154
All Ages	561	\$8,082	\$4,533,829		4397	\$7,668.65	\$33,719,058		444	\$6,917	\$3,071,037
	Huntington				Kosciusko				LaGrange		
	Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost
Aged 5 to 6	59	\$3,671	\$216,589		143	\$8,892	\$1,271,556		104	\$7,280	\$757,120
Aged 4 to 5	60	\$6,084	\$365,040		154	\$9,295	\$1,431,430		101	\$7,280	\$735,280
Aged 3 to 4	60	\$6,084	\$365,040		149	\$9,295	\$1,384,955		106	\$7,280	\$771,680
Aged 2 to 3	55	\$6,175	\$339,625		139	\$10,896	\$1,514,544		99	\$7,973	\$789,327
Aged 1 to 2	57	\$6,175	\$351,975		135	\$10,896	\$1,470,960		98	\$7,973	\$781,354
Aged 0 to 1	57	\$6,175	\$351,975		136	\$10,896	\$1,481,856		99	\$7,973	\$789,327
All Ages	348	\$5,719	\$1,990,244		856	\$9,995	\$8,555,301		607	\$7,618	\$4,624,088
	Noble				Steuben				Wabash		
	Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost
Aged 5 to 6	83	\$7,202	\$597,766		58	\$5,720	\$334,364		50	\$4,457	\$221,079
Aged 4 to 5	84	\$7,202	\$604,968		53	\$6,831	\$361,640		47	\$6,344	\$297,048
Aged 3 to 4	86	\$7,202	\$619,372		60	\$6,831	\$408,674		47	\$6,344	\$298,831
Aged 2 to 3	85	\$8,337	\$708,645		57	\$7,702	\$442,384		48	\$7,211	\$344,737
Aged 1 to 2	88	\$8,337	\$733,656		50	\$7,702	\$383,942		43	\$7,211	\$310,286
Aged 0 to 1	89	\$8,337	\$741,993		50	\$7,702	\$387,416		43	\$7,211	\$313,214
All Ages	515	\$7,779	\$4,006,400		329	\$7,051	\$2,318,420		278	\$6,426	\$1,785,194
	Wells				Whitley				All Counties		
	Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost		Count of Children	Cost Per Child	Total Annual Cost
Aged 5 to 6	52	\$2,080	\$107,850		57	\$5,974	\$339,977		1,498	\$6,134	\$9,187,886
Aged 4 to 5	50	\$7,904	\$395,957		62	\$6,568	\$405,763		1,509	\$7,465	\$11,262,574
Aged 3 to 4	51	\$7,904	\$403,732		53	\$6,568	\$351,310		1,516	\$7,455	\$11,306,122
Aged 2 to 3	51	\$8,693	\$444,034		57	\$6,885	\$391,485		1,507	\$8,378	\$12,626,570
Aged 1 to 2	52	\$8,693	\$456,249		56	\$6,885	\$388,583		1,472	\$8,374	\$12,324,700
Aged 0 to 1	53	\$8,693	\$460,463		57	\$6,885	\$392,201		1,485	\$8,374	\$12,433,323
All Ages	310	\$7,327	\$2,268,285		342	\$6,627	\$2,269,320		8,987	\$7,694	\$69,141,175