



# *Investing in the* Child Care Industry

*An Economic Development Strategy for Louisiana*



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Note: Throughout this report the term “child care” is used as shorthand for “early care and education.” Child care is used for ease of recognition by individuals not as familiar with the early care and education industry.

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## EXECUTIVE SUMMARY

Economic development and job creation are a primary focus in Louisiana. When considering economic development, people tend to think of factories and manufacturing plants, stadiums and sports franchises, or tax incentives to draw businesses and stimulate job creation. However, child care and early childhood education programs may play a much larger role in determining Louisiana's long-run economic success by shaping the future workforce than any combination of tax incentives.

While the largest benefit of investing in child care takes many years, Louisiana does not have to wait fifteen or twenty years to see an economic impact. Like any other industry, the child care sector creates jobs and earnings within the state. Unlike many other industries, the child care sector also injects substantial new money into the Louisiana economy by leveraging dollars from the Federal government. This study focuses on quantifying the size and short-run impact of the child care sector on Louisiana's economy.

Nobel laureate James Heckman, an economist at the University of Chicago, has written extensively about the benefits of investing in people, or human capital. He described a process called "dynamic complementarity" wherein capable people acquire more skills and people with more skills become more capable. Heckman has detailed that much of the benefit of investing in young children is due to this dynamic complementarity as well as the fact that there is greater time to recoup the benefits of the intervention. Heckman asserts that it makes the most economic sense to redirect funds toward improving basic social, emotional and cognitive skills of children. He uses economic models of analysis to demonstrate convincingly that the longer we wait to intervene with children the more expensive it becomes to fix the problems and the less return on the investment is recognized over time.<sup>1</sup>

Fortunately, as a result of recent studies, the immediate benefits of investing in early childhood development through child care are recognized through economic development analyses. These studies determine the immediate economic impact by measuring the direct effects (revenues taken in by child care providers/centers), indirect effects (child care providers spend money on needed goods and services through local businesses) and induced effects (income that is spent by child care employees in local communities) that result from child care.<sup>2</sup> The economic analysis was completed here in Louisiana and the results show that the child care sector is a significant contributor to the economic development of the state.

In Louisiana, conservative estimates of the size of the child care sector show that there are 12,701 businesses, employing 22,644 workers, serving over 149,000 children and 136,000 working parents, and generating approximately \$658 million in gross receipts. In addition, for every dollar that is spent in the child care sector, \$1.72 is returned into the economy. Similarly, for each new child care job that is created, 1.27 jobs are created in the larger economy. The state contributes \$40 million dollars into child care which helps leverage \$251.7 million federal

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<sup>1</sup> Heckman, J. J. (2000). Policies to foster human capital. *Research in Economics*, 54, 3-56.

<sup>2</sup> Stoney, L., Warner, M., Woolley, A. E., & Thorman, A. (2003). *Investing in the child care industry: An economic development strategy for Kansas*. Mid America Regional Council.

dollars into the child care system. In turn, this \$251.7 million has a total impact of \$433 million in the Louisiana economy.

With a ten-fold return on the state investment and a substantial impact from each dollar spent in local communities, it is time that child care is recognized as an important economic tool that can be used to spur development throughout the state. Policy makers should recognize that immediate returns from support of the child care industry will also yield long term benefits to Louisiana as a result of success in school, leading healthy lives, and becoming productive citizens in the community as well as the workplace.

<b>Economic Impact of the Child Care Industry in Louisiana</b>	
<b>Child care in Louisiana is an industry...</b>	<b>More than 12,700 small businesses (family child care homes, in-home providers, for-profit centers, and non-profit centers)</b>
<b>That creates jobs...</b>	<b>Directly employing more than 22,000 people</b>
<b>Supporting working families...</b>	<b>Serving more than 149,000 children and assisting more than 130,000 working parents</b>
<b>And adds to the Louisiana economy.</b>	<b>Generating gross receipts of more than \$650 million per year.</b>

## Section I. A PROFILE OF LOUISIANA'S CHILDREN

Recent research and an expanding knowledge base provide convincing evidence that the young child's earliest experiences have significant impact on present and later health and well-being.<sup>3</sup> In the early years of life, health and physical, social, emotional, and cognitive development, are integrally intertwined; functioning in any one of these areas can be impeded or enhanced by functioning in other

Louisiana's children remain at-risk for multiple health, developmental, cognitive and social problems.

### Population

According to the 2000 Census, the total population of Louisiana is 4,468,976. Seventy-three percent (73%) of the population lives in urban areas compared to 27% in rural areas. Louisiana has slightly

**Table 1. Population of Children, 2000**

State	Total Population	Total Population Under 5 Years	Percent of Population Under 5	Total Population Under 18 Years	Percent of Population Under 18
Louisiana	4,468,976	317,297	7.1%	1,220,030	27.3%
Mississippi	2,844,658	204,815	7.2%	776,592	27.3%
Arkansas	2,673,400	181,791	6.8%	679,044	25.4%
Alabama	4,447,100	297,956	6.7%	1,125,116	25.3%
United States	281,421,906	19,136,690	6.8%	72,325,430	25.7%

areas of health and well-being, and by the context of early experiences in general.

These issues are particularly salient for Louisiana. For years, Louisiana's young children have languished at the bottom of the nation in terms of standard measures of child health and welfare. The 2004 Kids Count Data Book rates Louisiana as 49<sup>th</sup> in overall child well-being.<sup>4</sup> Though there have been overall improvements over the past decade, a significant proportion of

more children than surrounding states and the nation as a whole (see Table 1).<sup>5</sup>

### Poverty

The 2004 Federal poverty guidelines define poverty as income below \$18,400 per year for a family of four. With near-poverty defined as income between 100-200% of the federal poverty level (FPL), and low-income as income below 200% of FPL (currently \$36,800 per year for a family of four), then 45% of all families with children in Louisiana are considered low income compared to 35% in the U.S. (see Figures 1 and 2).<sup>6</sup>

<sup>3</sup> Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. National Research Council and Institute of Medicine Committee on Integrating the Science of Early Childhood Development. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, D.C.: National Academy Press.

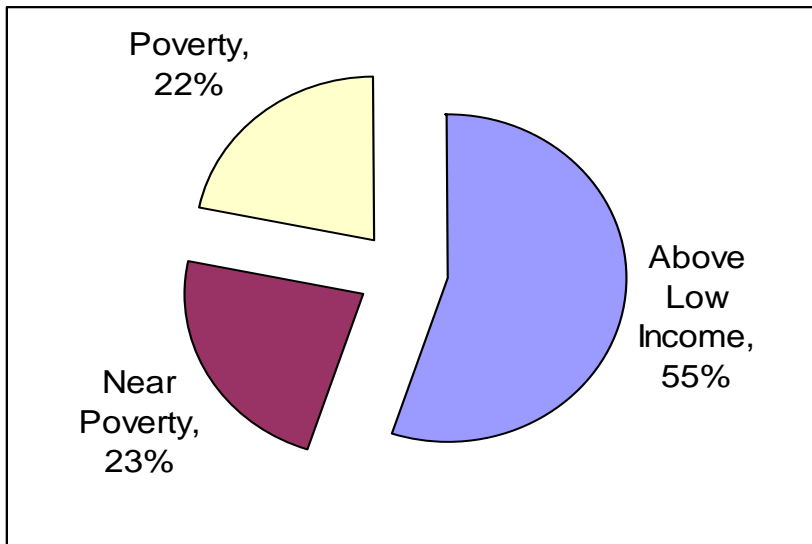
<sup>4</sup> Annie E. Casey Foundation. (2004). *Kids count data book: State profiles of child well-being*. Baltimore, MD.

<sup>5</sup> U.S. Census Bureau, 2000.

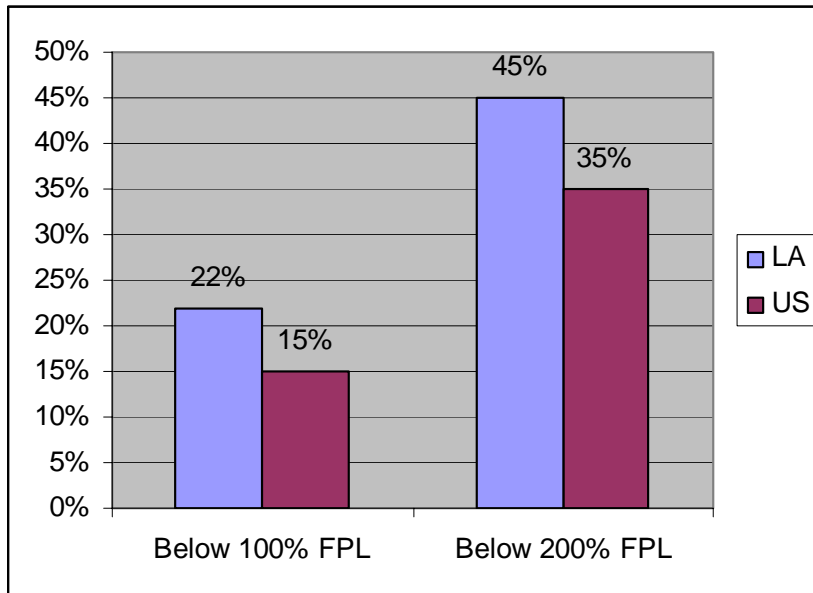
<sup>6</sup> National Center for Children in Poverty (2004), Available at: <http://nccp.org>. State data were calculated from the Annual Demographic Supplement (the March supplement) of the Current Population Survey from 2001, 2002, and 2003, representing information from calendar years 2000,



**Figure 1. Income Level of Families with Children in Louisiana<sup>6</sup>**

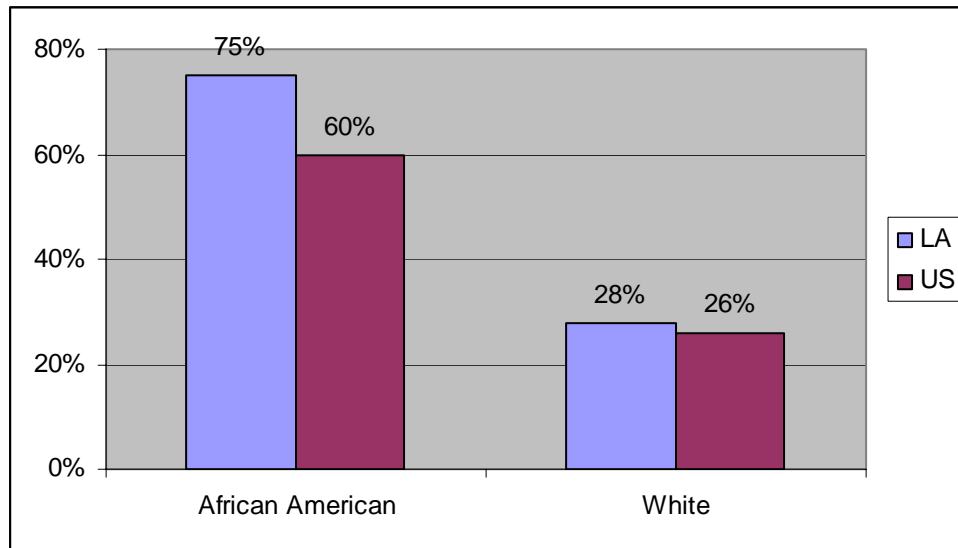


**Figure 2. Families in Poverty: Louisiana and the United States<sup>6</sup>**



2001, and 2002. NCCP averaged three years of data because of small sample sizes in less populated states. The national data were calculated from the 2003 data, representing information from calendar year 2002.

**Figure 3. Percent of Children Living in Low-Income Families in Louisiana (by Race)<sup>7</sup>**



In Louisiana, African American children are much more likely to live in low-income families (see Figure 3).<sup>7</sup>

- 28% of White children live in low-income families.
- 75% of African American children live in low-income families.

In 2004, 24% of Louisiana's children lived in poverty compared to 17% nationwide (see Figure 4). When looking specifically at children under the age of six, in Louisiana 55% live below 200% of FPL compared to 42% nationally (see Figure 5).<sup>7</sup>

Furthermore, Louisiana has the highest percentage of children 5 years of age and

under living in poverty (28.4%).<sup>8</sup> According to the Children's Defense Fund, a child in Louisiana is born into poverty every 29 minutes.

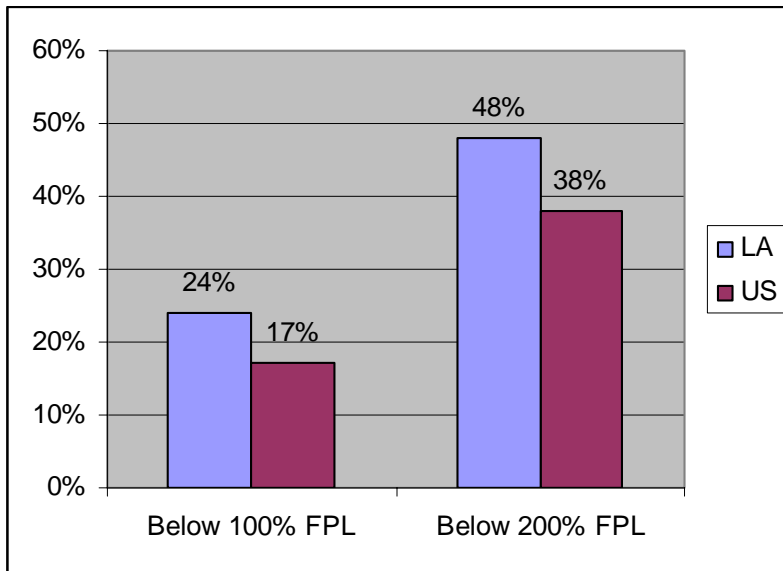
### Health Indicators

In addition to the health indicators detailed in Table 2, racial health disparities are of great concern. In 2001, the percentage of low birth weight babies in Louisiana was 10.4%, with African Americans at 14.7% compared to Whites at 7.5%. Similarly, the overall infant mortality rate was 9.8 per 1,000 live births, with an African American infant mortality rate of 14.4 compared to a rate of 6.5 for White infants. According to the Children's Defense Fund, a child in Louisiana dies before his or her first birthday every 14 hours.

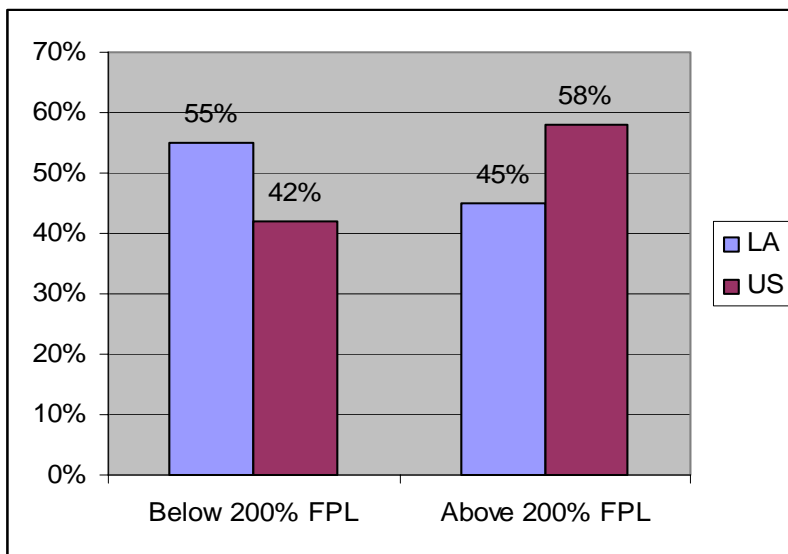
<sup>7</sup> National Center for Children in Poverty (2004), Available at: <http://nccp.org>. State data were calculated from the Annual Social and Economic Supplement (the March supplement) of the Current Population Survey from 2002, 2003, and 2004, representing information from calendar years 2001, 2002, and 2003. NCCP averaged three years of data because of small sample sizes in less populated states. The national data were calculated from the 2004 data, representing information from calendar year 2003.

<sup>8</sup> U.S. Census Bureau, Current Population Survey. October, 2003.

**Figure 4. Louisiana Children in Poverty: Children Less than 18 Years-Old<sup>9</sup>**



**Figure 5. Low-Income Children in Louisiana Less than 6 Years-Old<sup>9</sup>**



<sup>9</sup> National Center for Children in Poverty (2004), Available at: <http://nccp.org>. State data were calculated from the Annual Social and Economic Supplement (the March supplement) of the Current Population Survey from 2002, 2003, and 2004, representing information from calendar years 2001, 2002, and 2003. NCCP averaged three years of data because of small sample sizes in less populated states. The national data were calculated from the 2004 data, representing information from calendar year 2003.

**Table 2. Indicators of Well-Being**

Health Indicator	2000		2001		2002	
	LA	US	LA	US	LA	US
Number of Live Births	67,898		65,352		64,575	
Number of Women with Children Under Age 3 in the Workforce	94,000		121,000		NA	
Percent Total Births to Teens	17.0% <sup>a</sup> Rank 44	11.8% <sup>a</sup>	16.2% <sup>a</sup> Rank 48	11.3% <sup>a</sup>	15.8% <sup>b</sup>	10.8% <sup>c</sup>
Percent of Total Births to Unmarried Women	45.6% <sup>a</sup>	33.2% <sup>a</sup>	46.3% <sup>a</sup> Rank 48	33.5% <sup>a</sup>	53.0% <sup>b</sup>	34.0% <sup>c</sup>
Percent of Total Births to Mothers with Less than 12 Years of Education	23.4% <sup>a</sup>	21.7% <sup>a</sup>	23.0% <sup>a</sup> Rank 42	21.7% <sup>a</sup>	22.9% <sup>b</sup>	21.5% <sup>c</sup>
Percent Preterm Births (Less than 37 Weeks Gestation)	15.0% <sup>a</sup>	11.6% <sup>a</sup>	15.2% <sup>a</sup> Rank 48	11.9% <sup>a</sup>	12.3% <sup>b</sup>	12.1% <sup>c</sup>
Percent Low Birth Weight (Less than 5.5 Pounds)	10.3% <sup>a</sup> Rank 49	7.6% <sup>c</sup>	10.4% <sup>a</sup> Rank 49	7.7% <sup>c</sup>	10.5% <sup>b</sup>	7.8% <sup>c</sup>
Percent Very Low Birth Weight	2	1.4	2.3	1.4	2.1% <sup>b</sup>	1.5% <sup>c</sup>
Infant Mortality Rate (deaths per 1,000 live births)	8.9% <sup>b</sup> Rank 46	6.9% <sup>c</sup>	9.8% <sup>b</sup> Rank 48	6.8% <sup>c</sup>	10.2% <sup>b</sup>	7.0% <sup>c</sup>
Child Death Rate (deaths per 100,000 children ages 1-4)	51.1% <sup>b</sup>	NA	50.4% <sup>b</sup>	31.2% <sup>c</sup>	55.0% <sup>b</sup>	33.3% <sup>c</sup>
Percentage of Children (19-35 months) Immunized	74.7% <sup>c</sup>	76.2% <sup>c</sup>	68.9% <sup>c</sup>	77.2% <sup>c</sup>	69.3% <sup>c</sup>	77.5% <sup>c</sup>

<sup>a</sup> Kids Count Special Report - Annie E. Casey Foundation ([www.aecf.org/cgi-bin/rs.cgi?action=profile&area=Louisiana](http://www.aecf.org/cgi-bin/rs.cgi?action=profile&area=Louisiana) and [www.aecf.org/kidscount/rightstart2003/2000\\_state\\_rankings.pdf](http://www.aecf.org/kidscount/rightstart2003/2000_state_rankings.pdf))

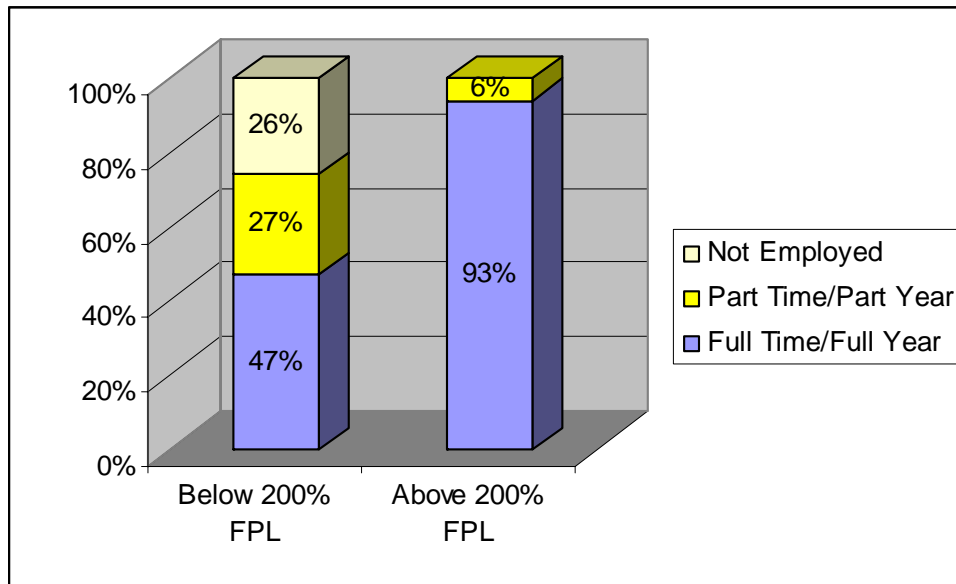
<sup>b</sup> LA Vital Records      <sup>c</sup> National Center for Health Statistics

NA – Data Not Available

## Employment of Families with Children in Louisiana

- 47% (133,545) of low-income families include at least one parent who is employed full-time/year-round.<sup>10</sup>
- 27% (75,936) of low-income families include parent(s) who are employed either part-year or part-time.<sup>10</sup>
- 26% (72,149) of low-income families have no employed parent(s).<sup>10</sup>
- There are currently 121,000 women with children under age three in the workforce.<sup>11</sup>
- 59% of families with children under the age of six have all parents in the workforce.<sup>12</sup>

**Figure 6. Employment of Families with Children in Louisiana<sup>10</sup>**



<sup>10</sup> National Center for Children in Poverty (2004). Available at: <http://nccp.org>.

<sup>11</sup> Current Population Survey. "Labor force status of women with children under the age of 3 by State." March 2000 and 2001. Total includes employed and unemployed.

<sup>12</sup> U.S. Census Bureau, Census 2000 Demographic Profile, DP-3: Profile of Selected Economic Characteristics.

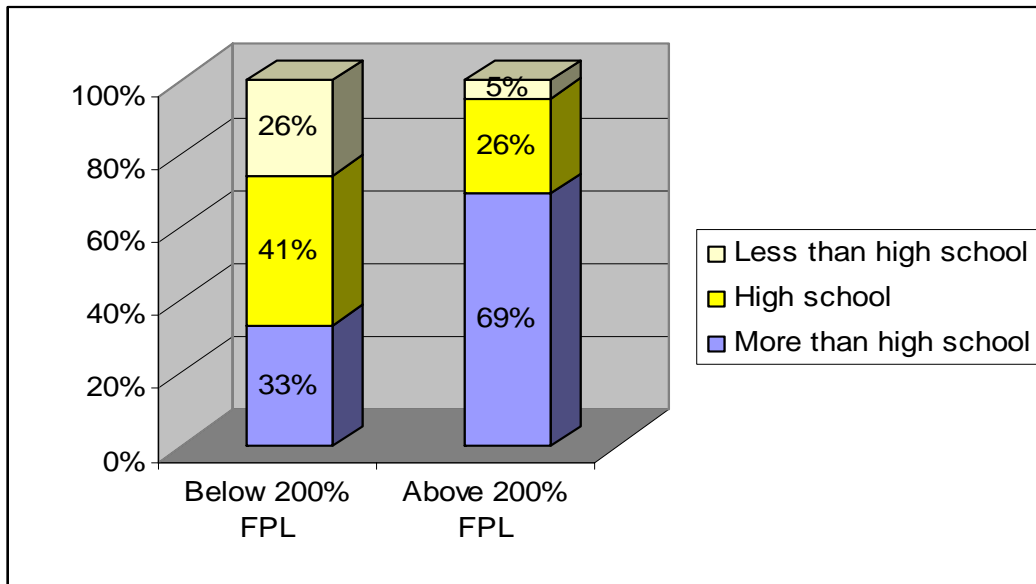
### Education Level of Families with Children

In Louisiana, as is true for the rest of the country, parents with limited education are more likely to be low-income.

- 26% (72,710) of low-income families are headed by parent(s) who do not have a high school degree.<sup>13</sup>

- Only 5% (16,956) of all other families are headed by parent(s) who do not have a high school degree.<sup>13</sup>

**Figure 7. Education Level of Families with Children in Louisiana<sup>13</sup>**



<sup>13</sup> National Center for Children in Poverty (2004). Available at: <http://nccp.org>.



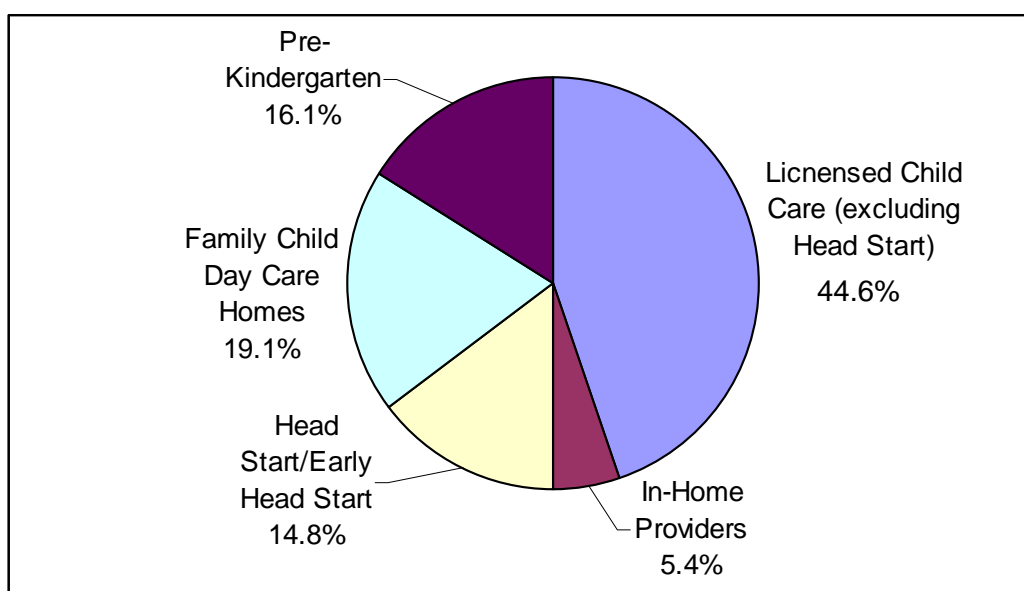
## Section II. MEASURING THE SIZE OF THE CHILD CARE SECTOR

The majority of child care is provided by private child care businesses. While there are a number of state agencies that collect data with regard to child care, there is no comprehensive database with information on the children that are served. While this report uses all of the available data to detail the child care sector it should be noted that it is not possible to capture the privately paid unregulated and/or unlicensed child care in

subsidized care. There are approximately 1500 Class A centers (including Head Start – see below) in Louisiana.

2) Class B centers – licensing regulations are developed by the Louisiana Committee on Private Child Care and are licensed by the DSS Bureau of Licensing. Class B centers are not eligible to receive state subsidy dollars. There are

**Figure 8. Percentage of Children in Type of Child Care**



this economic analysis. Therefore, it should be understood that this report will yield conservative (underestimated) results as only data from regulated and licensed child care programs will be included while all unregulated and informal child care will be excluded. Licensed and regulated child care in Louisiana consists of the following:

Licensed child care centers – provides care to seven or more children. There are two types of child care licenses in Louisiana.

1) Class A centers – licensing regulations developed by the Department of Social Services (DSS), Bureau of Licensing. Class A centers meet the criteria for state

approximately 500 Class B centers in Louisiana.

Registered child care – there are two types of registered child care in Louisiana.

1) Family Child Day Care Home (FCDCH) – provides care for no more than six children in the provider’s home. FCDCHs that want to receive state child care subsidy dollars must be registered with the Department of Social Services. FCDCHs that want to receive nutrition assistance dollars must be registered with the Louisiana Department of Education. There are approximately 7,388 FCDCH providers in Louisiana.



2) In-Home Child Care Provider – is a person who provides care for a child (not their own) in the child’s home. The provider must not be living in the same home as the child for whom care is being delivered. In-Home Child Care providers that want to receive state subsidy dollars must be registered with the Department of Social Services. There are approximately 3,336 registered In-Home Child Care providers in Louisiana.

Head Start/Early Head Start - is a federal program administered by the U.S. Department of Health and Human Services, Administration for Children and Families. Head Start is a comprehensive child development program that serves children from birth to 3 (Early Head Start) and from 3 to 5 (Head Start), pregnant women, and their families. The overall goal of Head Start is to improve child development and school readiness of low-income children. Head Start funding comes directly to the grant awarded providers from the federal government. In Louisiana, there are approximately 48 individual grantees that operate Head Start programs in 296 centers. These Head Start centers are Class A licensed.

Public/Private Pre-Kindergarten – throughout Louisiana there are a variety of pre-kindergarten (pre-k) programs serving four-year-old children that are administered through the Louisiana Department of Education (public) or the Governor’s Office (private). In the 2003-04 school year, there were approximately 24,000 children in public or private pre-k. Pre-k is funded through a variety of sources including Title I, Education Excellence Fund, 8(G), Starting Points, Even Start, TANF, state general fund, and local dollars.

As detailed in Table 3, there are approximately 149,849 children receiving some type of child care in Louisiana. The data in Table 3 estimates the number of children in center based care but does not include other types of private paid care from informal or individual caregiving by nannies, babysitters, relatives or neighbors. There is no widely accepted method to estimate this number of children. Therefore, the only children included in this report are those estimated in Table 3.

### **Number of Businesses**

In Louisiana, the child care industry is comprised of many locally based small businesses in the community or in the home. This includes non-profit and for-profit child care centers, family child day care home providers, in-home child care providers, and Head Start/Early Head Start classrooms. In addition, the child care sector may include a large informal child care network, self-

employed providers, who are not registered or licensed by the state. In this report, the pre-k providers are not

included as separate businesses because the majority of these classrooms are located in existing schools. In total, there are 12,701 child care businesses in Louisiana (see Figure 9).

**There are over 149,000 children in licensed or regulated child care settings in Louisiana.**

**Direct Employment**

The number of employees in the child care sector is conservatively estimated based on the number of child care businesses and the

care center, a random sample of licensed providers was drawn from licensing records to determine an average number of employees per provider. With an average of

**Table 3. Child Care Establishments, Capacity and Children Served in Louisiana**

Type of Establishment	Number of Establishments	Maximum Capacity <sup>a</sup>	Number of Children Served
Licensed Child Care Centers	1681 <sup>b</sup>	115,349	66,902 <sup>c</sup>
Family Child Day Care Home (FCDCH)	7388 <sup>d</sup>	44,328 <sup>e</sup>	28,577 <sup>f</sup>
In-Home Child Care	3336	--	8,063 <sup>g</sup>
Head Start/Early Head Start	296	--	22,108 <sup>h</sup>
Public/Private Pre-K	--	--	24,199 <sup>i</sup>
<b>Total</b>	<b>12,701</b>	<b>--</b>	<b>149,849</b>

<sup>a</sup> Maximum capacity is known for licensed and registered care. However, most child care providers are not filled to capacity for both unintentional, as well as intentional (e.g., to improve quality) reasons.

<sup>b</sup> Data from the DSS, Bureau of Licensing

<sup>c</sup> Surveyed a random sample of licensing records to determine the vacancy rate (42%). Multiplied licensed capacity x .58 to determine number of children served.

<sup>d</sup> There are 1,885 FCDCHs registered with DSS and 6,297 registered with the Child and Adult Care Food Program (CACFP). The 794 that are registered on both lists was subtracted from the total to avoid a double count.

<sup>e</sup> Family Child Day Care Homes can care for up to six children. Multiplied this capacity by the number of registered FCDCH.

<sup>f</sup> DSS pays FCDCH providers a subsidy for 5,229 children, or an average of 2.77 children for each registered FCDCH. The CACFP program provides meals for 25,547 children in FCDCHs. As there are 794 FCDCHs that are on both registries, we multiplied by 2.77 and subtracted that (2,199) from the total.

<sup>g</sup> The number of children that receive subsidy from DSS. There is no way to know the number of children cared for by In-Home Child Care providers that do not receive a public subsidy.

<sup>h</sup> Provided by the Department of Health and Human Services – Administration for Children and Families.

<sup>i</sup> For 2003-04 school year. Data provided by the LA Department of Education and the Governor’s Office.

knowledge of the number of teachers and staff in the pre-k programs (see Figure 10).

To determine an estimate of the number of employees per licensed child

4.4 employees per licensed center, there are an estimated 7,396 employees working at

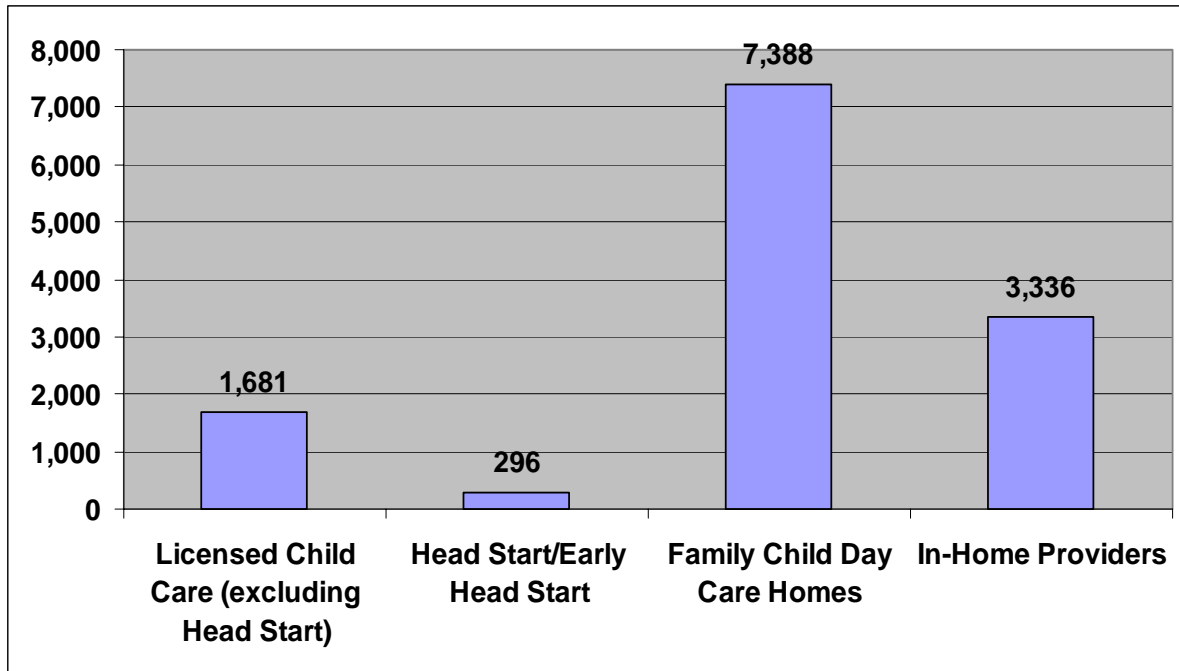
licensed centers (not including Head Start). Head Start numbers were gathered from federal data. Family Child Day Care Homes and In-Home Child Care providers were estimated as

**There are 12,701 child care businesses in Louisiana and 22,644 employees.**

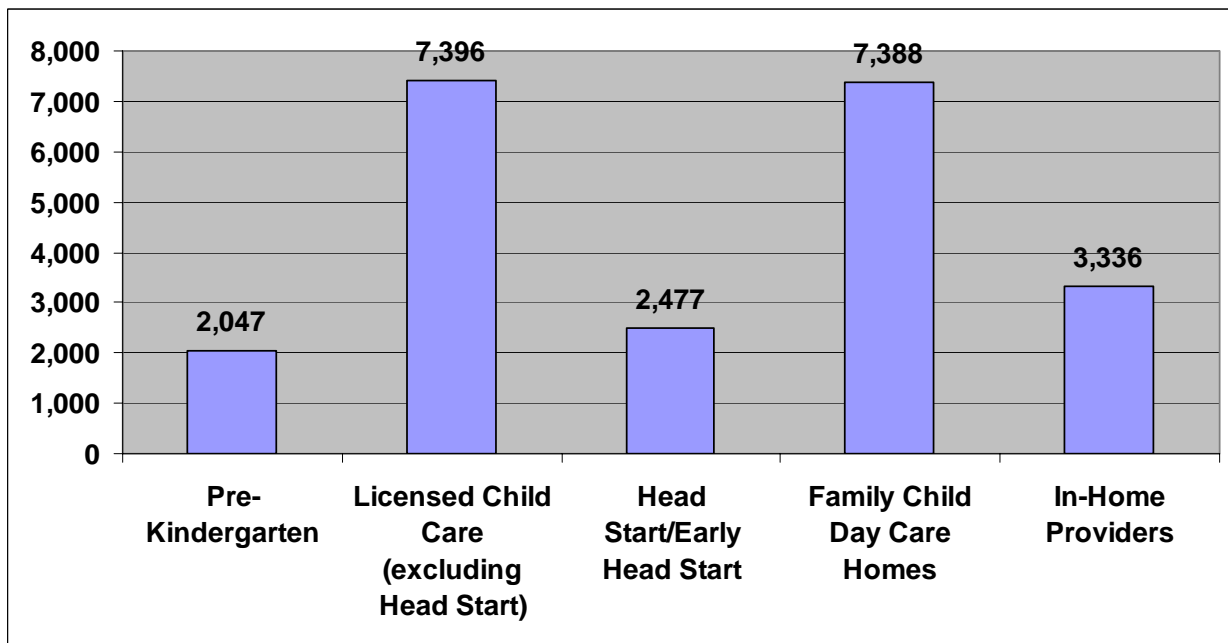
one employee per provider. The number of pre-k employees was available from the Department of Education and the Governor's Office.

Figure 11 compares a variety of notable industries in Louisiana by the number of employees. Over 22,000 individuals work in the licensed or regulated child care industry. This is more workers than people

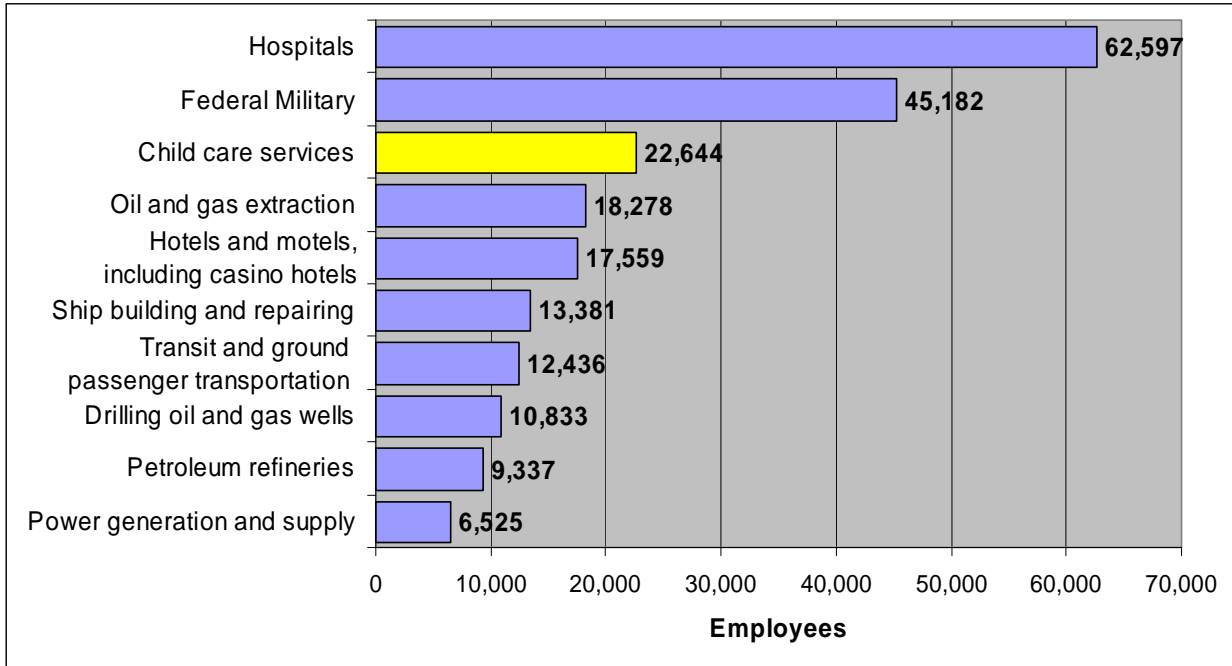
**Figure 9. Number of Child Care Providers by Type**



**Figure 10. Number of Child Care Employees**



**Figure 11. Employment by Industry in Louisiana**



employed in the hotel and motel industry, oil and gas extraction, ship building and repairing and oil and gas well drilling, among others.

**Gross Receipts**

The gross receipts are the total revenue received by child care providers. The gross receipts include all of the dollars that flow into the child care sector including payments, subsidies, and any other revenues paid to the industry. Again, the following estimates should be considered conservative, or underestimates, as it is not possible to measure the gross payments from unregulated or unlicensed child care.

To determine gross receipts for licensed child care (excluding Head Start), the total number of estimated children in licensed care (see Table 3) was multiplied by the median weekly rate of licensed child care in Louisiana as determined by the 2003 Market

Rate Survey and adjusted for inflation. This method was also used to determine gross receipts for Family Child Day Care Home and In-Home Child Care providers. Gross receipts for Head Start was the total amount of federal funds that support the program. The total state and federal funds for pre-k was used to determine gross receipts for this program. Added to these revenues were federal dollars to subsidize nutrition through the Child and Adult Care Food Program as well as state supported efforts using federal funds to enhance quality e.g., staff training, enhanced facilities, staff retention. To ensure that the gross receipts estimate is conservative, all

**The child care sector in Louisiana generates gross receipts in excess of \$658 million.**

administrative dollars that could be identified were excluded from analysis. This includes \$16 million in administrative funds for the Child Care and Development Fund Block Grant programs. The detailed figures are summarized in Table 4 and amount to \$658,583.324 in gross receipts in the child care sector.

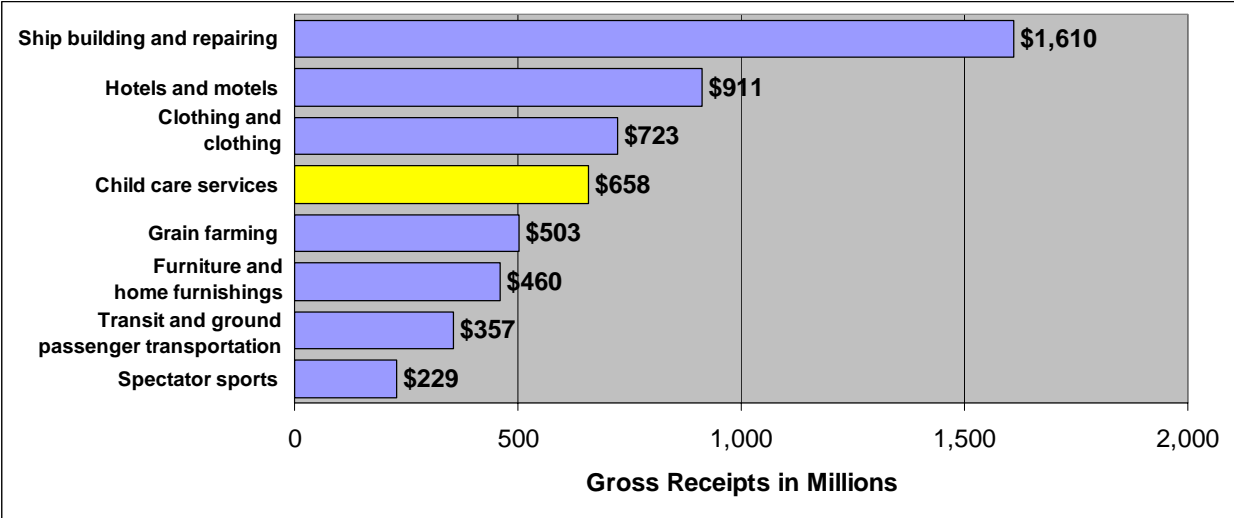
Figure 12 compares the total gross receipts across a number of industries in Louisiana. Child care compares favorably to a variety of high profile industries recognized as being significant in the state, with gross

revenues in excess of those in spectator sports, furniture stores and public transportation while trailing clothing stores, hotels and motels, and ship building and repairing. This shows that child care should be recognized as an industry in Louisiana that can generate consistent significant revenues on a yearly basis.

**Table 4. Sources and Amount of Gross Receipts**

<b>Total</b>		<b>Formula</b>
Centers	\$270,215,128	Determined average vacancy rate (42%) at licensed centers (excluding Head Start) and multiplied by licensed capacity (115,349). Multiplied 66,902 by the median weekly rate for licensed care as determined in 2003 (\$77.67 adjusted for inflation).
Family Child Day Care Homes	\$91,120,554	Determined number of children receiving child care subsidy and those participating in the food program. Removed children from the count that were in both programs so there was no double counting. Multiplied by median weekly rate for family child day care as determined in 2003 (\$61.32 adjusted for inflation).
In-Home Child Care	\$25,710,004	Determined number of children receiving child care subsidy and multiplied by median weekly rate for in-home care as determined in 2003 (\$61.32 adjusted for inflation).
Head Start	\$132,332,707	Federal Head Start money in Louisiana for the provision of Head Start.
Early Head Start	\$9,559,000	Federal Head Start money in Louisiana for the provision of Early Head Start.
Pre-K (Public and Private)	\$77,698,969	Cumulative total of state and federal dollars used for the provision of public or private pre-k. Funding sources include Education Excellence Fund, TANF, Title I, Even Start, state general fund, and 8G funds.
Child and Adult Care Food Program	\$44,361,435	Federal money to provide food to eligible children in licensed centers or family child day care homes.
Quality Grants	\$7,585,527	Child care block grant money or TANF funds used to improve the quality of child care.
<b>Total</b>	<b>\$658,583,324</b>	

**Figure 12. Gross Receipts by Industry in Louisiana**



**Conclusion**

Conservative estimates of the size of the child care sector show that there are 12,701 businesses, employing 22,644 workers,

serving 149,000 children and generating approximately \$658 million in gross receipts.

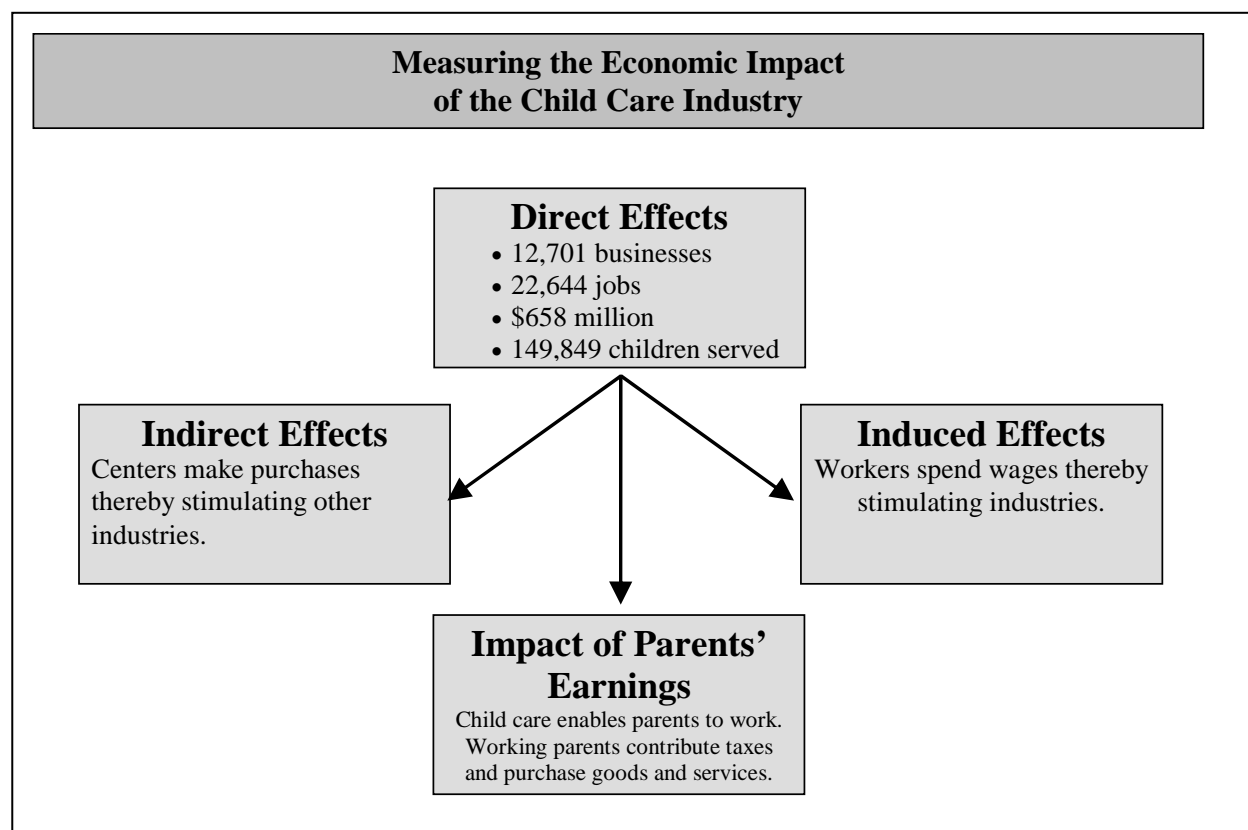
<b>Direct Economic Impact of the Child Care Industry in Louisiana</b>	
<b>Child care in Louisiana is an industry...</b>	<b>More than 12,700 small businesses (family child care homes, in-home providers, for-profit centers, and non-profit centers)</b>
<b>That creates jobs...</b>	<b>Directly employing more than 22,000 people</b>
<b>Supporting working families...</b>	<b>Serving more than 149,000 children</b>
<b>And adds to the Louisiana economy.</b>	<b>Generating gross receipts of more than \$650 million per year.</b>

### Section III. MEASURING THE SIZE OF THE ECONOMIC LINKAGES

#### Child Care Multipliers

Based purely on its size (businesses, employees, children served, gross receipts), child care can be viewed as an industry. However, simply viewing child care as industry still fails to recognize the importance of this sector as an economic engine due to its linkages to the rest of Louisiana's economy. The economy is

of the child care industry's purchases take place locally. This is in contrast to other industries, for example retail, who purchase many of their goods outside of the local economy. The strength of these purchases are determined using economic impact analysis. This type of analysis, known as input-output analysis, makes it possible to estimate the value of these linkages by



comprised of many industries and businesses that buy and sell from each other and the most telling measure of a sector's economic importance is the size of its output and employment.

These outputs, known as multipliers, estimate the gross number of dollars that would be generated throughout the entire economy for each increased dollar of spending on child care services. The multipliers for child care are strong as most

measuring inter-industry purchases.

The input-output analysis measures two effects; indirect effects and induced effects. The indirect effects examine the money spent providing child care including the purchase of food and supplies from other local businesses. In turn, these purchases stimulate additional activity as local businesses purchase goods and services from other local suppliers. The induced effects examine the impact of household



**Table 5. Child Care Multipliers**

	<b>Direct Effects</b>	<b>Indirect Effects</b>	<b>Induced Effects</b>	<b>Type I Multipliers</b>	<b>Type II Multipliers</b>
Output Multiplier	1.00	0.33	0.39	1.33	1.72
Employment Multiplier	1.00	0.12	0.15	1.12	1.27

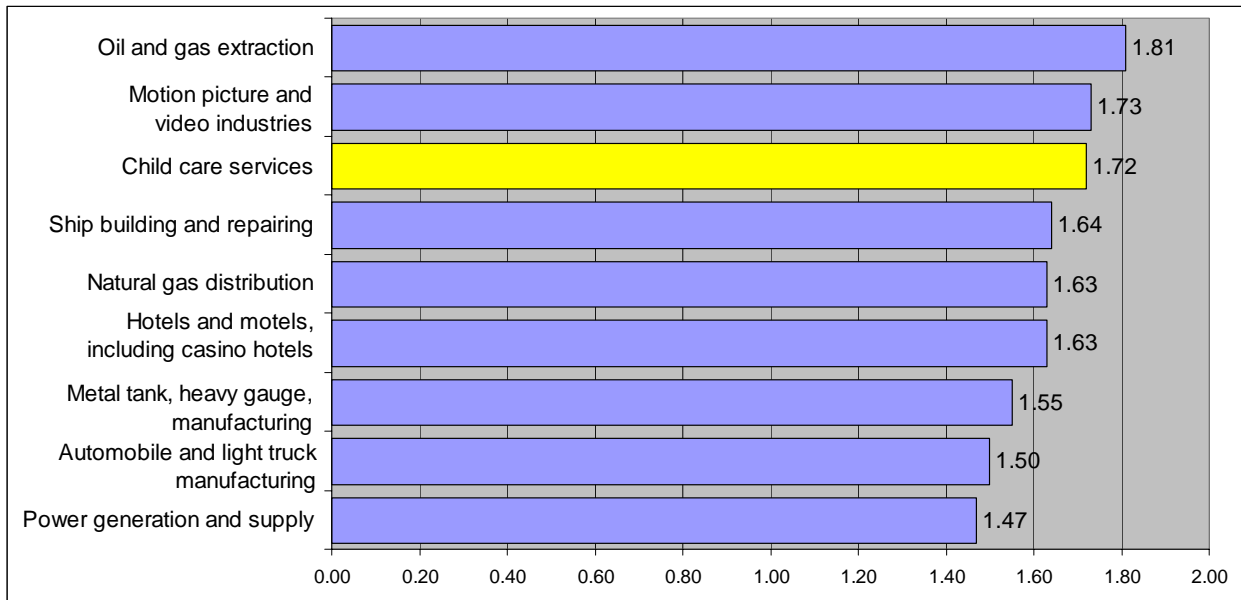
spending by child care employees who spend their earnings locally on groceries and housing and thereby stimulate other sectors whose employees are able to then purchase goods and services in the community.

To measure the linkage effect of the child care sector, IMPLAN modeling software was used. This program, the most commonly used software to measure the

Economic Analysis and the Bureau of Labor Statistics.<sup>14</sup>

The linkage effects, or multipliers, can be used to compare the impact of decisions to allocate funds to one industry compared to another. For example, policy makers might want to know if allocating funds to child care is likely to produce more or less economic impact than using those resources

**Figure 13. Output Multipliers by Industry, Louisiana**



economic impact of the child care sector, includes data for 509 sectors, including child care services. The data are primarily from federal sources including the Bureau of

in other important sectors such as job-training, education or transportation. There are two types of multipliers of concern when examining the impact of the child care

<sup>14</sup> Lindall, S. A., & Olson, D. C. (2002). *The IMPLAN Input-Output System*. See [www.implan.com](http://www.implan.com).

sector. The first is the output multiplier. This multiplier estimates the total sales generated for the entire economy for each additional dollar spent in child care. The second is the employment multiplier. The employment multiplier estimates the new jobs that are created in the entire economy due to each new job in the child care sector.

Table 5 indicates that for each dollar spent in the child care sector, there is an impact of a \$1.72 in the wider economy. The table also indicates that for each new job in child care, an additional 1.27 jobs are stimulated in the economy.

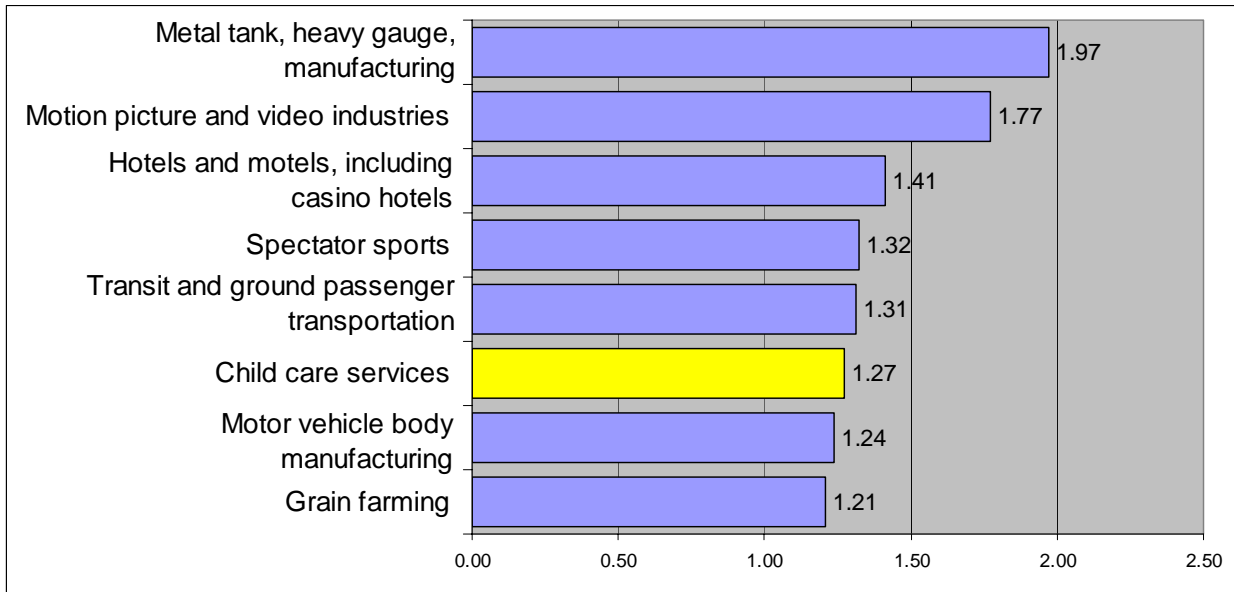
Figures 13 and 14 illustrate how the multipliers detailed in Table 5 compare to

profile economic development industries including motion picture and video and oil and gas extraction. While the employment multipliers are not as strong as the output multipliers, it is clear that child care does stimulate additional jobs and at a pace similar to public transportation, spectator sports and hotels and motels.

### Parents' Earnings

The input-output analysis measures the backward (or purchasing) linkages of the child care sector and therefore does not take into account the contributions child care makes to the economy beyond these traceable linkages. One of the important forward linkages that is left out of the model

**Figure 14. Employment Multipliers by Industry, Louisiana**



multipliers in other Louisiana industries. The output multipliers compare favorably to a variety of Louisiana's industries. **In fact, child care services have a greater dollar for dollar impact than ship building and repairing, hotels and motels, metal tank and heavy gauge manufacturing, and power generation and supply.** In addition, the impact is almost equal to other high

is the impact of child care enabling parents to participate in the labor force. In Louisiana, 59% of families with children under the age of six have all parents in the workforce.<sup>15</sup>

<sup>15</sup> U.S. Census Bureau, Census 2000 Demographic Profile, DP-3: Profile of Selected Economic Characteristics.

It is possible to estimate the number of parents who work and rely on child care. The federal dependent care tax credit is available to households where all parents work and have to pay for child care. This tax credit is a percentage of the child care

the child care industry. Approximately \$40 million is from state funding which is used to help leverage over \$325.4 million in federal funding (see Table 6). The vast majority of the federal funds (\$251,698,723) used to provide child care are specifically

<p>Number of Parents using Paid Child Care: <b>136,158</b></p>	<p><b>X</b></p>	<p>Per Capita Income in Louisiana: <b>\$25,307</b></p>	<p><b>=</b></p>	<p>Total of Parents' Earnings: <b>\$3.4 billion</b></p>
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expenses. In 2002, 87,017 Louisiana tax returns claimed the child care tax credit.<sup>16</sup> This involved 51,895 joint returns and 32,368 individual returns, or a total of 136,158 working parents. The 2002 per capita income in Louisiana was \$25,307.<sup>17</sup> Therefore the total earnings of these working parents that used child care is in excess of \$3.4 billion dollars. With over 130,000 working parents in Louisiana using paid child care, it is clear that child care is an essential support mechanism for the labor market.

**With over 130,000 working parents in Louisiana using paid child care, it is clear that child care is an essential support mechanism for the labor market.**

**The Economic Impact of Public Investments in Child Care**

Each year, Louisiana spends approximately \$365.6 million in state and federal funds in

designated for that purpose from the federal government and the state has little, or no, discretion to use that money for other purposes (e.g., Head Start and funds from the Child Care Development Fund Block Grant). In addition, there are federal funds that the state has discretion over and chooses to use these federal funds (\$73,722,585) to

support child care (e.g., TANF funds and pre-k funds).

The input-output analysis can be used to measure the impact of “external” money that is spent

on child care. There is an important distinction here as state dollars that are spent in the child care sector would presumably be spent elsewhere in the state if not spent in child care (e.g., roads, secondary education, transportation). Therefore, these funds are not included in the impact analysis.

Similarly, funds that Louisiana has discretion over should not be included in the impact analysis because they too would be spent in Louisiana in some capacity if not for child care. However, federal dollars that the state must spend in child care if it is to

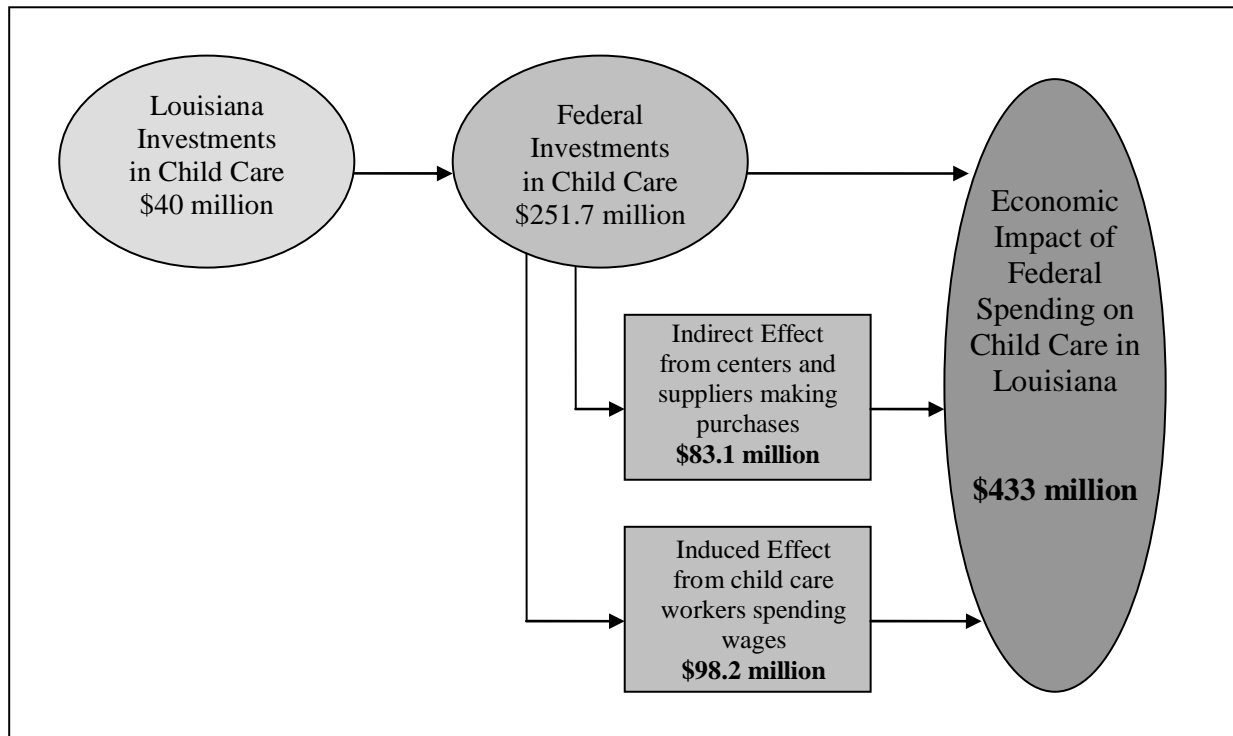
<sup>16</sup> Internal Revenue Service data available at <http://www.irs.gov/taxstats/article/0,,id=103106,00.html>

<sup>17</sup> Bureau of Economic Accounts. Per capita income in 2004 increased to \$26,038. The national per capita income in 2003 was \$31,459. Available at <http://www.bea.doc.gov/bea/regional/spi/drill.cfm>.

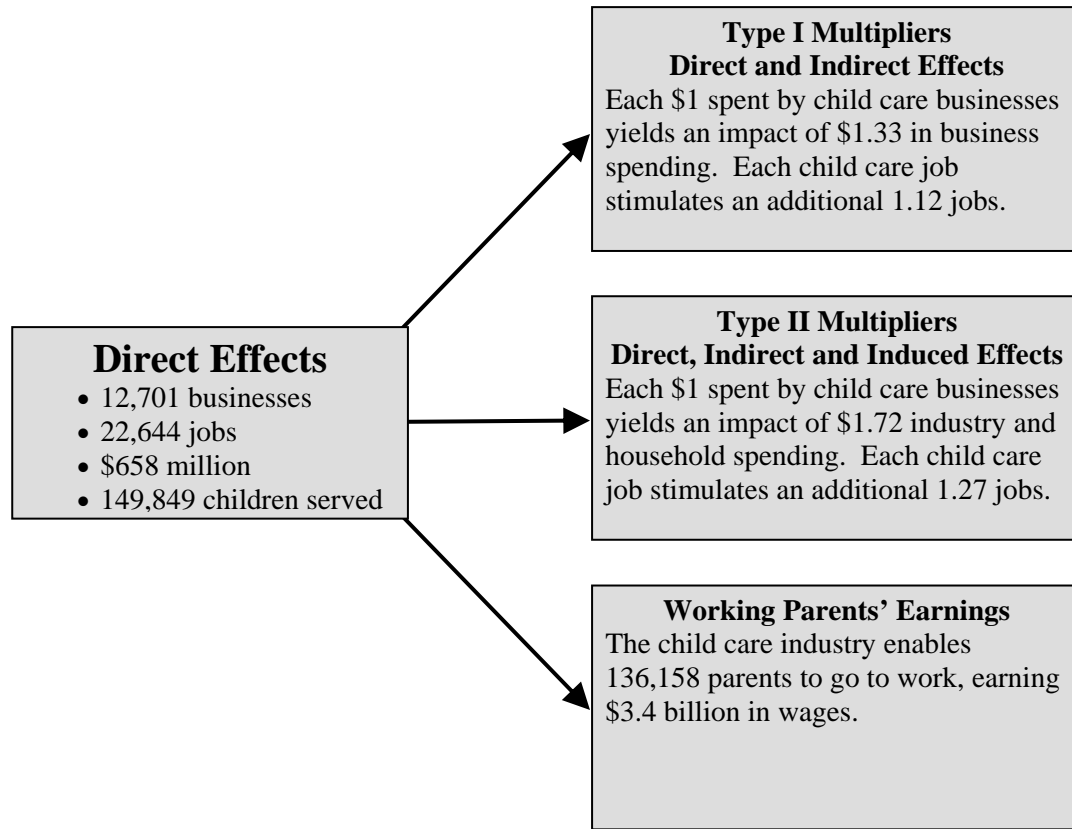
use the funds at all can be considered “new” money that will stimulate the Louisiana economy. As shown in Figure 15, Louisiana spends approximately \$40 million of state funds, and \$251.7 million that was designated by the federal government, in child care. These federal funds stimulate an additional \$433 million in the Louisiana economy.

Therefore, the \$40 million in state funds used in the child care sector have a greater than 10 fold return into the state economy. Ultimately, if these investments are wisely made to create and improve high quality programs, then they will also have tremendous long term impacts. The long term benefits of high quality child care are detailed in Section V.

**Figure 15. The Economic Impact of Federal Child Care Expenditures in Louisiana**



## Measuring the Economic Impact of the Child Care Industry



**Table 6. Louisiana Child Care Funding**

<b>Funding Source</b>	<b>Purpose</b>	<b>LA Funds (State Funds)</b>	<b>Federal Funds (Discretionary)*</b>	<b>Federal Funds (Designated)**</b>
Federal Child Care Development Funds (CCDF)	Subsidies[1]	\$11,300,756		\$60,148,897
	Early Learning Quality Grants[2]			\$4,901,174
	Funds from OCS used as state match dollars.	\$280,493		
Federal TANF Funds Transferred to CCDF	Subsidies[3]		\$22,300,000	
	Early Learning Quality Grants		\$2,684,353	
Federal Early Head Start Funds	Early Head Start			\$9,559,000
Federal Head Start Funds	Head Start			\$132,332,707
Federal Child and Adult Care Food Program (CACFP)	Food Subsidies to Child Care Programs			\$44,361,434.72
Education Excellence Fund	Pre-K Program		\$1,698,605	
Starting Points (TANF)	Pre-K Program	\$1,489,137	\$3,530,363	
LA 4 Pre-K (Public)	Pre-K Program	\$18,000,000	\$16,179,172	
LA 4 Pre-K (Private)	Pre-K Program		\$7,733,232	
Title I	Pre-K Program		\$19,596,860	
Even Start	Pre-K Program			\$395,510
8(G) Early Childhood Program	Pre-K Program	\$9,076,090		
<b>Total Funding</b>		<b>\$40,146,476</b>	<b>\$73,722,585</b>	<b>\$251,698,723</b>

\* Federal funds that Louisiana has the discretion to use for early childhood care and education programs.

\*\* Federal funds that are specifically designated for early childhood care and education programs.

[1] State funds comprised of \$5.2 million in MOE and \$6.1 in match.

[2] Includes Resource and Referral Agencies and other initiatives.

[3] TANF dollars used for subsidy payments



## Section IV. CHILD CARE AS AN IMPORTANT BUSINESS TOOL

### Business Recruitment

Business recruitment requires convincing firms to move operations to Louisiana. To evaluate the factors that influence these decisions, a recent LSU study asked executives to rate the important factors in making decisions on site selection.<sup>18</sup> As

training and improvements in public school tend to top the list of options on how to address this issue, improvements in child care provide another alternative, as discussed in Section V.

Although job training seems a more immediate approach to building worker

**Figure 16. Proportion of National Businesses Placing High Emphasis to Each Factor in Site Selection**

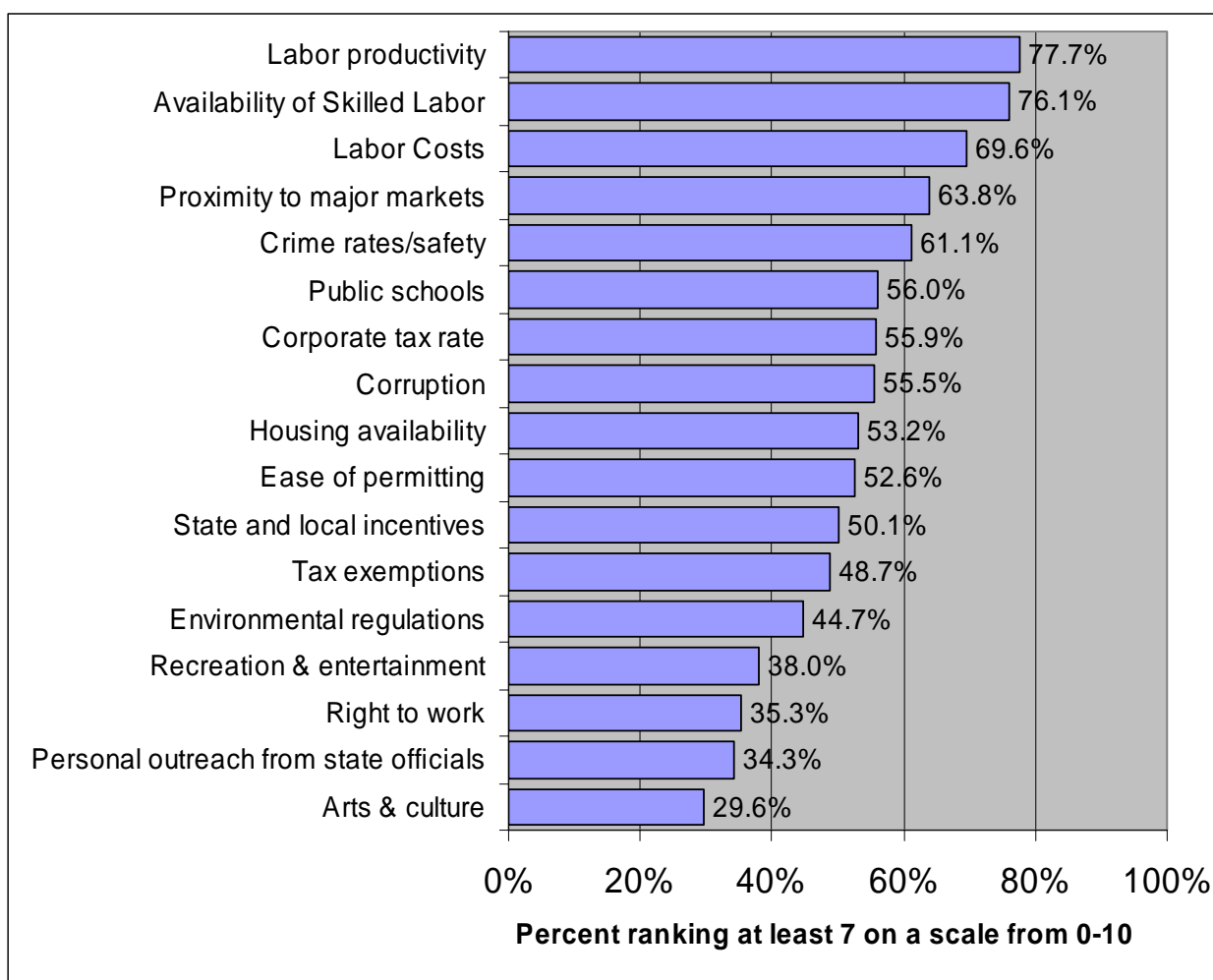


Figure 16 shows, labor productivity and skilled labor top the list. Though job

skills, the job training literature finds that the overall effectiveness of most job training programs is questionable at best, particularly for those who fail to master basic skills in

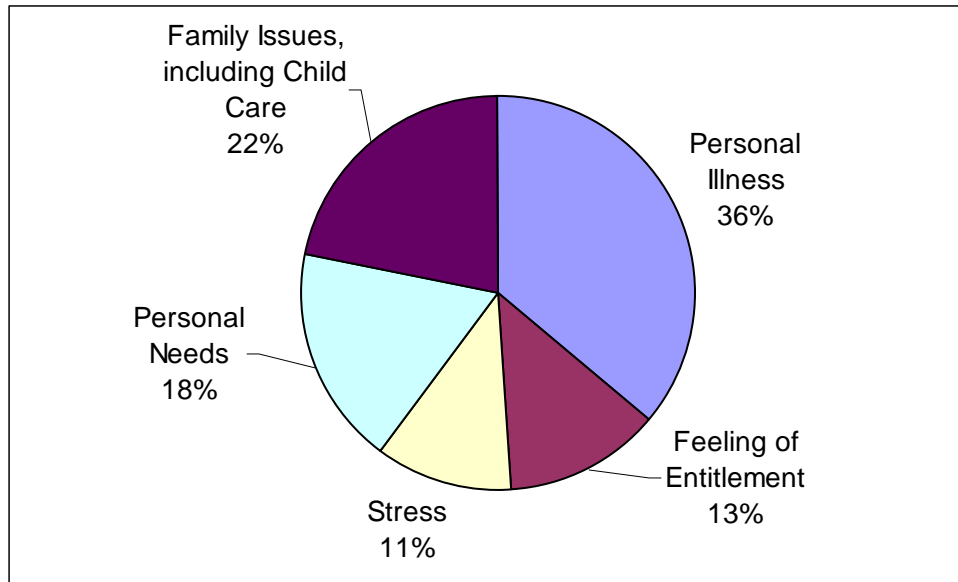
<sup>18</sup> Louisiana Business Image Survey (2004), LSU Public Policy Research Lab. Available at <http://www.survey.lsu.edu/lasurvey.html>.



school.<sup>19</sup> Because the learning experience begins with child care, the process of building skills that will be later used in the workplace also begins with child care. Perhaps reflecting both this reality and the importance of good public schools in convincing skilled workers to move to an

However, more than one in five unscheduled absences are due to family issues, including problems with child care (see Figure 17). Companies utilize a variety of strategies in an effort to keep absenteeism to a minimum with the provision of child care cited as one of the most common strategies. In fact, 21%

**Figure 17. Reasons for Unscheduled Absences by Employees**



area, both Louisiana and national businesses place improving public schools at the top of the list on what Louisiana can do to attract business.<sup>20</sup>

**Employee Absenteeism and Retention**

According to the 2003 CCH *Unscheduled Absence Survey*, while unscheduled absenteeism showed declines from 2002 to 2003, it can still be a significant cost to employers, averaging \$645 per employee. Most unscheduled absences are due to a variety of reasons, usually personal illness.

of the companies surveyed said that their company offered on-site child care.<sup>21</sup> Bank of America has found that supporting their employees in their efforts to find stable and quality child care serves to reduce absenteeism and increase productivity.<sup>22</sup>

<sup>19</sup> LaLonde, R. (1995). The promise of public sector sponsored job training programs. *Journal of Economic Perspectives*, 9, 149-168.

<sup>20</sup> Louisiana Business Image Survey (2004), LSU Public Policy Research Lab. Available at <http://www.survey.lsu.edu/lasurvey.html>.

<sup>21</sup> The 2003 CCH *Unscheduled Absence Survey*. Available at <http://www.cch.com/press/news/2003/20031022h.asp>

<sup>22</sup> Litchfield, L. C., Swanberg, J. E., & Sigworth, C. M. (2004). *Increasing the visibility of the invisible workforce: Model programs and policies for hourly and low-wage employees*. Boston College Center for Work and Family, Carroll School of Management. <http://www.bc.edu/centers/cwf/research/publications/meta-elements/pdf/LowWageStudy.pdf>

The cost of losing an employee can be substantial to a company. The turnover cost for a salaried employee is estimated at a minimum of 150% of the base salary.<sup>23</sup> For

company for over ten years.<sup>25</sup> A recent survey of employees at Bank of America found that those taking advantage of the bank's child care subsidy program were

<b>Child Care Benefits: The Bottom Line</b>	
<b>Boosting Recruitment</b>	Eighty-five percent of employers report that providing child care services improved employee recruitment. About one in three working parents is willing to change employers or trade salary and benefits for work-family programs that fit their needs.
<b>Reducing Turnover</b>	Almost two-thirds of employers found that providing child care services reduced turnover. Depending on the type of child care program offered, businesses reduced turnover by 37% to 60%.
<b>Lowering Absenteeism</b>	Child care breakdowns leading to employee absences cost businesses \$3 billion annually in the United States. Fifty-four percent of employers report that child care services had a positive impact on employee absenteeism, reducing missed workdays by as much as 20% to 30%.
<b>Increasing Productivity</b>	Forty-nine percent of employers report that child care services had helped boost employee productivity.
<b>Business Image</b>	Communities value and support businesses that address the needs of their employees and the larger needs of the community in general. In one national survey, 85% of employers that offered child care programs reported more positive public relations.

Source: Reprinted from the Child Care Partnership Project Employer Toolkit Template: It's Good Business to Invest in Child Care. U.S. Department of Health and Human Services. <http://nccic.org/ccpartnerships/toolkit/section1.htm>.

a full time employee making an hourly wage of \$8 per hour, the turnover cost is \$9,000.<sup>24</sup> One strategy to combat potential turnover is to offer child care benefits. Companies that offer child care to their employees have shown that turnover is 50% less for employees utilizing this benefit compared to those who do not. Furthermore, almost half of the employees that do take advantage of the child care benefit have been with the

twice as likely to stay with the bank than their peers in similar positions who were not using the program.<sup>26</sup>

<sup>23</sup> Bliss, W. (1999) *The business cost and impact of employee turnover*. New Jersey: Bliss & Associates, Inc. Available at [http://www.blissassociates.com/html/articles/employee\\_turnover01.html](http://www.blissassociates.com/html/articles/employee_turnover01.html).

<sup>24</sup> Sasha Corporation. (2003). *Turnover costs in 15 different studies*. Available at <http://www.sashacorp.com/turnframe.html>

<sup>25</sup> Bright Horizons Family Solutions. *The real savings from employer-sponsored child care: Investment impact study results*. Boston, MA: Bright Horizons, 2003. <http://www.brighthorizons.com/investstudies/Investment%20Impact.FINAL.pdf>

<sup>26</sup> Litchfield, L. C., Swanberg, J. E., & Sigworth, C. M. (2004). *Increasing the visibility of the invisible workforce: Model programs and policies for hourly and low-wage employees*. Boston College Center for Work and Family, Carroll School of Management. <http://www.bc.edu/centers/cwf/research/publications/meta-elements/pdf/LowWageStudy.pdf>

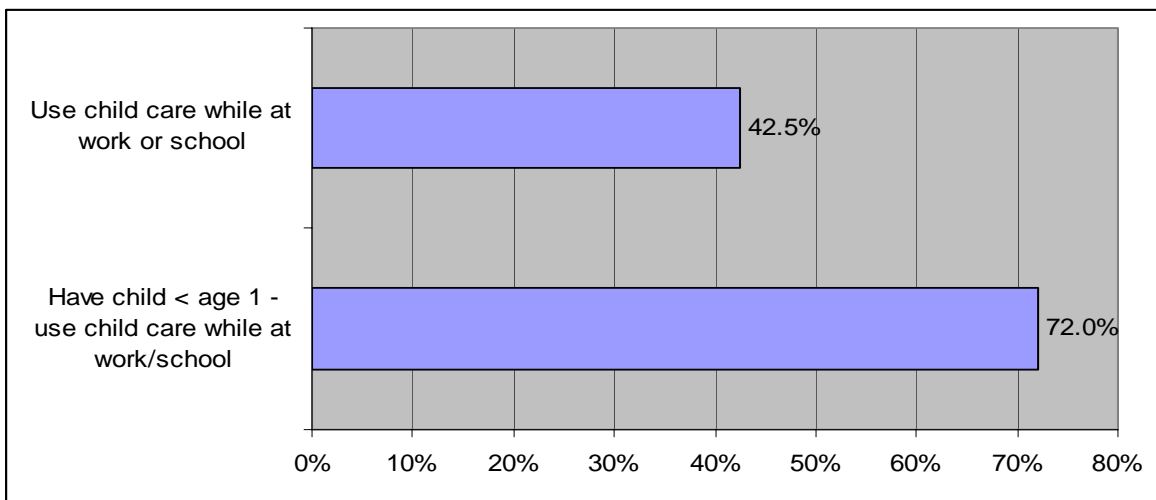
## Parents Need Child Care in Order to Work

In 2002, Maximus completed a needs assessment for the Louisiana Department of Social Services and the Division of Administration. This needs assessment was conducted using a telephone survey of a statewide sample of low-income households (below 200% of the federal poverty level) with children under the age of 18. Eighteen

babysitter to look after their children while they were at work, in school, or looking for work. This number is even greater for the 11% of all families surveyed that had a child under age one (approximately 220 families). For this subgroup, 72% reported that they needed child care for the infant (see Figure 18).

Among those surveyed, greater than 1 in 4 families reported having a problem paying

**Figure 18. Child Care Use**



hundred surveys were completed over the telephone and an additional 200 surveys were conducted in households without telephones. The results of the survey reported here are from 874 families that had at least one child between the ages zero to five.<sup>27</sup>

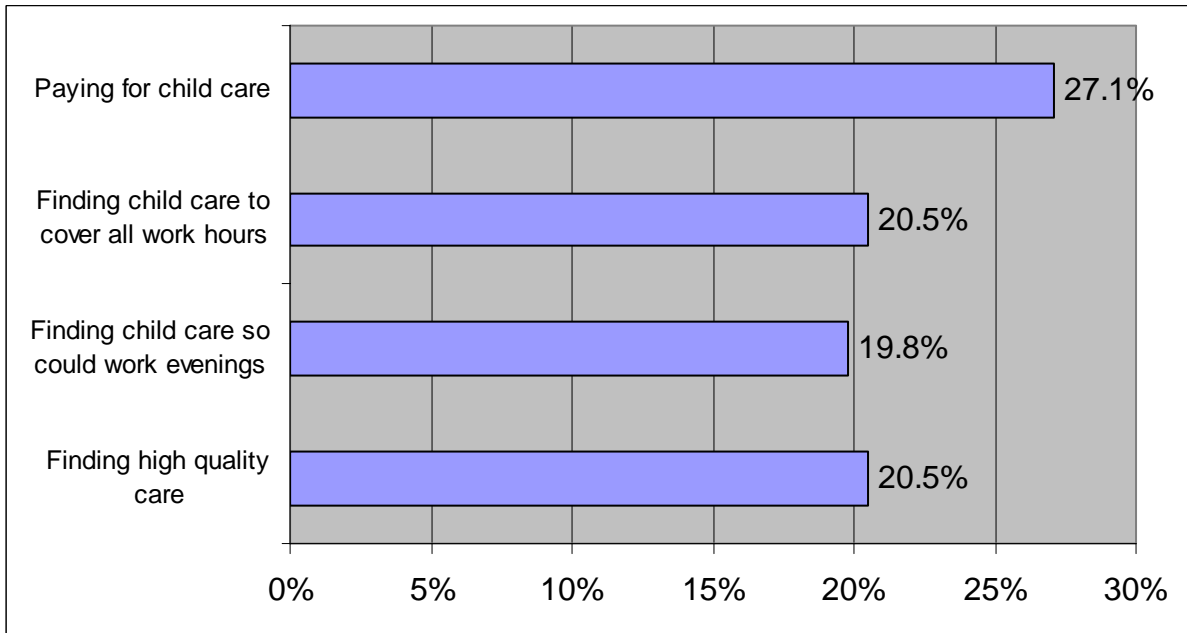
It is clear from the results of the needs assessment that child care plays a big role in whether or not parents are able to work. A considerable number of families use child care. Almost forty-three percent reported that they used a child care provider or

for child care in the previous 12 months. In addition, 1 in 5 families experienced problems finding child care to cover all work hours or to cover evening work hours and cited finding quality care as a problem (see Figure 19).

The importance of child care as an essential component of a family's ability to improve their socio-economic life situation is clear. Thirty-seven percent of working parents expressed that child care would be at least somewhat of a problem in obtaining a better job or working additional hours (see Figure 20). When looking at unemployed respondents, almost 34% reported that child care would be a problem in their ability (or their spouse) to go to work (see Figure 21).

<sup>27</sup> Comprehensive Needs Assessment of Low-Income Families in Louisiana, October 2002. Prepared for the State of Louisiana, Division of Administration by Maximus.

**Figure 19. Percent of Families Experiencing Child Care Problems in Past Year**



**Figure 20.**

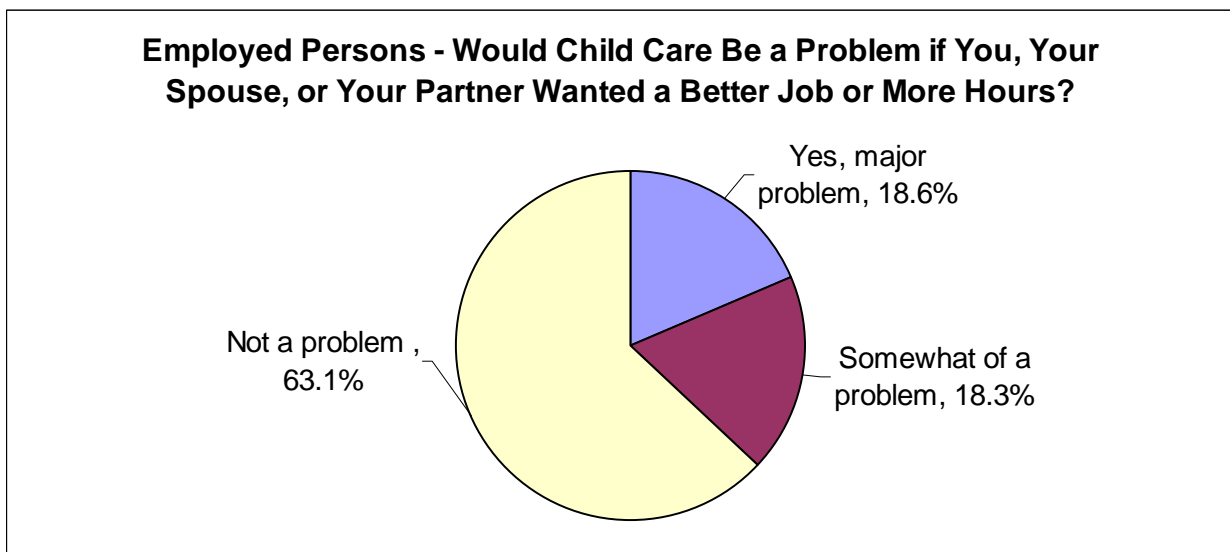
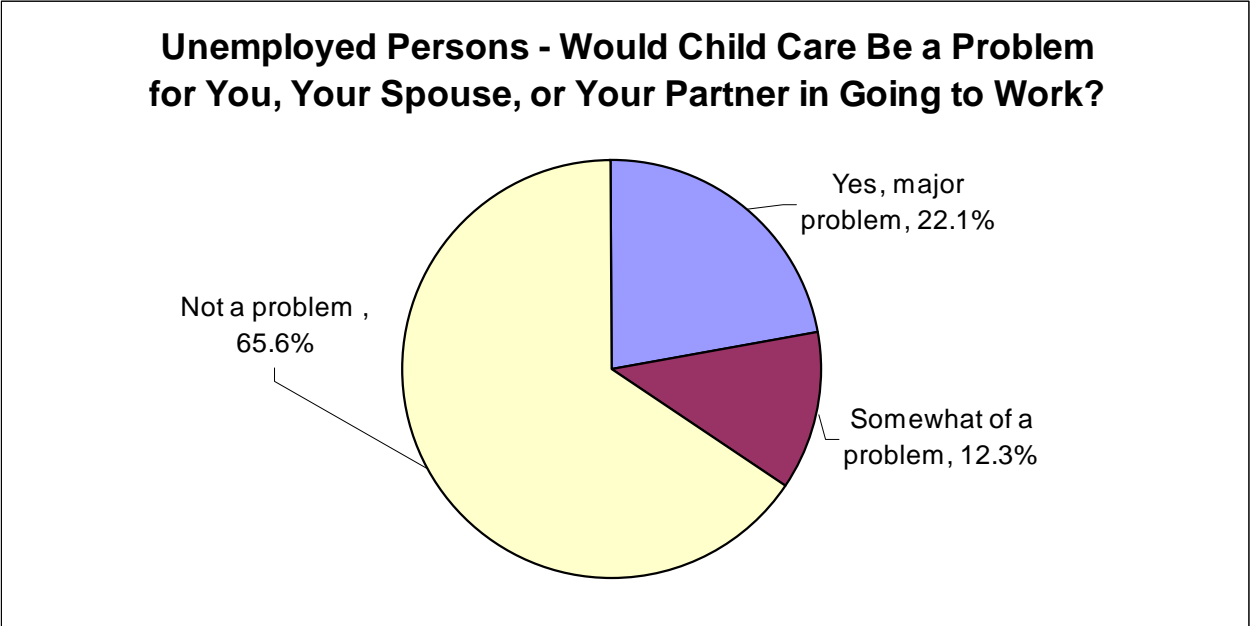


Figure 21.



## Section V. LONG TERM BENEFITS OF HIGH QUALITY CHILD CARE

Supports and interventions in the early years of life may in fact be the most effective way to improve school performance, increase high school graduation rates, job performance, and adult productivity. Unfortunately, such supports and interventions come with a 15 year wait between the time of the original investment and when the benefits begin to be recognized. While this report documents the immediate economic benefits of investments in early care and education, it is important to recognize that ultimately, these investments make sense not just because of short term gain but from the profound results that are achieved over time. As the Economic Policy Institute recently reported, “Public investment in early childhood health, brain development, family, and school readiness is one of the most productive uses of public funds because of the return to the public treasury and long-term health of the economy produced over a reasonable length of time.”<sup>28</sup>

The Cost, Quality, and Child Outcomes in Child Care Centers Study was a longitudinal study designed to examine the relationship between the quality of center based child care and children’s outcomes through the early school years. This multi-site study followed over 800 children for four years from preschool through second grade. The study showed that child care quality was associated with both cognitive skills as well as behavioral skills (e.g., attention, sociability, peer relations) in the classroom. Furthermore, the results showed that children who were at greatest risk for school failure were more greatly affected by the

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<sup>28</sup> Lynch, R. G. (2004). *Exceptional returns: Economic, fiscal, and social benefits of investment in early childhood development*. Economic Policy Institute: Washington, DC.

quality of child care than other children, especially with regard to behavior problems and math skills.<sup>29</sup>

A second longitudinal study that greatly contributes to the knowledge base of the importance of early care and education is the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care. This study followed over 1,300 children from 10 sites across the country from diverse backgrounds. This study was able to detail the characteristics of high quality child care settings. These characteristics include: a) smaller group sizes; b) high adult to child ratios; c) caregivers who are safe and nurturing; and d) physical environments that are safe, clean and stimulating.<sup>30</sup>

Longitudinal studies of three child care/early education programs provide empirical evidence of the benefits of high quality early childhood programs. The High/Scope Perry Preschool Project served low-income children in Ypsilanti, Michigan from 1962 – 1967. These children were randomly assigned to receive the intensive preschool intervention program or to a control group. The intervention was 2-1/2 hour daily preschool classes and one 90 minute teacher home visit per week, occurring for one to two years. The teachers were certified public teachers with training in child

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<sup>29</sup> Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., & Yazejian, N. (2001). The relation of preschool quality to children’s cognitive and social developmental trajectories through second grade. *Child Development, 72*(5), 1534-1553.

<sup>30</sup> National Institute of Child Health and Human Development Early Child Care Research Network. (2002). Does quality of child care affect child outcomes at age 4½? *Developmental Psychology, 39*, 451 – 469.

development and the classroom ratio of teacher to students was low. Data has been collected measuring the program effects through the children's 27<sup>th</sup> birthday. The results show that program children had significant reductions in welfare utilization and in the incidence and severity of criminal activity. In addition, there were significant improvements in high school graduation (or achieving a GED) in the program group.<sup>31,32</sup> This in turn led to improved employment rates and earnings for the program group. Cost-benefit analysis has shown that for every dollar invested in this program, over \$7 in benefits are gained by the participants and society.<sup>33</sup>

The Abecedarian Project was conducted in North Carolina beginning in 1972 and provided low-income children with full-time, high-quality, year-round, full-day, preschool from infancy through age 5. The participants, including a control group, have been followed for 21 years. The results show that in addition to reduced health-related expenditures, the greatest benefits from the project were from increased earnings of the mothers as well as the earnings of the children after entering the workforce. A cost-benefit analysis has

shown that there was a return of \$3.78 for each dollar invested in the program.<sup>34</sup>

The Child-Parent Center (CPC) Program started in 1967 in Chicago area public schools. The program provided comprehensive educational and family support services from preschool to early elementary school to economically disadvantaged minority children in Chicago's inner city. The program works in four specific domains: early intervention, involving the parent, a structured language-based curriculum, and building continuity between preschool and early elementary school. Longitudinal follow-up studies began in 1980 and have tracked 989 program children and 550 comparison group children (enrolled in locally-funded full-day kindergarten but did not receive preschool services) from preschool through age 21. The results show that program children had a 20% higher rate of high-school completion, a 42% decrease rate in juvenile arrests for violent offenses, a 41% decreased placement in special education services, a 52% reduction in child abuse and neglect, an increase of 86% in the number of children by age 5 that scored at or above national norms in cognitive-literacy skills, and a 59% improvement in school achievement by age 14.<sup>35</sup> Cost-benefit analysis shows that for an average cost of \$6,730 (1998 dollars) per child, CPC returned benefits to society totaling \$47,759 per participant, a ratio of 7:1. These benefits are attributed in a large part to increased earnings, lower crime rates

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<sup>31</sup> Karoly, L. A., Greenwood, P., Everingham, S., Hoube, J., Kilburn, R., Rydell, C., Sanders, M. & Chiesa, J. (1998). *Investing in our children: What we know and don't know about the costs and benefits of early childhood intervention*. Santa Monica, CA: The RAND Corporation.

<sup>32</sup> Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). *Significant benefits: The High/Scope Perry preschool study through age 27*. Ypsilanti, Michigan: High Scope Press.

<sup>33</sup> W.S. Barnett. (1996). Lives in the Balance: Age-27 Benefit-Cost Analysis of the High/Scope Perry Preschool Program. *Monographs of the High/Scope Educational Research Foundation*: Number 11. Ypsilanti, MI.

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<sup>34</sup> L. N. Masse and W. S. Barnett. (2002). A Benefit-Cost Analysis of the Abecedarian Early Childhood Intervention. New Brunswick, NJ: National Institute for Early Education Research.

<sup>35</sup> Reynolds, A. J. & Robertson, D. L. (2003). School-based early intervention and later child maltreatment in the Chicago longitudinal study. *Child Development*, 74, 3-26.

and a reduced need for school remedial services.<sup>36</sup>

Entergy Corporation, an energy company that provides electricity to four southern states, commissioned a report, *The Economics of Education: Public Benefits of High-Quality Preschool Education for Low-Income Children*, that examined the benefits of early childhood education programs. This report detailed that high quality early childhood programs, such as Perry

in excess of \$100,000 (net present dollar value) per program participant.<sup>37</sup>

The success of the children in these early intervention programs indicates that the long term results are not just from making children “smarter,” but from helping children attain needed social, emotional, and behavioral benefits. In fact, program effects of increased IQ may diminish over time whereas the social, emotional, and behavioral gains appear to be more stable

<b>Summary of Economic Benefits of High Quality Early Education Programs</b>				
	<b>Length of Program</b>	<b>Average Yearly Cost per Child</b>	<b>Total Cost per Child</b>	<b>Lifetime Benefit per Child</b>
Perry Preschool	2 years, half-day	\$6,000	\$12,000	\$108,000
Abecedarian Program	5 years, full-day	\$7,200	\$36,000	\$136,000
Chicago Parent Center Program	2 years, half-day	\$3,500	\$7,000	\$48,000

Note: All dollar values reported are based on a 3% discount rate. Costs and benefits are presented adjusted to the following dollar values: Perry Preschool (1992), Abecedarian (2002), Chicago (1998). Table reprinted from *The Economic Impact of the Child Care and Early Education Industry in Massachusetts* report prepared by the National Economic Development and Law Center.

Preschool and Head Start, have produced reductions in crime, improved high school graduation rates, decreased health care and welfare utilization, and improved employment that has resulted in savings well

and lasting.<sup>38</sup> Over the past 15 years, social scientists have addressed the importance of social competence, or the ability to cope and live with their family and society, as a more useful criterion of later life success than IQ.<sup>39</sup> The benefits of supporting emotional

<sup>36</sup> Reynolds, A. J., Temple, J. A., Robinson, D. L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up on low-income children in public schools. *Journal of the American Medical Association*, 285, 2339-2346. Also by the same authors, *Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Center Program, Executive Summary, June 2001*, available at [www.waisman.wisc.edu/cls/cbaexecsum4.html](http://www.waisman.wisc.edu/cls/cbaexecsum4.html).

<sup>37</sup> Oppenheim, J., & MacGregor, T. (2002). *The economics of education: public benefits of high-quality preschool education for low-income children*. Prepared for the Entergy Corporation.

<sup>38</sup> Magnuson, K. A., Ruhm, C. J., & Waldfogel, J. (2004). *Does prekindergarten improve school preparation and performance?* Working Paper No. 10452, Cambridge, MA: National Bureau of Economic Research. (<http://papers.nber.org/papers/w10452.pdf>)

<sup>39</sup> Zeanah, C. H., & McDonough, S. (1989). Clinical approaches to families in early intervention. *Seminars in Perinatology*, 13, 513-522.



development through high quality early education programs is evident from the three intervention programs discussed here as the program participants had significantly lower rates of crime and delinquency while enjoying increased school achievement, job participation and earnings.

Nobel laureate James Heckman, an economist at the University of Chicago, has written extensively about the benefits of investing in people, or human capital. He described a process called “dynamic complementarity” wherein capable people acquire more skills and people with more skills become more capable. In Heckman’s view, expenditures on education and job training programs for adult workers are based on “fundamental misconceptions” about the importance of cognitive skills and the failure to recognize how socially useful skills are created. He has emphasized that the focus on school expenditures or the results of academic achievement tests, fails to recognize the critical importance of families in developing and fostering the skills in young people that are needed for later success in life. He further cautioned against early intervention programs falling into the same trap of measuring success by IQ scores as opposed to the enhanced social and emotional competence of the program participants.<sup>40</sup> Heckman asserts that it makes the most economic sense to redirect funds toward improving basic social, emotional and cognitive skills of children. He uses economic models of analysis to demonstrate convincingly that the longer we wait to intervene with children the more expensive it becomes to fix the problems and the less return on the investment is recognized over time. Therefore, as states are under constant pressure to improve the efficient use of ever dwindling financial

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<sup>40</sup> Heckman, J. J. (2000). Policies to foster human capital. *Research in Economics*, 54, 3-56.

resources, any investment that is not directed at young people can be viewed as a diversion of resources from the most efficient use of those funds and away from people who will likely produce more favorable returns over the long term.

Examining the cost-benefit analysis of high quality preschool programs, as well as the work of James Heckman on the importance of acquiring skills at an early age, Art Rolnick and Rob Grunewald, from the Federal Reserve Bank of Minneapolis, have worked to detail the exact benefits to society of these early childhood efforts. They have now documented that the benefits to the individual child, while substantial, is not as great as the benefits to the general public. In fact, 80% of the benefits derived by the children that have gone through a high quality early education program are enjoyed by the larger society.<sup>41</sup> Others have calculated that even an expensive intervention such as the Perry Preschool program (\$12,000 for two years), yields a 12% internal rate of return to society in general, totaling \$124,776 over 30 years in today’s dollars.<sup>42</sup>

Interestingly, when asked what Louisiana can do to attract businesses to relocate to the state, both Louisiana and national businesses place improving public schools at the top of the list. This was most recently demonstrated in the Louisiana Business Image Survey<sup>43</sup> in which executives from

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<sup>41</sup> Rolnick, A., & Grunewald, R. (December 2003). Early Childhood Development: Economic Development with a High Public Return. *Fedgazette*. p. 7. (<http://www.minneapolisfed.org/pubs/fedgaz/03/earlychild.cfm>)

<sup>42</sup> Dugger, R. H. (August, 2004). U.S. Workforce Quality, Fiscal Sustainability, A Ten Year Plan. New York: Committee for Economic Development, Invest in Kids Working Group. p.12.

<sup>43</sup> Louisiana Business Image Survey (2004), LSU Public Policy Research Lab. Available at <http://www.survey.lsu.edu/lasurvey.html>.

across the country chose “improve public schools” as the most important thing to do to draw business to Louisiana (ahead of “clean up image of corruption” and “cutting taxes” as well as 9 other options). However, economic studies have found that improving public schools is much more complex than simply increasing funding. Hanushek, Rivkin, and Taylor<sup>44</sup> note “further reductions in the teacher-pupil ratio or further increases in teacher salary **by themselves** (emphasis added) are unlikely to generate improvements in the performance of students who attend United States public elementary and secondary schools.” Given the success of child care programs in improving school performance of children from disadvantaged families,<sup>45</sup> improving child care may play an important role in the difficult, but crucial, task of improving Louisiana’s public schools.

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<sup>44</sup> Hanushek, E., Rivkin, S., & Taylor, L. (1996). Aggregation and the estimated effects of school readiness. *Review of Economics and Statistics*, 78, 611-627.

<sup>45</sup> For a review of the literature, see Curry, J. (2001). Early childhood education programs. *Journal of Economic Perspectives*, 15, 213-238.



## **Section VI. RECOMMENDATIONS**

As Louisiana prepares for the 2005 Regular Session of the Legislature, it is clear that difficult times are ahead as budget cuts are being proposed in nearly all sectors of state government. However, as detailed in this report, any reduction in support of child care will have an immediate negative impact on the state's economy. In fact, Louisiana needs to increase its investment in child

care. Financial support of child care leads to many benefits including jobs, economic activity and perhaps most importantly, the future success of Louisiana's children.

Based on the findings in this report, the following recommendations are made:

**Recommendation: Incorporate child care into Louisiana's economic development plan.**

- Target the child care industry with the benefits and supports that the state currently extends to small businesses and other sectors identified for economic development.
- In Vermont, every regional economic plan has to address child care and how it will be supported as a key component of the infrastructure of the economy.

**Recommendation: Recognize that publicly funded child care spending leverages federal funds. These funds are net new funds to the state and should be maximized.**

- Louisiana should appropriate the state funds needed to draw down all federal child care dollars that are available.
- A percentage of the required state matching dollars can come from existing state dollars utilized in Louisiana's pre-kindergarten program.

**Recommendation: Advance the effectiveness and quality of the child care industry by strengthening workforce development and retention and by providing support for business management practices.**

- Child care clusters can be formed to benefit from economies of scale by sharing infrastructure, technologies, and skill base.
- Improve productivity through decreased transaction, overhead, or health insurance costs.
- Support teacher education through scholarships for child care staff that can be supported through workforce development monies.

**Recommendation: Increase access to capital to support quality and infrastructure improvements.**

- As a result of the Community Reinvestment Act, private banks have to make credit and other banking services accessible to underserved communities.
- Loan forgiveness or other incentives can be linked to achieving quality based on a quality rating system.
- Low interest loans can be used to support physical infrastructure.

**Recommendation: Give consumers the means to differentiate between child care options.**

- Expand consumer education and accountability measures by implementing a quality rating system for child care programs. These ratings can guide consumers when choosing programs and put pressure on the child care market to improve quality.
- A quality rating system can also be used to guide certain tax policy that can then incentivize the use of quality care. Maine doubles the state child care tax credit for parents who enroll their children in programs that attain a certain level of quality.

**Recommendation: Use tax policy to support improvements in quality child care.**

- Oregon – created an Employer Child Care Tax Credit worth up to 50% of an employer’s costs for providing child care access to employees.
- Texas – created a \$50,000 a year franchise tax credit for child care expenditures by firms that operate a child care center or provide for child care for the children of employees.
- Local governments can give property tax breaks to providers that attain a certain minimum quality rating.

Child care is an important part of the Louisiana economy. It generates significant revenue, creates jobs, supports working parents, and stimulates the economy. The long term benefits to society, from improved human development and workforce skills,

are also clear. Policy makers can now view child care as an important economic development tool and efforts to support the industry should be implemented with the same funding and urgency that is currently being applied to other development projects.

