

# **Child Care in State Economies**

This report was produced by RegionTrack, Inc., an economic research firm, and commissioned by the Committee for Economic Development with funding from the Alliance for Early Success. It provides a broad overview of the child care industry from the perspective of allowing parents to participate in the labor force (or to further education and training) and as an industry that employs workers and is an integral part of state economies.



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#### I. Introduction to the Economic Role of Child Care

The purpose of this report is to aid policymakers and business leaders in better understanding the child care industry's role in the economy.

The economic role of the industry is examined using three distinct perspectives—the traditional labor force view of child care as a means for parents to work; the child care industry's macroeconomic role in the U.S. economy; and the role played by child care in regional economic growth and development. Much of the existing research on the economics of child care focuses on the traditional role child care plays in enabling parents to work. This remains child care's single most important economic contribution and makes it of vital importance to a large number of working parents. The dimension of child care that is not as well understood is the supporting role child care plays in regional economic growth and development. Child care supports regional growth primarily through its indirect support of increased labor force participation and the education of the workforce in a region.

The report evaluates the economic role of child care at the state level in extensive detail. The structure of the child care industry varies greatly across the states, largely as a result of the state-level framework in place for both regulating the industry and administering child care assistance programs. Substantial variation is present in child care usage rates, the cost of care, and the mix of child care providers at the state level. These differences play a large role in determining the size of the potential economic linkages between the child care industry and the broader economy.

The analysis focuses on *organized* child care providers who typically offer care on a paid basis. This definition of the industry captures market-based forms of care that produce measureable economic activity.

The remaining sections of the report examine in detail the various economic roles of the child care sector as well as the economic channels through which child care contributes to the broader economy.

The first section examines the traditional role of organized child care in enabling parents to work. Organized care providers serve roughly one third of all households with a working mother, and one in six children ages 14 and under. The use of organized child care varies widely based on demographic and economic characteristics of the child, mother, and household. There is also significant variation in the use of child care across the states.

These factors include shifts in the labor force participation rate of women, the decline of two-parent households, and a growing share of unmarried mothers. Access to organized child care services is a potential tool for attracting and retaining parents affected by these factors who might otherwise opt out of the labor force. The cost of organized child care remains a significant financial hurdle for many families, particularly for low-income and low-skilled workers. The cost of child care at the state level is determined by many factors, including the age of the child, the type of child care provider selected, child care licensing requirements, and the overall cost of living. Public efforts to help offset the cost of care,

primarily in the form of tax credits and child care subsidies, can play a major role in assisting low-income working parents to enter the labor force.

The next section examines the direct and spillover contributions of the child care industry to broader economic activity at the national and state levels. Total revenue produced by the industry reached \$41.5 billion in 2012. The industry consists of a large network of nearly 770,000 very small businesses.

The final section examines the role played by child care in regional economic growth and discusses child care's potential to support economic development at the state level. Access to child care plays an indirect, but vital, role in raising the labor force participation rate and education level of the workforce in a region. Both of these factors have long been recognized as key determinants of economic growth.

# II. How is Organized Child Care Used in the U.S.?

The most fundamental economic contribution of child care remains the role it plays in enabling parents to work. While most working families still rely on relatives and other informal care arrangements, many working parents rely upon organized, or market-based, child care. Organized child care providers serve one of every six children age 14 and under, including nearly one third of all households with a working mother. The use of organized child care varies widely across U.S. families. The age of the child and demographic characteristics of both the child and mother play a large role in determining the likelihood that a child is enrolled in organized care. There is also substantial variation in the use of organized child care across the states driven by differences in regulatory structure, demographic and economic characteristics, cultural preferences, and other factors.

## Defining the Organized Child Care Industry

No uniform standards or guidelines exist for tracking either the number of children in child care or the size of the child care industry. Federal surveys of the sector routinely use multiple definitions when collecting and reporting child care-related data. Definitions for the industry also vary widely across the states, largely as a result of the state-level structure in place for both regulating the industry and administering child care assistance programs.

The definition of the industry used in this report focuses on *organized* child care providers that provide *market-based* child care services. This definition excludes most forms of informal, or nonmarket, care typically provided by parents, grandparents, and other relatives. These forms of child care are excluded because they represent household production rather than market production and do not produce measurable economic activity as a result. This is not meant to suggest that household production of child care does not constitute meaningful economic activity, but simply that it is difficult to measure the value of this production because it is not traded in any market. Although the focus of the report is on market-based care available to families through a structured market, subsidies may cover a portion, or possibly all, of the cost of organized care for some families.

Most child care providers as described in the report operate as formal business entities and are tracked by state and federal taxing authorities. Both private and public providers of care are included, as are both forprofit and nonprofit care providers. In many states, the definition of a child care provider would mostly comprise the group of regulated providers. However, definitions of licensed, regulated, registered, and license-exempt (unlicensed) care vary by state.<sup>2</sup>

Market-based child care services generally are delivered in an organized care facility or a home-based setting. The two primary types of providers are most often referred to as traditional child care centers and family child care homes. Other organized child care providers commonly grouped with child care centers include nursery schools, preschools, and Head Start programs. Family child care homes include providers who care for children either inside or outside the child's home, though typically in the provider's own residence.

Both working and nonworking mothers use organized child care. The great majority are working mothers who hold either full-time or part-time employment. Nonworking mothers who use child care include those enrolled in school, receiving job training, or looking for work, as well as those out of the labor force temporarily for other reasons. Some mothers use organized child care even though they are not actively in the labor force or pursuing education or training.

Child Care Arrangements in the U.S. There are 58.4 million children ages 14 and under in the U.S., and all are potential candidates for organized child care.<sup>3</sup> About one-third (19.8 million) are preschoolers under the age of 5; the remaining two-thirds (38.6 million) are school-aged children between the ages of 5 and 14. The Census Bureau's Survey of Income Program and Participation (SIPP) suggests that approximately 10.7 million (18.3 percent) of these children are reported as enrolled in one or more forms of organized child care as a regular care arrangement.

It is important to note that organized care is rarely the sole form of child care used. Families often use multiple care arrangements, with organized care serving as either the sole or primary source of care or even as a secondary or minor source of care. Child care arrangements also differ greatly for preschool versus school-age children. Preschoolers use more parental and organized forms of child care, while school becomes the primary care arrangement for most school-aged children.

**Preschoolers.** Figure 1 summarizes the most recent SIPP data describing child care arrangements for preschoolers under the age of 5. Care arrangements fall under the broad categories of relative and nonrelative care, with nonrelative care generally considered organized child care throughout the report.

Relative care (i.e., parents, siblings, grandparents, or other relatives) is the most commonly reported

Figure 1. Child Care Arrangements of Preschoolers Percentage Number of Children in of Total Characteristic **Thousands Arrangements** Total children under 5 years 19,839 100.0% **IN A REGULAR ARRANGEMENT** 10,756 Relative Care 54.2% **Parents** 4,163 21.0% Sibling 509 2.6% Grandparent 4,635 23.4% Other Relative 1,449 7.3% Nonrelative Care 6,721 33.9% 4,693 Care Facility 23.7% 2,676 Child care center 13.5% Nursery or preschool 1,190 6.0% Head Start/school 175 0.9% Other nonrelative care 2,281 11.5% In child's home 728 3.7% In providers home 1,553 7.8% 927 Family day care 4.7% Other care 626 3.2% **NO REGULAR ARRANGEMENT** 7,817 39.4%

Source: Census Bureau — SIPP Survey: Spring 2011 Panel

Notes: Category sums may exceed the totals due to multiple arrangements reported for many children.

care arrangement, cited for more than half (54.2 percent) of all preschoolers. Grandparents (23.4 percent) are the most common source of relative care for preschoolers, followed closely by parents (21.0 percent). Organized care by nonrelatives accounts for roughly one-third (6.7 million) of all preschoolers. Larger care facilities, including day care centers, nursery and preschools, and Head Start programs, serve 23.7 percent of preschoolers. Family child care homes are reported as a source of care for 11.5 percent of preschool-age children.

Beyond relative and nonrelative care, more than one in three preschoolers (39.4 percent) have no regular child care arrangement in place.

### Preschoolers—Primary Arrangement.

While most children are commonly placed in multiple forms of care, a child's primary care arrangement (defined as the source of care used the most hours each week) is relied upon most heavily by working parents. Figure 2 describes the reported primary care arrangements of preschoolers with employed mothers in the SIPP survey.

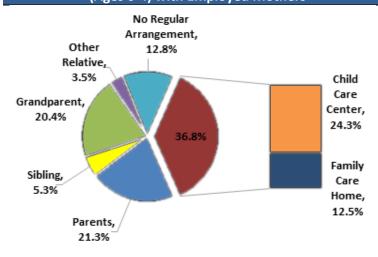
Relative care remains the primary arrangement for a majority (50.5 percent) of preschoolers with working mothers, but it is approximately 4

percentage points below the share reported across all arrangements for all preschoolers (54.2 percent) in Figure 1. Conversely, organized care is reported as the primary arrangement for 36.8 percent of preschoolers, up from 33.9 percent of all care arrangements. By type of organized care, child care centers serve as the primary form of care for 24.3 percent of preschoolers, while family child care homes serve as the main form of care for 12.5 percent.

About 12.8 percent of children ages 0 to 4 with an employed mother have no primary care arrangement in place.

School-Aged Children. School becomes the most important care arrangement for children once they reach school age and is reported as a regular arrangement for 93.5 percent of children ages 5 to 14. Relative care remains important and is cited as a regular arrangement for 45.0

Figure 2. Primary Child Care Arrangement for Preschoolers (Ages 0-4) with Employed Mothers



Source: Census Bureau — SIPP Survey: Spring 2011 Panel

Figure 3. Child Care Arrangements of School-Aged									
Chi	ldren								
	Number of Children in	Percentage of Total							
Characteristic	Thousands	Arrangements							
Total Children Ages 5-14 Years	38,590	100.0%							
IN A REGULAR ARRANGEMENT									
Relative Care	17,383	45.0%							
Parents	7,233	18.7%							
Sibling	3,125	8.1%							
Grandparent	5,153	13.4%							
Other Relative	1,872	4.9%							
Nonrelative Care	3,977	10.3%							
Care Facility	1,961	5.1%							
Nonrelative In child's home	842	2.2%							
Nonrelative in providers home	1,174	3.0%							
OTHER ARRANGEMENTS									
School	36,086	93.5%							
Enrichment activity	5,944	15.4%							
Self-care	4,238	11.0%							
NO REGULAR ARRANGEMENT	19,639	50.9%							

Source: Census Bureau-SIPP Survey: Spring 2011 Panel; and RegionTrack Notes: Category sums exceed the totals due to multiple arrangements reported for percent of school-aged children.

The use of organized child care becomes much less prevalent among the nation's 38.6 million schoolaged children ages 5 to 14 (see Figure 3) relative to preschoolers. Only 10.3 percent (3.98 million) of all school-aged children participate in one or more forms of organized child care on a regular basis.

Enrichment activities such as music and sports become a common child care arrangement as children reach school age and are cited for 15.4 percent of children ages 5 to 14. Self-care is a regular arrangement for 11.0 percent of school-age children. A little more than half (50.9 percent) of school-aged children report having no regular child care arrangement in place.

Households with Working Mothers. Organized child care plays a key role in allowing working mothers with school-aged children to remain in the labor force. SIPP estimates indicate that nearly one-third (31.9) percent) of the 21.1 million families in the U.S. with an employed mother and a child under age 15 report paying for child care (see Figure 4). For those with preschoolers under the age of 5, nearly half (46.3 percent) report paying for care. For school-aged children ages 5 to 14, roughly one in four (22.8 percent) families with a working mother reports the use of paid child care.



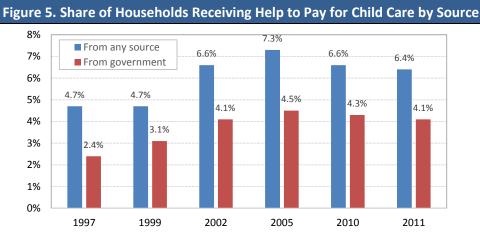
Figure 4. Share of U.S. Families With an Employed Mother Making Child Care Payments

Source: Census Bureau - SIPP Survey: Spring 2011, Spring 2005/Summer 2006, Winter 2002, and Fall 1991 editions.

The share of families with school-aged children making child care payments has remained in a range of 31 to 42 percent the past several decades. The share peaked at 42.2 percent in 1997 and has declined steadily since. 4 There was a sustained shift the past two decades away from family child care homes to various forms of relative care, particularly care provided by fathers and grandparents, who are less likely to receive pay for their services.<sup>5</sup>

At least two factors underlie the ongoing decline in paid child care use. First, the recent national recession worked to accelerate the trend toward increased relative care. Primary care provided by fathers who were either unemployed or working part-time increased beginning in 2009, particularly among those caring for preschoolers. The overall share of fathers providing child care for children under 15 with employed mothers increased by 5 percent following the recession to roughly 31 percent.<sup>6</sup>

A second factor working to reduce the share of families using paid child care is an ongoing decline in financial assistance to help pay for child care provided to families by government, employers, and other sources (*see Figure 5*). The share of households receiving assistance from any source declined in the two most recent SIPP surveys, falling from 7.3 percent in 2005 to 6.4 percent in 2011.



Source: Census Bureau - SIPP Survey: Spring 2011, Spring 2005/Summer 2006, and Winter 2002 editions.

Who Uses Organized Child Care Services? The Census SIPP survey provides a detailed view of U.S. child care arrangements along a number of key demographic and economic characteristics of the child, mother, and household. Figure 6 details these characteristics for the 10.7 million children ages 14 and under who are enrolled in one or more forms of organized child care. Relative to the overall rate of 18.3 percent, usage rates at the household level are highly dependent upon a number of factors, including the age of the child, demographics of the parents and children, household structure, and the work status and schedule of the primary parent.

Age of the Child. The most fundamental factor driving child care usage is the age of the child. The likelihood of a child being in organized care rises steadily during the preschool years and then falls sharply after reaching school age. Only 21.8 percent of all infants (less than 1 year old) are in formal care, versus 29.2 percent of 1- and 2-year-olds and 44.0 percent of 3- and 4-year-olds. The share then drops to 17.1 percent of children ages 5 to 8 as they enter their early school years. Very few children remain in organized care beyond age 8, with usage rates falling to only 7.5 percent for 9 to 11 year-olds and 3.6 percent for 12 to 14 year olds.

Figure 6: Organized	Child (	Care Arr	angem	ents by	Emplov	ment S	tatus ar	nd Chara	cterist	ics of th	e Moth	er
(Numbers in thousands)		al - Under				Under 5		ia ciiaia			ears Old	<u>.                                    </u>
(Numbers in thousands)						Ondor 0	curo oru			0 10 14 1	curo ora	
Characteristics		Children in Organ- ized care	Total	Share of Category Total	Total	Children in Organ-ized Care	Share of Total	Share of Category Total	Total Children	Children in Organ-ized Care	Share of Total	Share of Category Total
ALL	58,429	10,698	18.3%	100.0%	19,839	6,721	33.9%	100.0%	38,590	3,977	10.3%	100.0%
MARITAL STATUS OF MOTHER	00,120	10,000	10.070	100.070	10,000	0,721	00.070	100.070	00,000	0,011	10.070	100.070
Married	41,220	7,021	17.0%	65.6%	13,637	4,532	33.2%	67.4%	27,583	2,489	9.0%	62.6%
Widowed, separated, divorced	7,294	1,234	16.9%	11.5%	1,422		36.3%	7.7%	5,872	717	12.2%	18.0%
Never married	9,915	2,443	24.6%	22.8%	4,780	1,670	34.9%	24.8%	5,135	773	15.1%	19.4%
RACE/HISPANIC ORIGIN	0,010	2,110	21.070	22.070	1,700	1,070	01.070	21.070	0,100	110	10.170	10.170
White alone	45,111	8,052	17.9%	75.3%	15,083	4,984	33.0%	74.2%	30,028	3,068	10.2%	77.1%
Non-Hispanic	33,691	6,788	20.1%	63.4%	11,365	4,203	37.0%	62.5%	22,326	2,585	11.6%	65.0%
Black alone	8,465	1,732	20.1%	16.2%	2,959	1,121	37.0%	16.7%	5,506	611	11.1%	15.4%
Asian alone	2,461	497	20.3%	4.6%	900	343	38.1%	5.1%	1,561	154	9.9%	3.9%
Hispanic (of any race)	12,705	1,463	11.5%	13.7%	4,197	871	20.8%	13.0%	8,508	592	7.0%	14.9%
AGE OF MOTHER	12,700	1,400	11.570	13.7 /0	4,137	0/1		13.0 /0	0,500	332	7.070	14.570
15-24 years	3,749	939	25.0%	8.8%	3,278	824	25.1%	12.3%	471	115	24.4%	2.9%
	22,942	5,100	22.2%	47.7%	10,719	3,549	33.1%	52.8%	12,223	1,551	12.7%	39.0%
25-34 years 35+ years	31,739	4,661	14.7%	43.6%	5,842	2,348	40.2%	34.9%	25,897	2,313	8.9%	58.2%
EDUCATION LEVEL OF MOTHER	31,739	4,001	14.7 /0	43.076	3,042	2,340	40.2 /0	34.970	25,697	2,313	0.970	30.2 /0
	7,796	833	10.7%	7.8%	2,747	476	17.3%	7.1%	5,049	357	7.1%	9.0%
Less than high school High school graduate					1 '		24.8%	17.0%		653	7.1%	
0 0	12,950	1,795	13.9%	16.8%	4,609	1,142			8,341			16.4%
Some college	20,371	3,579	17.6%	33.5%	6,228	2,148	34.5%	32.0%	14,143	1,431	10.1%	36.0%
Bachelor's degree or higher	17,312	4,491	25.9%	42.0%	6,255	2,953	47.2%	43.9%	11,057	1,538	13.9%	38.7%
EMPLOYMENT STATUS	04.005	0.707	0.4.00/	04.40/	40.050	<b>5</b> 00 4	40.00/	70.00/	04.400	0.400	44.40/	05.00/
Employed	34,995	8,707	24.9%	81.4%	10,859	5,304	48.8%	78.9%	24,136	3,403	14.1%	85.6%
Not Employed	23,434	1,991	8.5%	18.6%	8,980	1,415	15.8%	21.0%	14,454	576	4.0%	14.5%
In school and not in labor force	2,464	646	26.2%	6.0%	1,044	450	43.1%	6.7%	1,420	196	13.8%	4.9%
Looking for work	2,985	279	9.4%	2.6%	1,081	204	18.9%	3.0%	1,904	75	3.9%	1.9%
Not in labor force	17,984	1,066	5.9%	10.0%	6,855	761	11.1%	11.3%	11,129	305	2.7%	7.7%
WORK STATUS OF MOTHER												=
Not employed	23,434	1,991	8.5%	18.6%	8,980	1,415	15.8%	21.0%	14,454	576		14.5%
Employed full-time	23,988	6,529	27.2%	61.0%	7,264	3,854	53.1%	57.3%	16,724	2,675		67.3%
Employed part-time	8,305	1,685	20.3%	15.8%	2,808	1,116	39.7%	16.6%	5,497	569		14.3%
Self-employed	2,702	494	18.3%	4.6%	787	335	42.6%	5.0%	1,915	159	8.3%	4.0%
SHIFT OF MOTHER	00.404	4.004	0.50/	40.00/	0.000		45.00/	04.00/	44.454		4.00/	44.50/
Not employed	23,434	1,991	8.5%	18.6%	8,980	1,415	15.8%	21.0%	14,454	576		14.5%
Employed day shift	22,243	6,146	27.6%	57.4%	6,650		55.7%	55.1%	15,593	2,440		61.4%
Employed non-day shift	10,050	2,068	20.6%	19.3%	3,422		36.9%	18.8%	6,628	804		20.2%
Self-employed	2,702	494	18.3%	4.6%	787	335	42.6%	5.0%	1,915	159	8.3%	4.0%
FAMILY INCOME (MONTHLY)												
Less than \$1,500	9,114	1,302	14.3%	12.2%	3,241	824	25.4%	12.3%	5,873	478		12.0%
\$1,500 - \$2,999	11,002	1,765	16.0%	16.5%	3,777	1,057	28.0%	15.7%	7,225	708		17.8%
\$3,000 - \$4,499	8,551	1,349	15.8%		3,016		29.0%	13.0%	5,535	475		11.9%
\$4,500 and over	27,971	5,999	21.4%		9,053		41.9%	56.4%	18,918	2,206		55.5%
Missing	1,791	281	15.7%	2.6%	752	171	22.7%	2.5%	1,039	110	10.6%	2.8%
FAMILY POVERTY LEVEL												
Below poverty level	13,338	1,865	14.0%		4,867	1,198	24.6%	17.8%	8,471	667		16.8%
At or above poverty level	43,302	8,554	19.8%		14,221	5,353	37.6%	79.6%	29,081	3,201		80.5%
100 - 199 percent of poverty	13,446	1,928	14.3%	18.0%	4,546		25.6%	17.3%	8,900	764		19.2%
200+ percent of poverty level	29,856	6,623	22.2%	61.9%	9,675	4,188	43.3%	62.3%	20,181	2,435	12.1%	61.2%
Missing	1,791	281	15.7%	2.6%	752	171	22.7%	2.5%	1,039	110	10.6%	2.8%
RECEIVED TANF												
No Yes	57,399 1,031	10,499 200	18.3% 19.4%		19,337 503		33.9% 31.4%	97.6% 2.4%	38,062 528	3,936 42		99.0% 1.1%

Figure 6. (Cont.) Organized Child Care Arrangements by Employment Status & Selected Characteristics of Mother												
(Numbers in thousands)	Tot	al - Under	15 Years	Old	Under 5 Years Old				5 to 14 Years Old			
Characteristics	Total Children	Children In Organ- Ized Care	Total	Share of Category Total	Total Children	Children in Organ- ized Care	Share of Total Children	Share of Category Total	Total Children	Children in Organ- ized Care	Share of Total Children	Share of Category Total
ALL	58,429	10,698	18.3%	100.0%	19,839	6,721	33.9%	100.0%	38,590	3,977	10.3%	100.0%
REGION												
Northeast	9,648	1,914	19.8%	17.9%	3,099	1,209	39.0%	18.0%	6,549	705	10.8%	17.7%
Midwest	12,369	2,565	20.7%	24.0%	4,450	1,662	37.4%	24.7%	7,919	903	11.4%	22.7%
South	22,046	3,971	18.0%	37.1%	7,312	2,533	34.6%	37.7%	14,734	1,438	9.8%	36.2%
West	14,368	2,248	15.6%	21.0%	4,979	1,315	26.4%	19.6%	9,389	933	9.9%	23.5%
AGE OF CHILD												
Less than 1 year (or 5-8	N/A	N/A	N/A	N/A	3,484	758	21.8%	11.3%	15,884	2,710	17.1%	68.1%
1-2 years (or 9-11 years)	N/A	N/A	N/A	N/A	8,367	2,444	29.2%	36.4%	11,745	879	7.5%	22.1%
3-4 years (or 12-14 years)	N/A	N/A	N/A	N/A	7,988	3,518	44.0%	52.3%	10,961	390	3.6%	9.8%
SEX OF CHILD				•				•				
Male	29,839	5,580	18.7%	52.2%	10,185	3,535	34.7%	52.6%	19,654	2,045	10.4%	51.4%
Female	28,591	5,116	17.9%	47.8%	9,655	3,185	33.0%	47.4%	18,936	1,931	10.2%	48.6%

Source: U.S. Census Bureau, Survey of Income and Program Participation (SIPP), Spring 2011.

Notes: Data and ratios are from the Spring 2011 tabulation of the SIPP survey. Some category totals may exceed 100 percent where responses can fall within multiple categories.

Education. Mothers with higher educational attainment are much more likely to use organized care. Those with a bachelor's degree or higher are more than twice as likely to have a child in organized child care relative to mothers with less than a high school education (25.9 percent vs. 10.7 percent). The share reaches 47.2 percent for mothers who hold a bachelor's degree or higher and have children ages 4 and under. Mothers with a bachelor's degree or higher represent only 29.6 percent of children under age 15 but comprise 42.0 percent of all children under age 15 in organized care.

*Income and Poverty.* Due to its close link with education, income is also closely related to the use of organized care. Families with household income exceeding \$4,500 per month are 1.5 times more likely to use organized care than families earning less than \$1,500 per month (21.4 percent vs. 14.3 percent). Children from families with income above \$4,500 per month make up 47.9 percent of all children ages 14 and under but comprise 56.1 percent of those in organized care.

Similarly, by poverty status, families earning more than 200 percent of the poverty level are almost twice as likely to use organized care relative to those below the poverty level (22.2 percent vs. 14.0 percent). The children of families in poverty represent 22.8 percent of all children but only 17.6 percent of those in organized child care arrangements. There is little reported difference in usage rates between families in poverty and those with incomes between 100 and 199 percent of the poverty level (14.0 percent vs. 14.3 percent). This is due to federal and state assistance available to low-income families for child care payments.

*Mother's Age.* Mothers under age 35 with school-aged children are generally more likely to use organized child care services (22.6 percent) than are those over age 35 (14.7 percent). The children of mothers under

35 comprise 45.7 percent of all children under age 15 but make up 56.5 percent of all organized child care arrangements. This reflects in part the greater likelihood that mothers over 35 will have older children (rather than preschoolers) who tend to use less organized care on average. An exception to this is mothers over 35 with preschoolers. These mothers are among the most likely to use organized child care services (40.2 percent).

Mother's Work Status. More than half (53.1 percent) of young children under age 5 with a mother employed on a full-time basis are enrolled in organized care. Mothers working the day shift relative to those working non-day shifts are much more likely to use organized care for children under 5 (55.7 percent vs. 36.9 percent) and slightly more likely for children ages 5 to 14 (15.6 percent vs. 12.1 percent). Enrollment rates in organized care are also well above average for children whose mother is in school or pursuing job training (26.2 percent). The use of organized child care by self-employed mothers matches the overall rate (18.3 percent), but those with preschoolers use organized care at a much higher rate (42.6 percent). Overall, 88.3 percent of children regularly enrolled in organized child care have mothers who are either employed, in school, or looking for work.

**Race**. By race, the likelihood of using organized child care is slightly lower for white (17.9 percent) versus black (20.5 percent) and Asian (20.2 percent) parents, but it is far lower among Hispanic parents (11.5 percent).

*Other Demographics*. Boys are slightly more likely to be enrolled in organized care than are girls (18.7 percent vs. 17.9 percent). By marital status of the mother, children are more likely to be in organized care if their mother was never married (24.6 percent) versus mothers who are either currently married (17.0 percent) or widowed, separated, or divorced (16.9 percent).

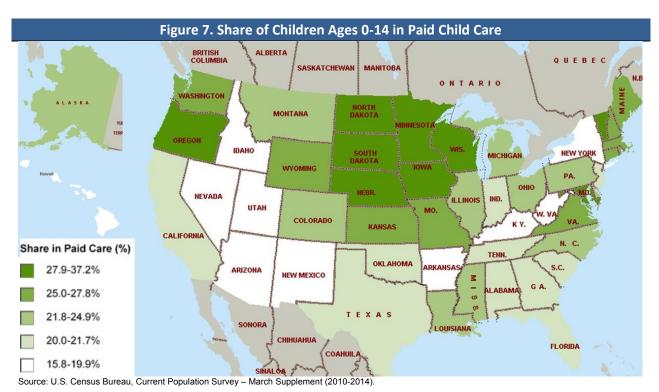
Organized Child Care Usage Patterns. Clear usage patterns for organized child care are visible in the SIPP profile in Figure 6. The survey results suggest that organized care remains most important to mothers of preschoolers and is used at the greatest rate by mothers who are experiencing the most successful work outcomes. In particular, the use of organized care is greatest among mothers with preschoolers who work full-time on the day shift, with usage rates typically exceeding 50 percent.

Organized care is also used most frequently by better-educated and higher-income mothers who are expected to receive relatively greater economic returns from work. Mothers ages 35 and over with preschoolers generally have more accumulated work experience relative to younger mothers, which encourages greater use of organized care. Self-employed mothers with preschoolers may have fewer care options and less flexibility in work scheduling which similarly encourages more use of organized child care services.

Child Care Usage Across the States. Just as child care usage varies across households types, there are clear patterns in the use of organized care across the states. The Census Bureau's Current Population Survey (CPS) provides an alternative measure of the use of child care among households at the state level. The CPS measures *paid* child care use based on a broader measure of usage than the SIPP survey. The CPS captures all forms of paid care, including relatives who receive pay to care for related children.

Nationally, the CPS data suggest that 23.8 percent (13.9 million) of U.S. children ages 0-14 were in some form of paid care on average between 2010 and 2014. As expected, this exceeds the 18.3 percent share derived using the more narrow measure of organized child care used in the SIPP survey. Estimates are averaged over the 2010 to 2014 period in order to minimize the potential effects of short-run variability in both child care usage over the business cycle and variability in the CPS sample. The high level of unemployment in the U.S. during the sample period may also influence the estimated share of children in paid care both nationally and at the state level.

Figure 7 illustrates the variation in the reported use of paid child care across the states (ranging from 15.9 percent to 37.2 percent) as well as distinct regional patterns. Usage is highest in the upper Plains, the Pacific Northwest, New England, and portions of the Mid-Atlantic region. Usage is much less prevalent in the Mountain West, much of the Southwest, Southern Plains, the Appalachia region, much of the Southeast, California, and Hawaii.



Notes: State shares by quintile are estimated using the percentage of children ages 0-14 reported as participating in paid child care in the Current Population Survey based on a five-year average share in the 2010-2014 period.

	Figure 8	. Children	Ages 14 an	d Under in	Paid Child	Care by S	State		
		dren of Child Ca			In Paid Child C	Care	Share	in Paid Chil	d Care
Region	Total	Ages 0-4	Ages 5-14	Total	Ages 0-4	Ages 5-14	Total	Ages 0-4	Ages 5-14
United States	61,089,123	19,868,088	41,221,035	13,857,336	5,954,524	8,028,735	23.8%	31.4%	20.5%
Alabama	921,016	297,104	623,912	185,677	76,285	110,535	20.2%	25.7%	17.7%
Alaska	157,878	55,392	102,486	37,489	15,344	22,534	23.7%	27.7%	22.0%
Arizona	1,347,565	431,758	915,807	249,556	106,246	146,332	18.5%	24.6%	16.0%
Arkansas	591,324	192,916	398,408	116,426	53,130	62,971	19.7%	27.5%	15.8%
California	7,598,091	2,507,536	5,090,555	1,523,458	610,783	922,476	20.1%	24.4%	18.1%
Colorado	1,038,870	335,136	703,734	250,923	108,820	145,429	24.2%	32.5%	20.7%
Connecticut	639,273	191,937	447,336	170,047	68,518	102,216	26.6%	35.7%	22.8%
Delaware	170,244	56,319	113,925	37,465	15,820	21,916	22.0%	28.1%	19.2%
Dist. of Columbia	96,084	40,967	55,117	30,450	15,388	15,332	31.7%	37.6%	27.8%
Florida	3,324,369	1,078,313	2,246,056	721,768	304,708	428,820	21.7%	28.3%	19.1%
Georgia	2,077,631	668,508	1,409,123	451,323	198,336	259,786	21.7%	29.7%	18.4%
Hawaii	259,190	90,770	168,420	48,630	21,181	27,865	18.8%	23.3%	16.5%
Idaho	357,803	113,487	244,316	71,097	26,705	44,503	19.9%	23.5%	18.2%
Illinois	2,499,834	799,019	1,700,815	554,269	239,002	319,761	22.2%	29.9%	18.8%
Indiana	1,315,506	420,815	894,691	281,341	118,225	166,397	21.4%	28.1%	18.6%
Iowa Kansas	602,101	194,726	407,375	192,930	83,130	110,189	32.0%	42.7%	27.0%
Kentucky	605,708	200,406	405,302	157,306 168,460	72,164 74,013	85,763 94,586	26.0%	36.0%	21.2%
Louisiana	844,643	274,874	569,769	203,991	102,672	103,721	19.9%	26.9%	16.6%
Maine	930,829	308,217	622,612	59,400	24,002	35,263	21.9%	33.3%	16.7% 23.8%
Maryland	213,002	65,014 367,210	147,988 748,256	327,634	135,398	195,274	27.9% 29.4%	36.9% 36.9%	26.1%
Massachusetts	1,115,466 1,144,025	365,546	746,256	309,114	142,587	169,136	27.0%	39.0%	21.7%
Michigan	1,838,782	572,768	1,266,014	428,273	177,996	255,327	23.3%	31.1%	20.2%
Minnesota	1,066,261	347,567	718,694	381,357	163,198	217,894	35.8%	47.0%	30.3%
Mississippi	614,976	198,426	416,550	138,660	61,738	78,332	22.5%	31.1%	18.8%
Missouri	1,160,974	376,837	784,137	308,687	139,097	173,266	26.6%	36.9%	22.1%
Montana	186,272	61,272	125,000	41,899	18,559	23,671	22.5%	30.3%	18.9%
Nebraska	390,469	130,160	260,309	141,170	61,661	79,208	36.2%	47.4%	30.4%
Nevada	550,411	178,194	372,217	108,350	45,083	62,921	19.7%	25.3%	16.9%
New Hampshire	219,370	65,661	153,709	55,870	23,569	32,488	25.5%	35.9%	21.1%
New Jersey	1,666,413	533,235	1,133,178	358,559	156,257	208,212	21.5%	29.3%	18.4%
New Mexico	424,415	138,724	285,691	72,319	32,030	41,744	17.0%	23.1%	14.6%
New York	3,502,059	1,173,627	2,328,432	675,163	318,838	368,047	19.3%	27.2%	15.8%
North Carolina	1,907,861	612,295	1,295,566	449,998	201,593	255,942	23.6%	32.9%	19.8%
North Dakota	136,970	48,767	88,203	50,935	24,942	26,493	37.2%	51.1%	30.0%
Ohio	2,185,335	690,821	1,494,514	543,521	224,995	322,809	24.9%	32.6%	21.6%
Oklahoma	794,571	264,479	530,092	164,800	71,494	93,997	20.7%	27.0%	17.7%
Oregon	710,576	230,022	480,554	200,885	76,181	125,987	28.3%	33.1%	26.2%
Pennsylvania	2,234,011	715,904	1,518,107	520,530	219,799	306,286	23.3%	30.7%	20.2%
Rhode Island	175,066	54,632	120,434	44,411	16,344	28,366	25.4%	29.9%	23.6%
South Carolina	901,182	292,316	608,866	183,658	83,337	100,957	20.4%	28.5%	16.6%
South Dakota	174,688	59,957	114,731	64,387	29,104	35,336	36.9%	48.5%	30.8%
Tennessee	1,240,428	399,677	840,751	262,424	120,050	143,918	21.2%	30.0%	17.1%
Texas Utah	5,900,424	1,940,825	3,959,599	1,220,505	529,341	702,745	20.7%	27.3%	17.7%
Vermont	759,465	253,867	505,598	120,690	42,445	78,304 10,571	15.9%	16.7%	15.5%
Virginia	99,777	30,478	69,299	33,970 402,039	14,581 172,491	19,571 232,949	34.0%	47.8%	28.2%
Washington	1,555,039	512,115	1,042,924	352,085	142,509	232,949	25.9%	33.7%	22.3%
West Virginia	1,328,817	444,620	884,197	50,351	20,222	30,162	26.5%	32.1%	23.8%
Wisconsin	316,000	102,194	213,806	302,780	141,665	164,969	15.9%	19.8%	14.1%
Wyoming	1,082,722	344,331	738,391	30,307	12,953	17,353	28.0%	41.1%	22.3%
, o	115,337	38,347	76,990	30,307	12,800	17,303	26.3%	33.8%	22.5%

Source: U.S. Census Bureau, Current Population Survey – March Supplement (2010-2014).

Notes: State shares are estimated using the percentage of children ages 0-4 and 5-14 reported as participating in paid child care in the Current Population Survey based on a five-year average share in the 2010-2014 period.

Figure 8 details estimates of the share of children ages 14 and under in paid child care in each state, including a breakout of the totals for both preschool and school-age children. At the state level, enrollment in paid care varies from a low of 15.9 percent in both Utah and West Virginia to a high of 37.2 percent in North Dakota.

Thirty states have a share of children in paid care between 20 percent and 28 percent, a fairly narrow range extending roughly 4 percentage points above and below the 23.8 percent national share. Ten states have a share below 20 percent, while ten have a share above 28 percent.

The five states with the lowest rates of paid care include Utah (15.9 percent), West Virginia (15.9 percent), New Mexico (17.0 percent), Arizona (18.5 percent), and Hawaii (18.8 percent). Other states use a significantly higher share of paid care, often at more than twice the rate of the lowest usage states. The highest overall usage rates are found in North Dakota (37.2 percent), South Dakota (36.9 percent), Nebraska (36.2 percent), Minnesota (35.8 percent), Vermont (34.0 percent), and Iowa (32.0 percent). Most of these states are located in the upper Midwest and generally have much-higher-than-average usage rates for both preschool and school-age children.

Usage rates for preschool children ages 4 and under are the most variable across the states. While the national share of preschool children in paid care is 31.4 percent, state rates range from a low of 8.1 percent in Maine (only about one in twelve) to a high of 51.1 percent in North Dakota (one of every two). <sup>10</sup>

For the 20.5 percent of school-age children (ages 5 to 14) in paid care nationally in the CPS survey, usage rates fall within a much narrower range, from a low of 14.1 percent in Maine to a high of 30.8 percent in South Dakota.

*Labor Force Participation and Paid Child Care*. Much as economic, demographic, and cultural factors explain variation in the use of organized child care at the household level, many of the same factors underlie variation in the use of organized child care at the state level.

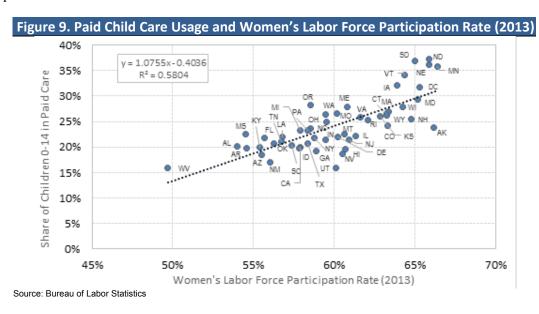
Perhaps the most important factor is the labor force participation rate of women. Figure 9 illustrates the state-level link between the share of women in the workforce and the share of school-aged children in paid child care in 2013. States with a greater share of women in the labor force consistently have a higher share of children in paid care.

The use of organized child care tends to rise roughly proportionately with increased employment. The linear best-fit line in Figure 9 suggests that a 10 percent higher labor force participation rate is accompanied by a 10.76 percent higher share of children in paid child care on average across the states.

All six states in Figure 8 with a share of children in paid care above 30 percent (North Dakota, South Dakota, Nebraska, Minnesota, Vermont, and Iowa) rank among the top ten states based on the labor force participation rate of women. Similarly, traditional low-participation rate states such as West Virginia,

Alabama, Arkansas, Arizona, Mississippi and New Mexico are clustered among the states with the smallest share of children in organized care.

Other economic and demographic factors beyond labor force participation undoubtedly influence the use of paid child care at the state level. These include the cost of care, overall cost of living, access to financial assistance, and the level of income in each state. These factors are discussed in the next section of the report.

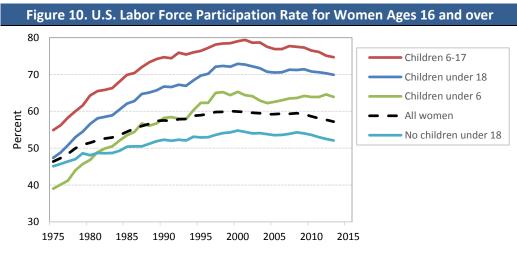


## III. Demand for Organized Child Care

The organized child care sector continues to evolve to meet the demands of both working parents and employers in the United States. Demographic trends and the cost of care remain key influences shaping overall child care usage. The cost of organized child care remains a significant financial hurdle, particularly for low-income and low-skilled workers. The cost of care varies widely across the states and is highly dependent upon the age of the child, the type of provider chosen, licensing requirements, and the overall cost of living. Paid child care can also consume a significant fraction of household income and is as costly as college for families in many states. Federal and state efforts to help offset the cost of child care continue to play a major role in helping low-income working parents enter and remain in the labor force

## Key Trends Driving the Overall Demand for Formal Child Care

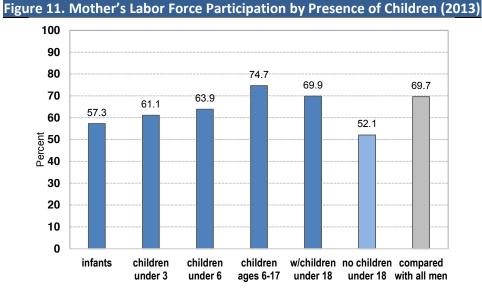
**Labor Force Participation Rate of Women**. The expansion of the organized child care industry the past several decades closely tracks the labor force participation rate of women in the period. Participation rates for women ages 16 and over increased steadily from just above 30 percent following the end of World War II to a recent peak of 60.0 percent in 1999 (see Figure 10). For women with children under 18, the participation rate increased from 47 percent to more than 70 percent in the period.



Source: Bureau of Labor Statistics

The participation rate for women has stabilized since 1999. Between 1999 and 2013, the share of women 16 and over participating in the labor force declined slightly by about 3 percentage points to 57.2 percent. For women between ages 25 and 54 (in their prime working years), the participation rate declined across each five-year age interval in the period. However, the decline in participation is generally steeper for women ages 40 to 54 than for younger women ages 25 to 39. Much of the stronger participation among younger women is traced to mothers with children at home. In contrast to all other groups of women in Figure 10, participation rates for mothers with children under the age of 6 increased steadily between 2005 and 2013.

The need for child care follows a clear pattern over a mother's work life and is closely related to the age of the youngest child at home. Figure 11 details the variation in the current labor force participation rate for women based upon the presence of children in the household. Overall, the participation rate is significantly higher (69.9 percent) for mothers with children under 18 than for women with no children under 18 at home (52.1 percent). The participation rate for mothers with children under 18 is also slightly higher than the overall participation rate for men (69.7 percent).



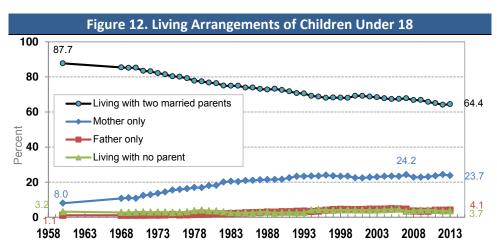
Source: Bureau of Labor Statistics. Labor Force Statistics from the Current Population Survey.

The likelihood that a mother participates in the labor force increases along with the age of the youngest child. Mothers with an infant are the least likely (57.3 percent) to participate in the labor force, although more than half are active participants. The rate rises to 61.1 percent for mothers with children under 3 years of age and to 63.9 percent for those with children under 6 years of age. The participation rate then rises to 74.7 percent among mothers with school-aged children (ages 6 to 17), a full 5 percentage points above the overall participation rate for men and more than 10 percentage points above the rate for mothers with children under 6.

The recent stabilization in the share of women entering the labor force could be viewed as an economic development concern, as it indicates a limit on the number of new entrants into the labor force. This has heightened the focus on access to affordable child care for women of working age who might otherwise opt out of the labor force.

Single-Parent Households. Along with shifts in the labor force participation rate of women, other demographic trends have redirected child care policy efforts toward assisting parents who are living under much different marital and family arrangements than in years past. One of these demographic challenges is the far smaller share of children in the U.S. who are living with two married parents (see Figure 12). Across all living arrangements, only 64.4 percent of children under age 18 lived with two married parents in 2013. This share is down steadily from about 88 percent in 1960 when estimates were first reported.

As a result, more than one in four (27.8 percent) children in the U.S. live in a household with only one parent present. The share of children living with their mother has remained relatively stable at slightly more than 20 percent the past few decades, and is currently 23.7 percent. Only 4.1 percent of children living with one parent live with their father, a share that has similarly remained stable for many years.

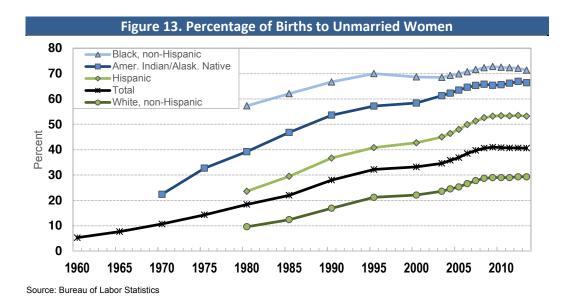


Source: Bureau of Labor Statistics.

Notes: Totals do not include children living in group quarters or other institutional arrangements.

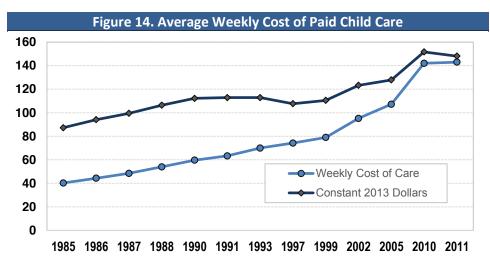
Single mothers with children under 18 are more likely to participate in the labor force (74.2 percent) than married mothers (67.8 percent) and are more likely to use organized child care (*see Figure 6*). While participation rates are roughly equal for single and married mothers with infants, single mothers begin to enter the labor force at a much higher rate as the youngest child in the household reaches 1 year of age. For mothers with a 1-year-old, the participation rate is 67.3 percent for single mothers versus 58.2 percent for married mothers. The gap remains large for 2-year-olds, with 70.6 percent of single mothers participating in the labor force versus only 62.4 percent of married mothers. Labor force outcomes are also much less favorable for single mothers. In 2013, single mothers with young children under 3 were unemployed at a rate more than three times the rate of married mothers with children under 3 (16.9 percent versus 5.0 percent).

Births to Unmarried Mothers. A related demographic trend influencing child care policy is the increased number of children born to unmarried women. The share of total births to unmarried mothers has leveled off at about 40 percent since 2009 but remains double the level from the early 1980s (see Figure 13). All races have seen a sharp rise in the share of births to unmarried women. In 2013, the share reached 29.3 percent for white (non-Hispanics) mothers; 53.2% for Hispanic mothers; 66.4% for American Indian and Alaskan Native mothers; and 71.4% for black (non-Hispanic) mothers. Although roughly half of all unmarried births are to cohabitating parents, children born to unmarried mothers are more likely to live in poverty and have lower occupational status and income as young adults relative to children born to married mothers. <sup>13</sup>



#### Cost of Child Care in the U.S.

The cost of organized child care presents a significant financial hurdle for many working parents with children. The inability to afford paid child care can keep a parent out of the labor force, in part or in full, if other informal care arrangements are not readily available. A range of empirical estimates suggest that a 10 percent increase in the cost of child care will reduce the employment of single mothers by 3 to 4 percent and married women by 5 to 6 percent.<sup>14</sup>



Source: Census Bureau – SIPP Survey: Spring 2011, Spring 2005/Summer 2006, Winter 2002, and Fall 1991 editions; and RegionTrack

Recent SIPP survey results indicate that employed parents pay an average of \$143 per week (\$7,436 per 52-week year) for child care services (*see Figure 14*). <sup>15,16</sup> The average weekly cost of care roughly

doubled between 1997 and 2011. The rise in child care costs exceeded the rate of inflation in the period, pushing the inflation-adjusted cost of care up by more than one-third overall (37.5 percent) in the period.

Cost by Type of Care. The cost of organized child care varies widely based upon the age of the child and the type of child care provider chosen. Figure 15 summarizes rates from the 2014 survey of state-level child care rates administered by the National Association of Child Care Resource & Referral Agencies (NACCRRA). Three common child care arrangements by age of the child are included—infant care, 4-year-old care, and before- or after-school care for a school-aged child. The rates describe the annual cost of full-time care at both child care centers and family child care homes for each of the three child care arrangements.

Figure 15. Annual Cost of Full-Time Child Care by Provider Type and Child's Age

Annual fees for full-time care in a child care center:	Median	50-State Range
Infant	\$9,185	\$5,496-21,948
4-year-old child	7,805	4,515-17,304
School-age child (before-/after-school care)	4,577	1,086-13,211
Annual fees for full-time care in a family child care home:		
Infant	\$6,828	\$4,560-15,240
4-year-old child	6,500	4,039-12,012
School-age child (before-/after-school care)	4,087	1,817-9,844

Source: NACCRRA/Child Care Aware of America: Parents and the High Cost of Child Care: 2014 Report. December 2014.

Notes: The median is determined using the reported cost for each of the 50 states and Washington D.C.

The median cost of care across the states is generally much higher for younger children than for older children, and higher in child care centers than in family child care homes. For infants, the highest-cost category of care, the median cost of annual care is \$6,828 in a family child care home and \$9,185 in a child care center. Care for 4-year-olds ranges from \$6,500 per year in a family child care home to more than \$7,800 in a child care center. The annual cost for school-aged children is the lowest and least variable for each provider type, ranging from \$4,087 in a family child care home to \$4,577 in a center.

Overall, care for infants is typically 5 to 15 percent more than for 4-year-olds, and 50 to 100 percent more than care for school-aged children. Equivalent care in a child care center costs 20-35 percent more than in a family child care home.

**State-Level Cost of Care**. There is substantial variation in the cost of child care across the states for a given care arrangement. Figure 16 details state-level child care rates from the 2014 NACCRRA survey for the same set of national child care arrangements shown in Figure 15.

Figure 16. An	Figure 16. Annual Cost of Child Care by Provider and Child's Age							
		Child care co	enter	F	amily child ca	ire home		
			School-age			School-age		
		4-year-old	child (before-/after-		4-year-old	child (before-/after-		
State	Infant	child	school care)	Infant	child	school care)		
						,		
Alabama	\$5,547	\$5,869	\$5,223	\$4,793	\$4,927	\$4,685		
Alaska Arizona	10,280	8,283 7,334	,	8,580	7,779	5,179		
Arkansas	9,166 5,933	4,944		6,727 5,046	6,334 4,588	6,134 6,227		
California	11,628	8,099	,	7,555	7,153	2,872		
Colorado	13,143	9,871	4,920	8,817	8,183	4,260		
Connecticut	13,241	11,006		9,790	9,351	4,388		
Delaware	9,058	7,208	,	6,916	5,893	4,773		
Dist. of Columbia	21,948	17,304	,	15,240	12,012	9,159		
Florida	8,376	6,647		7,449	6,325	4,083		
Georgia	7,025	5,947	3,585	5,781	5,293	3,219		
Hawaii	11,748	8,817		7,540	7,375	7,449		
Idaho	6,483	6,380	4,042	5,389	5,114	4,614		
Illinois	12,568	9,300	5,912	7,717	7,188	4,537		
Indiana	8,281	6,448	5,051	6,591	5,343	3,600		
Iowa	9,185	7,904	4,388	6,785	6,521	4,136		
Kansas	10,787	7,615		6,667	5,819	4,087		
Kentucky	6,194	N/A	,	5,411	N/A	5,126		
Louisiana	5,655	4,882		4,836	4,660	1,995		
Maine	9,360	8,320		6,760	6,500	3,705		
Maryland	13,897	9,490		9,528	7,798	3,632		
Massachusetts	16,549	12,320		10,535	9,904	3,955		
Michigan	9,724	7,956		6,656	6,448	4,068		
Minnesota	13,993	10,812		7,835	7,108	N/A		
Mississippi	5,496	4,800		4,560	4,320	3,180		
Missouri Montana	8,736 8,858	6,074 7,805		5,644 7,173	4,894 6,748	3,059 6,717		
Nebraska	9,100	7,800		6,760	6,500	4,875		
Nevada	10,095	8,208		8,481	7,855	3,432		
New Hampshire	11,901	9,623		8,688	8,275	2,962		
New Jersey	11,534	9,546		8,699	7,790	3,268		
New Mexico	7,523	6,868		6,179	5,791	3,610		
New York	14,508	12,280		10,727	9,962	9,844		
North Carolina	9,107	7,471		6,828	5,826	3,641		
North Dakota	7,871	7,147		6,662	6,383	N/A		
Ohio	7,771	6,487	4,027	6,744	6,080	4,145		
Oklahoma	7,741	5,761	3,546	6,225	5,398	3,650		
Oregon	11,240	8,741	3,945	6,978	6,503	3,908		
Pennsylvania	10,470	8,727	5,601	7,943	7,128	5,263		
Rhode Island	12,662	10,400		9,880	9,100	5,850		
South Carolina	6,372	5,385		4,577	4,039	1,817		
South Dakota	6,160	5,865		5,409	5,257	3,482		
Tennessee	5,857	4,515		4,773	4,064	2,516		
Texas	8,619	6,643		6,623	5,192	2,604		
Utah	8,052	6,108 10,068		6,000	5,232	2,952 4,741		
Vermont Virginia	10,103	7,696		7,729 8,272	7,191	4,741		
Washington	10,028 12,332	9,306	,	9,252	6,656 7,678	4,173 3,679		
West Virginia	7,800	6,760		5,720	5,200	5,200		
Wisconsin	11,342	9,302		8,963	8,088	7,643		
Wyoming	9,233	7,914		7,914	7,122	7,122		
	1		,					
Median State	\$9,185	\$7,805	\$4,577	\$6,828	\$6,500	\$4,087		

Source: NACCRRA/Child Care Aware of America: Parents and the High Cost of Child Care: 2014 Report. December 2014.

Notes: Costs represent the average of median costs reported for each child care arrangement.

Consistent with regional cost of living patterns, the highest overall costs of care are generally found in the New England, Great Lakes, and Pacific Coast states, plus Hawaii and the District of Columbia. The lowest costs are generally found in the Deep South, the Southwest, and Plains states.

The cost of infant care is the most variable across the states. In child care centers, the annual cost of infant care ranges from a low of \$5,496 in Mississippi to a high of \$16,549 in Massachusetts, a three-fold difference in cost. In family child care homes, the cost of infant care is lowest in Mississippi at \$4,560 per year but costs more than twice as much in New York at \$10,727 per year. The annual cost of infant care is even higher in the District of Columbia, at \$21,948 in a child care center and \$15,240 in a family child care home.

For 4-year-olds, the annual cost of care in a child care center ranges from a low of \$4,515 in Tennessee to a high of \$12,320 in Massachusetts. Care for a 4-year-old in a family child care home costs \$4,039 in South Carolina but is more than twice as costly at \$9,962 in New York. In the District of Columbia, four-year-old care costs \$17,304 in a child care center and \$12,012 in a family child care home.

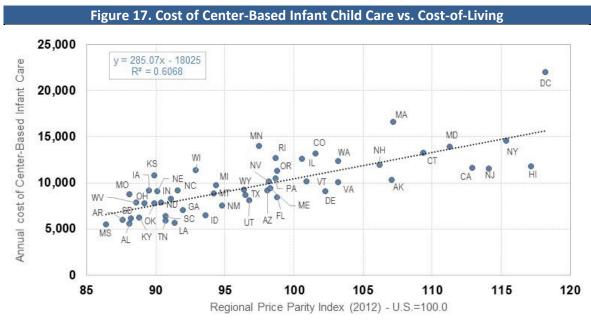
Costs are significantly lower and somewhat less variable across the states for school-age children. For those in child care centers, the lowest annual cost is \$1,086 in Louisiana versus a high of \$8,936 in Hawaii (\$13,211 in the District of Columbia). The annual cost of care for school-age children in a family child care home falls within a narrower range, from a low of \$1,817 in South Carolina to a high of \$9,844 in New York (\$9,159 in the District of Columbia).

Cost of Living and Cost of Care. For most child care arrangements, the variation in the cost of care at the state level is highly correlated with a state's overall cost of living. <sup>17</sup> Figure 17 illustrates the relationship between the cost of center-based infant care (the most costly form of care) and the cost of living at the state level. Cost of living is measured using state-level regional price parity (RPP) indexes from the Bureau of Economic Analysis. <sup>18</sup> A state's RPP index measures the overall cost of living in the state relative to the U.S. price level, whereby a state with an RPP value of 110.0 has a price level 10 percent higher than the nation as a whole.

As expected, most of the traditional high-cost of living regions of the country (e.g. the District of Columbia, New York, New Jersey, Hawaii, California, Connecticut, Massachusetts, and Maryland) tend to have the highest overall costs for center-based infant care. Similarly, most of the traditional low-cost of living states (e.g. Mississippi, Arkansas, Alabama, South Dakota, Kentucky, Missouri, and Oklahoma) have much lower costs for center-based infant care.

The linear best-fit line in Figure 17 suggests child care costs tend to rise more than proportionately with the cost of living across the states. A 1 percentage point rise in the overall price level of a state relative to the nation is associated with an estimated 3.1 percent (\$285.07) increase in the annual cost of center-based infant care. Given a 10 to 15 percent higher average cost of living in the highest-cost states, a parent in a typical high-cost state could expect to pay a premium of 30-45 percent (\$2,850-4,275) for center-based infant care relative to states close to the national average cost of living. A similar-size discount

would be expected for parents in the lowest-cost states where the cost of living is generally 10 to 15 percent below the national average.



Source: Bureau of Economic Analysis: Price Parity Index (2012), NACCRRA/Child Care Aware of America and RegionTrack

Many factors other than cost of living undoubtedly underlie state-level differences in the cost of child care, including the quality of care and licensing regulations. Regulations vary widely across the states with regard to staff-child ratios and other regulations that might affect the cost of operating a child care program.

It is also important to note that not all states have uniformly high, or low, costs across all forms of child care. Massachusetts, for example, has the highest cost of care for both infants and 4-year-olds but ranks among the lowest-cost states for school-aged children. Conversely, Arkansas has one of the lowest costs of care for infants and 4-year-olds but ranks among the highest-cost states for school-aged children.

*Cost as a Share of Household Income*. The cost of full-time care can absorb a significant fraction of total household income. SIPP surveys conducted over the past several decades suggest that households have long reported spending an average of roughly 7 percent of monthly household income on child care.

The share has ranged between 6.3 percent and 7.3 percent since 1986 and is near the top of the historical range at 7.2 percent in the latest survey. For families with multiple children in organized care, total child care costs can be a significantly higher share of household income.

The cost of care can be particularly burdensome for low-income working parents in states where household income does not fully compensate for a higher cost of living. For example, in California the RPP-adjusted cost of center-based infant care is 26.6 percent above the median cost of care across the states, but RPP-adjusted household income is 2.0 percent below the national level.

						Care (2013)		
			Child Care		edian Income	Child Care Cost R		
	Median	Center- based infant	Family child care home	Center- based infant	Family child care home	Average annual tuition/fees for public 4-year	Center based infant	Family child care home
Region	Income	care	4-year-old	care	4-year-old	college (in-state)	care	4-year-old
United States	51,939	\$9,185	\$6,638	17.7%	12.8%	\$8,885	103.4%	74.7%
Alabama	41,381	5,547	4,927	13.4%	11.9%	9,161	60.6%	53.8%
Alaska	61,137	10,280	7,779	16.8%	12.7%	5,885	174.7%	132.2%
Arizona	50,602	9,166	6,334	18.1%	12.5%	10,078	91.0%	62.8%
Arkansas	39,919	5,933	4,588	14.9%	11.5%	7,251	81.8%	63.3%
California	57,528	11,628	7,153	20.2%	12.4%	9,078	128.1%	78.8%
Colorado	63,371	13,143	8,183	20.7%	12.9%	9,096	144.5%	90.0%
Connecticut	67,781	13,241	9,351	19.5%	13.8%	10,232	129.4%	91.4%
Delaware	52,219	9,058	5,893	17.3%	11.3%	11,259	80.5%	52.3%
Dist. of Columbia	60,675	21,948	12,012	36.2%	19.8%	7,255	302.5%	165.6%
Florida	47,886	8,376	6,325	17.5%	13.2%	6,315	132.6%	100.2%
Georgia	47,439	7,025	5,293	14.8%	11.2%	7,823	89.8%	67.7%
Hawaii	61,408	11,748	7,375	19.1%	12.0%	9,073	129.5%	81.3%
ldaho	51,767	6,483	5,114	12.5%	9.9%	6,325	102.5%	80.8%
Illinois	57,196	12,568	7,188	22.0%	12.6%	12,580	99.9%	57.1%
Indiana	50,553	8,281	5,343	16.4%	10.6%	8,926	92.8%	59.9%
lowa	54,855	9,185	6,521	16.7%	11.9%	7,837	117.2%	83.2%
Kansas	51,485	10,787	5,819	21.0%	11.3%	7,729	139.6%	75.3%
Kentucky	42,158	6,194	na	14.7%	na	8,701	71.2%	na 70 5%
Louisiana	39,622	5,655	4,660	14.3%	11.8%	6,605	85.6% 99.7%	70.5% 69.2%
Maine	50,121	9,360	6,500	18.7%	13.0%	9,391 8,480	99.7% 163.9%	92.0%
Maryland Massachusetts	65,262	13,897	7,798	21.3%	11.9% 15.7%	10,748	154.0%	92.0%
Michigan	62,963 48,801	16,549 9,724	9,904 6,448	26.3% 19.9%	13.2%	11,600	83.8%	55.6%
Minnesota	60,907	13,993	7,108	23.0%	11.7%	10,464	133.7%	67.9%
Mississippi	40,850	5,496	4,320	13.5%	10.6%	6,565	83.7%	65.8%
Missouri	50,311	8,736	4,894	17.4%	9.7%	8,093	107.9%	60.5%
Montana	44,132	8,858	6,748	20.1%	15.3%	6,225	142.3%	108.4%
Nebraska	53,774	9,100	6,500	16.9%	12.1%	7,315	124.4%	88.9%
Nevada	45,369	10,095	7,855	22.3%	17.3%	6,387	158.1%	123.0%
New Hampshire	71,322	11,901	8,275	16.7%	11.6%	14,652	81.2%	56.5%
New Jersey	61,782	11,534	7,790	18.7%	12.6%	12,723	90.7%	61.2%
New Mexico	42,127	7,523	5,791	17.9%	13.7%	5,960	126.2%	97.2%
New York	53,843	14,508	9,962	26.9%	18.5%	6,926	209.5%	143.8%
North Carolina	41,208	9,107	5,826	22.1%	14.1%	6,516	139.8%	89.4%
North Dakota	52,888	7,871	6,383	14.9%	12.1%	7,274	108.2%	87.8%
Ohio	46,398	7,771	6,080	16.7%	13.1%	9,942	78.2%	61.2%
Oklahoma	43,777	7,741	5,398	17.7%	12.3%	6,583	117.6%	82.0%
Oregon	56,307	11,240	6,503	20.0%	11.5%	8,600	130.7%	75.6%
Pennsylvania	53,952	10,470	7,128	19.4%	13.2%	12,802	81.8%	55.7%
Rhode Island	57,812	12,662	9,100	21.9%	15.7%	10,896	116.2%	83.5%
South Carolina	43,749	6,372	4,039	14.6%	9.2%	11,166	57.1%	36.2%
South Dakota	54,453	6,160	5,257	11.3%	9.7%	7,644	80.6%	68.8%
Tennessee	42,499	5,857	4,064	13.8%	9.6%	8,036	72.9%	50.6%
Texas	53,027	8,619	5,192	16.3%	9.8%	8,521	101.2%	60.9%
Utah	62,967	8,052	5,232	12.8%	8.3%	5,914	136.2%	88.5%
Vermont	54,842	10,103	7,191	18.4%	13.1%	13,965	72.3%	51.5%
Virginia	67,620	10,028	6,656	14.8%	9.8%	10,366	96.7%	64.2%
Washington	60,106	12,332	7,678	20.5%	12.8%	10,811	114.1%	71.0%
West Virginia	40,241	7,800	5,200	19.4%	12.9%	6,253	124.7%	83.2%
Wisconsin	55,258	11,342	8,088	20.5%	14.6%	8,741	129.7%	92.5%
Wyoming	55,700	9,233	7,122	16.6%	12.8%	4,404	209.7%	161.7%

Source: Census Bureau; College Board; and NACCRRA/Child Care Aware of America: Parents and the High Cost of Child Care: 2014 Report.

For any individual household, the share of income devoted to child care is determined largely by the age of the child and the state in which a family lives. Figure 18 compares the cost of both center-based infant care (traditionally the most expensive form of care) and family child care home-based care for a 4-year-old (one of the lowest-cost forms of care) to median household income at the state level.

For center-based infant care, the cost for a single child is approximately 17.7 percent of median household income at the national level. Again, there is tremendous variation in this share across the states. Center-based infant care costs only 11.3 percent of median household income in South Dakota but exceeds 20 percent of median income in 16 states.

Care for a 4-year-old child in a family child care home consumes 12.8 percent of median household income nationally. The lowest share is 8.3 percent in Utah, but it exceeds 10 percent of household income in all but eight states and exceeds 15 percent in six states.

Relative Cost: Child Care vs. Higher Education. Figure 18 provides a comparison of the cost of child care center-based infant care and family child care home-based care for a 4-year-old to the average annual in-state tuition and fees at a four-year public college in each state. Nationally, the cost of center-based infant care is 103.3 percent of the average annual cost of attending a four-year public college. The cost of center-based infant care now equals or exceeds the cost of a public college in 30 states and the District of Columbia. Center-based infant care is at least 50 percent higher than the cost of a public college in the District of Columbia (302.0 percent), New York (209.7 percent), Wyoming (209.7 percent), Alaska (174.7 percent), Maryland (164.0 percent), Nevada (158.1 percent), and Massachusetts (153.3 percent).

Even for lower-cost 4-year-old care in a family child care home setting, the cost of care nationally is 75 percent of the average cost of a year of college. The cost of after-school care exceeds 100 percent of college costs in the District of Columbia (165.3 percent), Wyoming (161.7 percent), New York (144.0 percent), Alaska (132.2 percent), Nevada (123.0 percent), and Montana (108.6 percent). The cost exceeds 50 percent of college costs in all states except South Carolina (36.3 percent) where the low ratio reflects relatively high college costs rather than low child care costs.

# Assisting with the Cost of Child Care

Federal and state policymakers have long recognized the cost burden of paid child care for some families and have sought ways to make child care more affordable for low-income working parents. As a result, funding for organized child care has evolved into a combination of direct payments by families supplemented by federal and state subsidies and tax credits. Federal funding administered through cooperative state programs provides the bulk of the funding, while some states provide state child care tax credits in addition to federal credits.

**Federal-State Child Care Funding**. Significant federal funding is provided to the states to administer child care assistance programs. The underlying goal of these programs is to offset the cost of child care services in order to help low-income parents enter the labor force or seek job training and/or education.

Figure 19 summarizes federal and state spending on child care assistance programs in FY2013. Assistance totaled \$12.4 billion, with federal sources providing \$7.82 billion (63.1 percent) and states contributing the remaining \$4.56 billion (36.9 percent). For perspective, this funding is equivalent to approximately 30 percent of the \$41.5 billion in revenue reported by the U.S. child care sector in 2012.

Figure 19. Federal/State Child Care Funding (FY2013)								
Program <sup>19</sup>	Source	Funding						
CCDF Mandatory, Matching, and Discretionary	Federal	\$5,004,332,923						
CCDF Matching State Share and Maintenance of Effort (MOE)	State	2,034,724,826						
TANF Transfer to CCDF	Federal	1,405,172,330						
Federal TANF Expenditures	Federal	1,110,204,445						
State TANF MOE Expenditures	State	2,528,997,537						
Social Services Block Grant (SSBG) - Child Care*	Federal	296,451,309						
Sub-Total Federal Funding		7,816,161,007						
Sub-Total State Funding		4,563,722,363						
Total Federal/State Funding		\$12,379,883,370						

Notes: CCDF is the Child Care and Development Fund and TANF is the Temporary Assistance for Needy Families program. Both CCDF and TANF are operated by the U.S. Department of Health and Human Services — Administration for Children and Families. All categories reflect direct spending on child care services. \*SSBG expenditures are for FY2012

Source: U.S. Health and Human Services—Administration for Children and Families

The bulk of federally funded child care assistance is provided through two major programs operated by the U.S. Department of Health and Human Services: the Child Care and Development Fund (CCDF) and the Temporary Assistance for Needy Families (TANF) program. CCDF funding is used primarily to provide subsidies to eligible low-income families who need child care due to work, work-related training, and/or attending school. TANF provides time-limited assistance for needy families to acquire training leading to employment, as well as child care assistance for qualified families with children. A third minor source of federally funded child care assistance is the Social Services Block Grant (SSBG) program, also administered by the U.S. Department of Health and Human Services. SSBG provides a range of assistance to needy families, including child care services.

States become eligible to receive much of the federal funding by making matching current year expenditures and maintaining state spending levels from a prior year ("maintenance of effort"). Under CCDF, most of the funding allocated to states is used to provide direct assistance to families, while a small portion of the aid supports child care quality initiatives. Funding for TANF and SSBG is allocated to the states for a wide array of uses (including child care) to assist low-income families.<sup>21</sup>

An estimated 874,200 families with 1,455,100 children received direct child care assistance through CCDF in FY2013.<sup>22</sup> Sixteen percent of families receiving CCDF assistance reported receiving TANF assistance as well.

*Child and Dependent Care Credit*. The federal Child and Dependent Care tax credit is a second major source of assistance provided to families with children in paid child care.<sup>23</sup> For tax year 2012, more than 6.2 million households with children in paid care received \$3.36 billion in tax credits.<sup>24</sup> While households may offset their federal tax bill by up to \$1,000 per qualifying child, the average credit totaled \$539, or less than 10 percent of the typical annual cost of full-time care. The total value of the credits represents approximately 8.8 percent of total U.S. child care industry revenue in 2012.

Unlike CCDF, TANF, and SSBG assistance for low-income households, the federal child care tax credit is targeted at middle-income families. Because the credit is not refundable, it is not available to low-income families who may have no federal income tax liability.<sup>25</sup>

Figure 20 provides a distribution of the tax credits received by income range, with higher-income households generally receiving larger credits on average. Fewer than 500,000 taxpayers with adjusted

gross income (AGI) below \$25,000 received the credit, with only 4.9% of total credits going to this group. The average credit for these families was about \$340.

Nearly 90 percent of total credits went to households with AGI between \$25,000 and \$200,000. Approximately 50 percent of credits were paid to households with AGI of \$75,000 or more. Fully one-third

Figure 20. Federal Child and Dependent Care Tax Credit								
Number of Amount of Average Share Adjusted Gross Income (AGI) Tax Returns Credits (000) Credit Credit								
Total	6,243,060	\$3,367,301	\$539	100.0%				
Under \$10,000	350	116	331	0.0%				
\$10,000-under \$25,000	480,870	164,834	343	4.9%				
\$25,000-under \$50,000	1,596,770	918,032	575	27.3%				
\$50,000-under \$75,000	1,122,430	602,459	537	17.9%				
\$75,000-under \$100,000	978,900	542,613	554	16.1%				
\$100,000-under \$200,000	1,592,970	882,318	554	26.2%				
\$200,000-under \$500,000	410,620	220,634	537	6.6%				
\$500,000-under \$1,000,000	45,550	26,916	591	0.8%				
\$1,000,000 or more	14,600	9,379	642	0.3%				

Source: Internal Revenue Service

(33.8%) of credits accrued to filers with taxable income above \$100,000 annually.

In addition to the federal credit, approximately half the states currently allow tax deductions or credits for child and dependent care expenses. <sup>26</sup> A few states provide fully or partially refundable tax credits, though most are nonrefundable.

*The Role of Public Funding by State*. The major federal and state assistance programs combine to create a significant pool of assistance for families with children in paid child care. Recent estimates suggest that 6.2 million households received federal child care tax credits and 2.4 million children received public child care subsidies.<sup>27</sup> Figure 21 provides a state-level breakdown of total child care assistance derived from both the federal-state programs and the federal Child and Dependent Care tax credit.

Figure 21. Federal/State Child Care Programs and Share of Child Care Industry Revenue

		care muust	ry kevenue		
State	Child Care Industry Revenue 2012 (millions)	Federal/State Child Care Assistance Programs (FY2013)	Federal Child & Dependent Care Tax Credit (TY2012)	Total Federal/State Programs	Public Funding as a Share of Industry Revenue
United States	\$41,465.3	12,324,144,381	3,367,301,000	15,691,445,381	37.8%
Alabama	440.0	100 770 054		454.070.054	07.40/
Alabama Alaska	416.6 83.1	102,778,054 41,872,975	51,901,000	154,679,054 49,484,975	37.1% 59.5%
Arizona	595.5	151,260,632	7,612,000 56,156,000	207,416,632	34.8%
Arkansas	273.5	63,891,534	27,058,000	90,949,534	33.3%
California	5,297.5	1,893,891,683	373,226,000	2,267,117,683	42.8%
Colorado	639.7	128,117,842	53,055,000	181,172,842	28.3%
Connecticut	625.3	164,224,857	41,299,000	205,523,857	32.9%
Delaware	168.6	83,040,406	12,616,000	95,656,406	56.7%
Dist. of Columbia	171.0	92,281,988	8,930,000	101,211,988	59.2%
Florida	2,532.0	669,808,104	221,917,000	891,725,104	35.2%
Georgia	1,404.6	258,972,285	115,935,000	374,907,285	26.7%
Hawaii	110.4	44,004,842	14,247,000	58,251,842	52.8%
Idaho	118.5	38,369,230	12,945,000	51,314,230	43.3%
Illinois	1,966.5	978,568,543	141,000,000	1,119,568,543	56.9%
Indiana	625.1	224,775,594	58,208,000	282,983,594	45.3%
lowa	447.6	105,075,407	40,634,000	145,709,407	32.6%
Kansas	371.1	89,001,814	31,672,000	120,673,814	32.5%
Kentucky	429.6	169,549,930	35,626,000	205,175,930	47.8%
Louisiana Maine	465.9	102,317,412	52,710,000	155,027,412	33.3% 22.3%
Maryland	196.2 932.1	29,882,008 144,518,259	13,861,000 100,812,000	43,743,008 245,330,259	26.3%
Massachusetts	1,463.6	475,415,121	80,365,000	555,780,121	38.0%
Michigan	950.5	208,441,214	77,350,000	285,791,214	30.1%
Minnesota	883.2	181,356,702	70,027,000	251,383,702	28.5%
Mississippi	406.3	79,842,856	33,835,000	113,677,856	28.0%
Missouri	723.5	182,727,053	60,393,000	243,120,053	33.6%
Montana	103.3	28,631,562	8,073,000	36,704,562	35.5%
Nebraska	286.7	82,870,619	27,243,000	110,113,619	38.4%
Nevada	237.9	44,166,454	30,052,000	74,218,454	31.2%
New Hampshire	189.9	36,876,254	15,531,000	52,407,254	27.6%
New Jersey	1,761.5	249,257,605	129,649,000	378,906,605	21.5%
New Mexico	205.3	81,744,303	13,188,000	94,932,303	46.2%
New York	3,397.6	1,050,312,070	252,855,000	1,303,167,070	38.4%
North Carolina	1,367.2	423,724,378	105,724,000	529,448,378	38.7%
North Dakota Ohio	101.7	14,904,695	10,842,000	25,746,695	25.3% 53.0%
Oklahoma	1,427.0 397.9	672,603,523 168,041,145	83,096,000 30,894,000	755,699,523 198,935,145	50.0%
Oregon	403.6	93,347,505	31,584,000	124,931,505	31.0%
Pennsylvania	1,597.9	708,805,824	121,757,000	830,562,824	52.0%
Rhode Island	182.7	59,028,054	9,706,000	68,734,054	37.6%
South Carolina	446.2	82,532,854	53,455,000	135,987,854	30.5%
South Dakota	140.6	21,703,992	13,618,000	35,321,992	25.1%
Tennessee	675.0	184,438,745	62,612,000	247,050,745	36.6%
Texas	2,976.1	588,707,064	306,677,000	895,384,064	30.1%
Utah	192.7	75,032,100	17,518,000	92,550,100	48.0%
Vermont	102.4	50,757,676	7,044,000	57,801,676	56.4%
Virginia	1,094.3	194,082,546	107,355,000	301,437,546	27.5%
Washington	860.9	309,992,649	62,365,000	372,357,649	43.3%
West Virginia	123.5	60,686,753	8,358,000	69,044,753	55.9%
Wisconsin Wyoming	829.7 66.0	316,627,363 21,282,303	48,688,000 5,751,000	365,315,363 27,033,303	44.0% 41.0%

Source: Census Bureau, U.S. Health and Human Services – Administration for Children and Families, Internal Revenue Service, and RegionTrack

Combined public funding for the most recently available years of state-administered federal programs and the federal child care credit totaled \$15.7 billion. More than three-fourths (78.5 percent) of public child care assistance is received from the major federal-state subsidy programs, with the remaining one-fourth from federal tax credits. For perspective, total public child care assistance is equivalent to more than one-third (37.8 percent) of the \$41.5 billion in total revenue produced by the organized child care industry in 2012.

Public funding sources play the smallest role in New Jersey's child care sector where it is equivalent to only 21.5 percent of total industry revenue. Eleven states (Colorado, Georgia, Maine, Maryland, Minnesota, Mississippi, New Hampshire, New Jersey, North Dakota, South Dakota, and Virginia) rely less heavily on public assistance programs, deriving less than 30 percent of total child care industry revenue. Put another way, parent fees comprise a larger share of overall child care costs in these states.

The child care industries in nine states (Alaska, Delaware, Hawaii, Illinois, Ohio, Oklahoma, Pennsylvania, Vermont, and West Virginia) and the District of Columbia are highly dependent upon public assistance programs, where they represent more than 50 percent of total child care industry revenue. Most reliant is Alaska, which receives public child care assistance totaling 59.5 percent of total child care industry revenue in the state.

# IV. The Organized Child Care Industry's Role in the Economy

The child care industry in the U.S. consists of a large network of mostly very small businesses. Most child care *providers* are home-based businesses operated by a sole proprietor. However, most *children* are served by larger, more organized child care centers. The relative size and structure of the industry differs greatly across the states, with substantial variation in the types of providers operating, amount of revenue produced per child care establishment, and average earnings of workers in the child care sector. It is the state-level structure of the industry that largely determines the overall economic role of the child care sector in the broader economy of each state.

# Size and Structure of the U.S. Child Care Industry

Figure 22 details several key economic measures of the size and structure of the organized U.S. child care industry. In 2012, more than 768,500 child care establishments produced revenue totaling \$41.5 billion and provided employment for 1.57 million wage and salary and self-employed workers.<sup>28</sup>

Figure 22. U.S. Child Ca	re Indust	ry Statisti	ics	
Economic Indicator	1997	2002	2007	2012
Total Revenue (\$ Billions)	19.0	28.8	38.6	41.5
Employers	14.2	21.8	29.7	32.0
Non-employers	4.8	7.0	8.9	9.5
Number of Establishments	550,788	688,074	766,401	768,521
Employers	62,054	69,127	75,112	75,196
Non-employers	488,734	618,947	691,289	693,325
Receipts/Revenue per Establishment (\$)	34,412	41,916	50,413	53,952
Employers	228,833	315,362	395,410	425,555
Non-employers	9,726	11,376	12,927	13,650
Total Employment (job equivalent)	1,117,446	1,370,680	1,546,415	1,566,576
Employers	628,712	751,733	855,126	873,251
Non-employers	488,734	618,947	691,289	693,325
Wage & Salary Earnings at Employers (\$ Billions)	7.0	10.5	14.0	15.6
Earnings per employee (\$)	11,075	13,972	16,316	17,851
Earnings per provider (\$)	112,209	151,938	185,749	207,298
Total Employees per Establishment	2.03	1.99	2.02	2.04
Employers	10.1	10.9	11.4	11.6
Non-employers	1.0	1.0	1.0	1.0
Receipts/Revenue per capita (\$)	70.78	100.27	128.26	132.10

Source: Census Bureau – Economic Census and Non-employer Statistics; Bureau of Labor Statistics; and RegionTrack

The economic structure of the industry in Figure 22 reflects the two major types of child care providers that commonly operate within the industry: larger, more organized establishments with paid employees and smaller establishments operated by a sole proprietor with no employees. Federal employment and wage surveys track and refer to these businesses as *employer* and *non-employer* firms, respectively.

*Employers*. The core of the U.S. child care industry is made up of slightly more than 75,000 employer firms with paid employees.<sup>29</sup> Most of these businesses are traditional child care centers that collectively serve an estimated 76 percent of children enrolled in organized care.<sup>30</sup> In 2012, employer firms produced more than three-fourths (\$32.0 billion) of the \$41.5 billion in total child care industry revenue, or more than \$425,000 per child care provider. These firms employed an estimated 873,000 wage and salary

workers who received \$15.6 billion in total compensation. A typical provider employed approximately 11.6 workers with an annual payroll of \$207,300. Pay in the industry remains low, with the average employee earning only \$17,850 annually.<sup>31</sup>

*Non-Employers*. <sup>32</sup> The remainder of the industry consists of more than 693,000 very small business establishments that are owned and operated by a self-employed person with no paid employees. <sup>33</sup> Most are traditional home-based family child care providers, operated either in the child's home or out of the owner's personal residence. These *non-employer* businesses tend to produce much less revenue than those with employees, and most would be considered microbusinesses <sup>34</sup> under federal definitions. Collectively, these very small child care providers served nearly one-fourth of all children in formal care and generated \$9.5 billion in revenue in 2012. The owners do not receive a traditional salary, receiving instead the net profit from operating the business. After operating expenses, non-employer child care providers earned an estimated \$5.6 billion in proprietor income in 2012. <sup>35</sup> A typical non-employer child care provider produced approximately \$13,650 in annual revenue, and the owner retained an estimated \$8,111 in net proprietor earnings after expenses.

Industry Revenue and Establishment Growth. Revenue in the child care industry continues to grow steadily, but the rate of growth has slowed to closer to the pace of inflation in recent years. Total revenue increased only 7.5 percent between 2007 and 2012 after increasing by more than one-third (34.0 percent) between 2002 and 2007. The slowing can be traced to both the stabilization in the share of women entering the labor force and the shift during the recent national recession toward more unpaid forms of care. As a result, growth in child care industry revenue in recent years increasingly reflects the rising cost of care rather than increased numbers of children in care. Despite some slowing in the growth rate, revenue is still up about 44 percent in the decade ended in 2012. Longer term, child care industry revenue has more than doubled (118 percent increase) since 1997.

The number of child care establishments is growing more slowly than revenue, raising the average revenue received per child care establishment. The total number of establishments remained roughly flat between 2007 and 2012 and increased by only 11 percent in the decade between 2002 and 2012. However, revenue per establishment was up 7.0 percent between 2007 and 2012 and up 28.7 percent in the decade ended in 2012.

*Comparable Industries*. Evaluating the overall size and scope of the child care sector is aided by placing its \$41.5 billion in total revenues alongside other industry sectors that generate similar revenues as detailed in Figure 23.

Comparable service-providing sectors include outpatient medical care facilities (\$47.1 billion), waste collection (\$41.3 billion), scientific research and development services (\$39.4 billion), and advertising agencies (\$38.3 billion).

Manufacturing sectors of similar size include machine shops (\$38.9 billion) and paper mills (\$44.7 billion). Similar-sized retail sectors include women's clothing stores (\$43.1 billion), home furnishing stores (\$40.4 billion), and lawn and garden equipment and supplies stores (\$38.7 billion).

Figure 23. Child Care vs. Comparable Industries-	-Revenue (2012)
Sector	Total Revenue
Outpatient care centers	\$47,082,734,000
Television broadcasting	45,439,144,000
Paper mills	44,743,559,000
Women's clothing stores	43,085,226,000
Child day care services	<b>41,465,330</b> ,000
Waste collection	41,303,581,000
Home furnishings stores	40,368,447,000
Scientific research and development services	39,385,186,000
Machine shops	38,927,421,000
Lawn and garden equipment and supplies stores	38,680,916,000
Advertising agencies	38,323,666,000
Pipeline transportation	37,236,548,000

Source: Census Bureau – 2012 Economic Census, Non-Employer Statistics

Other sectors that produce a similar amount of revenue include television broadcasting (\$45.4 billion) from the communications sector and pipeline transportation (\$37.2 billion) from the utilities sector.

#### Economic Structure at the State Level

Figure 24 provides a profile of the size and structure of the organized child care sector in each state, including a breakdown of the contribution of both employer and non-employer child care providers.

The size and structure of the industry within a state has important implications for the potential economic impact the industry transmits to the broader state economy. The total economic contribution of the paid child care industry within a state is largely determined by the amount of total revenue produced.<sup>36</sup> Revenue is generally greatest in the largest states, with twelve states producing at least \$1 billion in child care industry revenue in 2012. In California, the largest state by population, organized child care is a \$5.3 billion industry. Wyoming, the smallest state, has the smallest organized child care sector with total revenue of \$66 million.

For states of similar size, total revenue produced by the child care sector is determined primarily by two factors: the share of children in paid care and the revenue produced per child in care. The greatest relative economic impacts are expected in those states where a higher share of children are in paid care and the child care industry produces higher revenue per child in care.

Figures 7 and 8 detail the wide variation in the share of children in paid care (15.8 percent to 37.2 percent) across the states. Again, the share of children in paid care is highest in the upper Plains, the Pacific Northwest, New England, and portions of the Mid-Atlantic region, and lowest in the Mountain West, much of the Southwest, Southern Plains, the Appalachia region, much of the Southeast, California, and Hawaii.

					Fi	gure 2	24. U.	S. Chi	ild Care	Industr	y Stati:	stics (	2012)					
			Tot	al			Non-Employers						Employers					
Region	Estab- lish- mints	Total Revenue (mil.)	Total Employ- ment	Total Earnings (mil.)	Average Revenue	Earnings per Worker	Estab- lish- ments	Total Revenue (mil.)	Proprietor Earnings (mil.)	Average Revenue per Estab.	Earnings per Proprietor	Estab- lish- ments	Total Revenue (mil)	Employee Compen- sation (mil.)	Employ- ment	Average Revenue	Workers per Estab.	Earnings per Employe
United States	768,521	\$41,465.3	1,566,576	\$21,210.8	\$53,955	\$13,540	693,325	\$9,463.5	\$5,623.2	\$13,650	\$8,111	75,196	\$32,001.8	\$15,587.5	873,251	\$425,578	11.6	\$17,850
Alabama	8,050	416.6	17,810	187.6	51,750	10,532	7,026	79.9	41.5	11,369	5,910	1,024	336.7	145.5	10,784	328,864	10.5	13,490
Alaska	1,710	83.1	3,483	60.7	48,564	17,430	1,538	24.8	20.6	16,130	13,373	172	58.3	40.1	1,945	337,801	11.3	20,63
Arizona	12,089	595.5	22,577	256.6	49,261	11,366	11,221	128.3	63.7	11,435	5,679	868	467.2	192.9	11,356	538,077	13.1	16,98
Arkansas	5,359	273.5	12,490	148.7	51,041	11,906	4,587	54.9	34.5	11,977	7,527	772	218.6	114.2	7,903	283,264	10.2	14,44
California	111,279	5,297.5	173,781	2,361.2	47,605	13,587	103,417	1443.3	733.4	13,956	7,092	7,862	3,854.1	1,627.8	70,364	490,246	9.0	23,13
Colorado	10,281	639.7	22,501	353.7	. ,	15,719	9,187	139.0		15,129	.,	1,094	500.7	265.2	13,314	457,851	12.2	
Connecticut	7,654	625.3	20,587		81,691	15,552	6,667	93.5		14,019		987	531.8	264.3	13,920	538,825	14.1	
Delaware	1,627	168.6	5,436		103,646	17,081	1,329	27.4		20,605		298	141.3	75.3	4,107	473,893	13.8	
Dist. of Columbia	1,727	171.0	5,295	112.1	98,978	21,161	1,486	17.2		11,592		241	153.7	98.7	3,809	637,239	15.8	
Florida	34,128	2,532.0	81,031	1,069.1	, .	13,194	29,938	403.7		13,486		4,190	2,128.3	870.5	51,093	507,944	12.2	,
Georgia	25,174	1,404.6	57,018	703.8	,	12,343	22,933	266.2		11,608	.,	2,241	1,138.4	549.2	34,085	507,965	15.2	. ,
lawaii 	1,334	110.4	3,795		82,764	16,911	1,102	20.4		18,500		232	90.0	50.4	2,693	387,649	11.6	
daho 	3,285	118.5	5,986	65.8	,	10,992	2,884	34.7		12,045		401	83.7	43.9	3,102	208,930	7.7	,
llinois	50,066	1,966.5	82,326	1,072.4		13,026	47,254	618.8		13,096		2,812	1,347.7	690.8	35,072	479,207	12.5	
ndiana	14,436	625.1	26,249	311.7	.,	11,874	13,068	185.6		14,201		1,368	439.6	206.7	13,181	321,374	9.6	
owa	13,260	447.6	22,716		33,757	12,842	12,426	211.5		17,021	,	834	236.1	140.4	10,290	282,989	12.3	- / -
Kansas	9,311	371.1 429.6	15,612	201.7 222.6		12,916	8,731	156.1 70.7		17,878	., .	580 1.066	215.0	107.6 179.9	6,881	370,614	11.9	.,.
Kentucky ⊾ouisiana	7,580 10,381	429.6	19,955 21,817	237.0		11,156	6,514 9,258	101.4		10,860		1,123	358.9 364.5		13,441	336,730	12.6 11.2	
Maine	2,992	196.2		237.0 88.1	,	10,863	2,369	43.8		10,954 18,489		623	152.4	177.5	12,559	324,693	6.6	, .
Marvland	16.241	932.1	6,471 32,228	489.0	65,565 57.392	13,615 15,174	14.776	263.9		17,859		1.465	668.3	65.5 331.5	4,102 17,452	244,555 456.001	11.9	.,
Massachusetts	12.524	1.463.6	36,898		116.863	19.800	10,398	234.4		22.544	.,	2.126	1.229.2	594.2	26.500	578.079	12.5	
Michigan	27,489	950.5	43,517	434.4	-,	9,982	25,535	320.8		12,562		1,954	629.8	269.3	17,982	322,297	9.2	,
Minnesota	18.986	883.2	32,292		46,522	16,201	17,558	391.1		22,276		1,428	492.1	267.4	14,734	344,723	10.3	, .
Mississippi	9,373	406.3	18,179		43,349	10,105	8,529	88.6		10,383		844	317.8	137.6	9,650	376,334	11.4	.,
Missouri	15,689	723.5	32.458	389.4		11,998	14.076	177.4		12,603		1.613	546.1	280.0	18,382	338,580	11.4	, .
Montana	2.421	103.3	4.867		42.675	11,399	1.960	28.7		14,643	,	461	74.6	37.9	2.907	161.967	6.3	
Nebraska	7,794	286.7	14,409	186.9	,	12,971	7,128	117.8		16,531	.,	666	168.8	101.6	7,281	253,508	10.9	
Nevada	4.935	237.9	8,896	104.1	48.203	11.704	4.628	53.8		11.615		307	184.1	77.1	4.268	599.684	13.9	
New Hampshire	2,178	189.9	6,567		87,221	15,538	1,703	24.2		14,237	- ,	475	165.7	86.8	4,864	349,148	10.3	.,
New Jersey	16,856	1,761.5	50,780		104,502	16,268	14,415	167.7	92.8	11,636		2,441	1,593.8	733.2	36,365	652,818	14.9	
New Mexico	3,905	205.3	8,783	111.4		12,682	3,502	32.8	20.7	9,365		403	172.5	90.6	5,281	428,232	13.1	17,16
New York	77,143	3,397.6	138,890	1,990.2	44,042	14,329	71,698	880.0	589.2	12,274	8,218	5,445	2,517.5	1,401.0	67,192	462,347	12.3	
North Carolina	16,641	1,367.2	46,512	639.4	82,161	13,746	13,981	172.2	94.5	12,315	6,756	2,660	1,195.0	544.9	32,531	449,301	12.2	16,75
North Dakota Continued	3,007	101.7	5,457	74.5	33,822	13,656	2,751	50.0	40.1	18,175	14,566	256	51.7	34.4	2,706	201,826	10.6	12,730

Figure 24. (Continued) U.S. Child Care Industry Statistics (2012)																			
	Total							N	on-Employ	ers		Employers							
State	Estab- lish- ments	Total Revenue (mil.)	Total Employ- ment	Total Earnings (mil.)	Average Revenue	Earnings per Worker	Estab- lish- ments	Total Revenue (mil.)	Proprietor Earnings (mil.)	Average Revenue per Estab.	Earnings per Proprietor	Estab- lish- ments	Total Revenue (mil)	Employee Compen- sation (mil.)	Employ- ment	Average Revenue	Workers per Estab.	Earnings per Employee	
				=															
Ohio	25,930	1,427.0	55,810	738.4	55,034		23,348		194.7	14,018	8,339	2,582	1,099.7	543.7	32,462	425,927	12.6	16,750	
Oklahoma	6,596	397.9	16,640	220.9	60,322		5,580	84.0	53.8	15,057	9,644	1,016	313.9	167.1	11,060	308,960	10.9	15,108	
Oregon	10,220	403.6	- ,	299.8	39,496	., .	9,110	108.2	91.7	11,877	10,065	1,110	295.4	208.1	9,871	266,263	8.9	21,081	
Pennsylvania	20,573	1,597.9		815.3	77,669	13,904	16,974	194.1	116.3	11,433	6,849	3,599	1,403.8	699.0	41,662	390,072	11.6	16,778	
Rhode Island	2,001	182.7	5,163	82.0	91,321	15,889	1,719	28.5	14.9	16,570	8,674	282	154.3	67.1	3,444	546,786	12.2	19,490	
South Carolina	8,177	446.2	18,151	207.2	54,562	11,417	7,253	79.3	42.8	10,940	5,900	924	366.8	164.4	10,898	396,925	11.8	15,088	
South Dakota	3,184	140.6	5,776	80.6	44,164	13,948	2,913	59.9	38.0	20,564	13,045	271	80.7	42.6	2,863	297,698	10.6	14,866	
Tennessee	14,394	675.0	30,031	338.9	46,894	11,283	12,943	145.5	84.2	11,241	6,504	1,451	529.5	254.7	17,088	365,031	11.8	14,903	
Texas	58,330	2,976.1	128,233	1,611.0	51,022	12,563	52,912	613.7	383.6	11,599	7,250	5,418	2,362.4	1,227.4	75,321	436,010	13.9	16,295	
Utah	5,609	192.7	9,567	91.7	34,365	9,582	5,175	60.2	32.4	11,626	6,256	434	132.6	59.3	4,392	305,720	10.1	13,500	
Vermont	2,059	102.4	4,474	78.3	49,730	17,506	1,785	34.9	30.0	19,537	16,814	274	67.5	48.3	2,689	246,313	9.8	17,966	
Virginia	16,919	1,094.3	40,552	583.5	64,681	14,388	15,006	222.5	137.0	14,825	9,132	1,913	871.9	446.4	25,546	455,751	13.4	17,475	
Washington	10,785	860.9	26,616	448.2	79,824	16,840	8,548	161.7	97.6	18,921	11,416	2,237	699.2	350.6	18,068	312,542	8.1	19,406	
West Virginia	2,737	123.5	7,367	95.3	45,115	12,932	2,357	28.4	25.2	12,068	10,702	380	95.0	70.0	5,010	250,190	13.2	13,981	
Wisconsin	12,487	829.7	29,685	413.7	66,446	13,935	10,735	169.2	97.5	15,762	9,079	1,752	660.5	316.2	18,950	377,078	10.8	16,686	
Wyoming	1,616	66.0	3,227	44.7	40,810		1,394	21.3	16.3	15,306	11,705	222	44.6	28.4	1,833	200,729	8.2	15,478	

Source: Census Bureau, Bureau of Labor Statistics, and RegionTrack

Notes: National totals are derived from the 2012 Economic Census. Total employment on a job-equivalent basis is equal to wage and salary employment plus the number of proprietor establishments. Total earnings is equal to proprietor's earnings plus employee compensation. Employee compensation is estimated from state-level payroll estimates from County Business Patterns, which are scaled to sum to national compensation using ratios from the Bureau of Economic Analysis 2010 U.S. input-output use table.

Revenue per child in care is similarly highly variable across the states (*see Figure 25*). Revenue per child averages \$2,992 annually at the national level, but there is a more than three-fold difference between the states with the lowest- and highest-revenue per child. Utah's child care industry produces the least revenue per child at \$1,597 annually, while New York produces the most at \$5,032 per child annually. The District of Columbia generates even higher annual revenue per child in care at \$5,614 annually.

Along with New York, other states with revenue per child exceeding \$4,000 per year include New Jersey (\$4,913), Massachusetts (\$4,735), Delaware (\$4,501), and Rhode Island (\$4,115). All are among the states with the highest average cost of care in Figures 15 and 16.

Along with Utah, states with revenue per child in care below \$2,000 per year include Idaho (\$1,666) and North Dakota (\$1,997). All are among the lowest-cost of care states.

**Revenue and Provider Types.** Cost of care is not the sole factor determining average revenue per child in care. The share of the industry comprised by larger child care centers versus smaller family child care homes plays a major role in determining the economic influence of the industry in a state. Child care centers have a much higher average cost of care per child and, as a consequence, produce much more revenue per child in care than family child care homes.

The mix between the two types of providers differs greatly across the states. Several states located primarily in the mostly rural Plains and Farm Belt states have an unusually high share of total industry revenue derived from small family child care homes. States where more than 40 percent of child care industry revenue comes from family child care homes include North Dakota (49.2 percent), Iowa (47.2 percent), Minnesota (44.3 percent), South Dakota (42.6 percent), Kansas (42.1 percent), and Nebraska (41.1 percent). Minnesota, for example, is considered a high cost of care state, but average revenue per child is relatively low (thirty-fifth) because of the high share of low-cost family child care homes used.

In contrast, states with a very low share of total industry revenue from family child care homes are located mostly along the East Coast. Areas deriving 16 percent or less of total industry revenue from family child care homes include the states of Massachusetts (16.0 percent), New Mexico (16.0 percent), Rhode Island (15.6 percent), Connecticut (14.9 percent), Florida (15.9 percent), New Hampshire (12.8 percent), North Carolina (12.6 percent), Pennsylvania (12.1 percent), and New Jersey (9.5 percent) plus the District of Columbia (10.1 percent). Florida and New Mexico, for example, are among the lowest-cost of care states but rank tenth and nineteenth, respectively, in revenue per child in care due to a much greater role for more-costly child care centers and very low usage of lower-cost family child care homes.

Figure 25. Child Care Revenue Per Child and Per Capita											
		Children	Ages 0-14	Child	Child Care Industry Revenue						
State	Population	Total	In Paid Care	Total (millions)	Per Capita	Rank	Per Child in Paid Care	Rank			
United States	314,886,749	61,089,123	13,857,336	\$41,465.3	\$132		\$2,992				
Alabama	4,818,325	921,016	185,677	416.6	86	46	2,244	40			
Alaska	711,129	157,878	37,489	83.1	117	31	2,216	44			
Arizona	6,606,370	1,347,565	249,556	595.5	90	45	2,386	32			
Arkansas	2,952,835	591,324	116,426	273.5	93	44	2,349	33			
California	38,173,571	7,598,091	1,523,458	5,297.5	139	21	3,477	9			
Colorado	5,231,579	1,038,870	250,923	639.7	122	29	2,549	25			
Connecticut	3,587,851	639,273	170,047	625.3	174	6	3,677	7			
Delaware	921,871	170,244	37,465	168.6	183	4	4,501	5			
Dist. of Columbia	643,374	96,084	30,450	171.0	266	1	5,614	1			
Florida	19,483,192	3,324,369	721,768	2,532.0	130	24	3,508	10			
Georgia	9,929,714	2,077,631	451,323	1,404.6	141	19	3,112	13			
Hawaii	1,356,940	259,190	48,630	110.4	81	48	2,271	39			
Idaho	1,608,319	357,803	71,097	118.5	74	49	1,666	50			
Illinois	12,850,828	2,499,834	554,269	1,966.5	153	13	3,548	8			
Indiana	6,567,908	1,315,506	281,341	625.1	95	42	2,222	42			
lowa	3,088,982	602,101	192,930	447.6	145	15	2,320	37			
Kansas	2,869,113	605,708	157,306	371.1	129	25	2,359	34			
Kentucky	4,374,903	844,643	168,460 203,991	429.6 465.9	98 101	40 38	2,550 2,284	24 38			
Louisiana Maine	4,604,746	930,829	,	465.9 196.2	148	38 14	3,303	12			
	1,326,922	213,002 1,115,466	59,400 327,634	932.1	158	11	2,845	18			
Maryland Massachusetts	5,901,029 6,687,269	1,113,466	309,114	1,463.6	219	2	4,735	4			
Michigan	9,891,667	1,838,782	428,273	950.5	96	41	2,219	43			
Minnesota	5,417,954	1,066,261	381,357	883.2	163	10	2,219	35			
Mississippi	2,973,414	614,976	138,660	406.3	137	22	2,930	17			
Missouri	6,024,509	1,160,974	308,687	723.5	120	30	2,344	36			
Montana	1,011,500	186,272	41,899	103.3	102	37	2,465	27			
Nebraska	1,861,905	390,469	141,170	286.7	154	12	2,031	47			
Nevada	2,778,050	550,411	108,350	237.9	86	47	2,196	41			
New Hampshire	1,322,111	219,370	55,870	189.9	144	17	3,399	11			
New Jersey	8,890,230	1,666,413	358,559	1,761.5	198	3	4,913	3			
New Mexico	2,072,025	424,415	72,319	205.3	99	39	2,838	19			
New York	19,626,836	3,502,059	675,163	3,397.6	173	7	5,032	2			
North Carolina	9,740,617	1,907,861	449,998	1,367.2	140	20	3,038	16			
North Dakota	715,474	136,970	50,935	101.7	142	18	1,997	49			
Ohio	11,561,326	2,185,335	543,521	1,427.0	123	28	2,626	22			
Oklahoma	3,829,367	794,571	164,800	397.9	104	35	2,414	31			
Oregon	3,927,609	710,576	200,885	403.6	103	36	2,009	48			
Pennsylvania	12,767,532	2,234,011	520,530	1,597.9	125	26	3,070	14			
Rhode Island	1,047,315		44,411	182.7	174	5	4,115	6			
South Carolina	4,733,338		183,658	446.2	94	43	2,429	29			
South Dakota	841,455	174,688	64,387	140.6	167	8	2,184	45			
Tennessee	6,475,777	1,240,428	262,424	675.0	104	34	2,572	23			
Texas	26,322,467	5,900,424	1,220,505	2,976.1	113	33	2,438	30			
Utah	2,895,768	759,465	120,690	192.7	67	51	1,597	51			
Vermont	625,983		33,970	102.4	164	9	3,014	15			
Virginia	8,144,505	1,555,039	402,039	1,094.3	134	23	2,722	21			
Washington	6,919,140	1,328,817	352,085	860.9	124	27	2,445	28			
West Virginia	1,852,953		50,351	123.5	67	50	2,452	26			
Wisconsin	5,739,704		302,780 30,307	829.7	145	16	2,740	20 46			
Wyoming	579,448	115,337	30,307	66.0	114	32	2,176	46			

Source: Census Bureau – Population Estimates, Current Population Survey, Non-employer Statistics, and 2012 Economic Census

Notes: Population estimates are for 2013. Child care industry revenue is for 2012.

Revenue and Earnings across States. Along with cost of living in a state, the earnings of child care workers are similarly intertwined with the average revenue per child in care and the mix of child care providers operating within a state. Figures 24 and 25 illustrate the number of child care workers and their earnings as well as the revenue earned by child care centers versus family child care homes. Because family child care homes generally charge lower fees per child than child care centers, they produce less revenue per child and receive much less revenue per worker on average than child care centers. This in turn reduces the average compensation received by operators of family child care homes. The average worker in an employer firm (mostly child care centers) received \$17,850 annually in compensation in 2012 versus an estimated \$8,111 in annual net proprietor earnings after expenses for each non-employer firm (mostly family child care homes).

Overall, U.S. child care establishments are staffed by slightly more employees working in traditional employer facilities (873,251 workers) than by proprietors operating non-employer family child care homes (693,325 proprietors). This ratio of paid employees to proprietors varies greatly across the states. The share of total employment from family child care homes ranges from a low of 24.4 percent in Delaware to a high of 59.5 percent in California.

More than 50 percent of industry workers are self-employed proprietors operating family child care homes in eleven states (California, Michigan, Illinois, Kansas, Iowa, Minnesota, Utah, Nevada, New York, South Dakota, and North Dakota). The high share of family child care homes works to reduce the average earnings received across all child care workers in these states.

Six states (Delaware, New Hampshire, Massachusetts, New Jersey, Pennsylvania, and Hawaii) and the District of Columbia have less than 30 percent of industry employment in family child care homes. Child care centers are much more prevalent in these regions. The average earnings of child care workers in these areas is enhanced by the low share of relatively low-paid proprietors operating family child care homes.

## The Child Care Industry's Interrelationships with Other Sectors of the Economy

Like all industry sectors, the child care industry has a strong economic interdependence with the broader economy. As a result, the child care sector's \$41.5 billion in direct economic contribution is associated with a variety of economic activities in other parts of the economy. Activity in the child care industry affects other industries through two primary channels: (i) the spending of earnings received by owners and employees working within the child care sector, and (ii) purchases of goods and services by child care providers to support the direct operations of child care facilities. At the state level, the size and nature of these economic flows are influenced by many factors including the share of children in paid care, the overall cost of care, mix of care providers, and the average revenue produced per child.

Figure 26 illustrates how an input-output model of the economy estimates that the \$41.5 billion in revenue produced by the U.S. child care industry in 2012 was subsequently respent by the industry. The primary categories are purchases of goods and services and various forms of value added, including employee compensation and proprietor's income.

Compensation of Employees and Proprietors' Earnings. The largest single factor in determining the overall economic impact of the sector is the amount of direct earnings received by workers and owners providing child care services. More than half of all revenue is used to compensate employees and owners working within the industry. The large share of revenue devoted to earnings reflects the highly labor-intensive nature of child care provision and is typical of most service-providing sectors.

Compensation paid to child care industry employees is the largest single component of earnings in 2012, totaling an estimated \$18.2 billion. Wage and salary earnings comprise 85 percent of this total, or \$15.6 billion; the remaining \$2.6 billion is for various employee benefits.<sup>37</sup> The share of these earnings respent within the state is a key factor in determining the size of any secondary economic influence the child care industry has on the broader state economy, as is the case for all similar service industries.

	Figure 26. Child Care Industry Purchases (20	12)	
NAICS Code	Industry Sector	Purchases (\$millions)	Share of Industry Output
11	Agriculture, Forestry, Fishing and Hunting	0	0.0%
21	Mining, Quarrying, and Oil and Gas Extraction	20	0.0%
22	Utilities	439	1.1%
23	Construction	202	0.5%
31-33	Manufacturing	3,691	8.9%
42	Wholesale trade	515	1.2%
44-45	Retail Trade	7	0.0%
48-49	Transportation and Warehousing	336	0.8%
51	Information	473	1.1%
52	Finance and Insurance	1,094	2.6%
53	Real Estate and Rental and Leasing	5,504	13.3%
54	Professional, Scientific, and Technical Services	1,076	2.6%
55	Management of Companies and Enterprises	419	1.0%
56	Administrative and Support & Waste Management Serv.	600	1.4%
61	Educational Services	0	0.0%
62	Health Care and Social Assistance	0	0.0%
71	Arts, Entertainment, and Recreation	178	0.4%
72	Accommodation and Food Services	512	1.2%
81	Other Services (except Public Administration)	296	0.7%
	Federal Government and Enterprises	16	0.0%
	State and Local Government and Enterprises	243	0.6%
	Total Intermediate Purchases	15,618	37.7%
	Compensation of employees (wages & salary earnings plus supplements)	18,154	43.8%
	Taxes on production and imports, less subsidies	336	0.8%
	Gross operating surplus (including proprietor's earnings)	7,358	17.7%
	Total Value Added	25,848	62.3%
	Total Industry Output	41,465	100.0%

Source: Bureau of Economic Analysis.

Notes: Intermediate purchase coefficients are from the 2010 IMPLAN input-output model

The large number of sole proprietors operating child care businesses earned \$5.6 billion in net proprietor income, or roughly 75 percent of the \$7.4 billion in gross operating surplus reported for the industry in Figure 26.<sup>38</sup>

*Industry Purchases*. Purchases of goods and services by child care establishments are the second-largest source of child care industry spending after employee compensation. Industry purchases totaled an

estimated \$15.6 billion in 2012, or slightly more than one-third (37.7 percent) of total industry revenue.<sup>39</sup> The net effects of these child care industry purchases on the rest of the state and regional economies are determined in part by the share of these goods and services purchased within the region rather than imported, and by the degree to which such spending is a net addition rather than a substitute for spending that would have been undertaken by a stay-at-home parent in the absence of paid child care.

Purchases made by child care providers are spread across most major industry sectors. The two largest categories are real estate (\$5.5 billion) and manufactured goods (\$3.7 billion). Real estate remains a key element of the industry, with nearly all child care operators owning or leasing a building, home, or other structure that must be maintained on a regular basis. Most purchases of manufactured goods are for food, transportation equipment, paper products, plastic products, toys and games, cleaning products, and items needed for real estate and grounds maintenance.

Other major purchases by the industry include finance and insurance (\$1.1 billion, primarily for real estate rental) and professional, scientific, and technical services (\$1.1 billion, mostly legal, accounting, and marketing services). Smaller purchases include utilities (\$439 million), transportation and warehousing (\$336 million, primarily for vehicle transportation), accommodation and food services (\$512 million, primarily for food preparation), and information (\$473 million, for telecommunications, data processing, and publications).

The exact mix of purchases made by the child care sector varies considerably across the states. State-level prices for the various goods and services purchased by child care providers, especially real estate, will influence the share of total spending within each category.

*Taxes*. The child care industry produces only a modest direct economic contribution in the form of net tax payments. Taxes paid by the child care industry after netting out subsidies received totaled an estimated \$336 million in 2012 (*see Figure 26*). 40 The relatively small net tax impact is traced to large federal and state subsidies provided to the industry and the low average earnings of individuals working in the industry.

## Estimating Economic Multiplier Effects

Economic impact multipliers are commonly used to estimate the effect of a change in economic activity in a given industry on the broader regional or national economy. Most multipliers are derived from a detailed input-output model of the economy that maps the various spending flows between firms, households, and governments. State-level multipliers are typically estimated by adjusting, or regionalizing, national purchasing patterns for a given industry sector such that they better reflect the actual economic flows within the states. <sup>41</sup> It is important to note that these multipliers represent estimates of gross economic effects and do not account for any public or private costs associated with child care provision.

Multipliers provide a convenient method for estimating the effects that a change in output, employment, or earnings within an industry sector may have on broader regional or state economic activity. For the

child care sector, output multipliers provide an estimate of the change in output in the broader economy per dollar of new output (or revenue) generated within the child care industry. Employment multipliers provide an estimate of the number of jobs generated in the broader economy as new jobs are added in the child care sector. Similarly, earnings multipliers provide an estimate of the amount of additional earnings generated in the broader economy per new dollar of earnings received by child care business owners and employees.

Figure 27 provides state-level RIMS II multipliers estimated by the Bureau of Economic Analysis for the child care sector. <sup>42</sup> In interpreting the multipliers, a given change in economic activity taking place within the child care industry is deemed the *direct* effect. The direct effect, in turn, produces both indirect and induced effects which are estimated using multipliers.

The *indirect* effect is the economic activity triggered in a region as a result of purchases of goods and services by child care businesses (*see Figure 26*) that are made within the region. The expected indirect effect is summarized using a Type I multiplier, which is calculated as [(direct effect + indirect effect) / direct effect]. The multiplier is larger in states where a higher share of purchases made by the child care industry are met by producers within the state rather than imported. The estimated share of purchases made within the state is referred to as the regional purchase coefficient (RPC).<sup>43</sup> For the child care industry, RPCs are usually quite high, generally at least 85 percent of purchases and often nearly 100 percent of the purchases of a child care establishment.

The *induced* effect reflects the economic activity triggered in other sectors of the economy as a result of new household spending in the region out of owner and employee earnings received as part of the direct and indirect effects. The expected induced effect is summarized using a Type II multiplier which is calculated as [(direct effect + indirect effect + induced effect) / direct effect]. Type II child care multipliers will generally be larger in regions where a larger share of child care facility purchases are made within the state or where a greater share of the earnings generated directly and indirectly through the child care sector is subsequently spent within the region. With some exceptions, the size of a Type II multiplier for most regions is closely related to the size of the corresponding Type I multiplier.

These indirect and induced effects of economic activity are generated by all industries and are not unique to child care. However, the effects of the child care industry on overall economic activity in a state will differ from that of other industries depending upon the distribution of the child care industry's spending on other goods and services and the degree to which that spending remains in the state or region.

Calculating Multiplier Effects. Indirect and induced effects resulting from a change in output, employment, or earnings in the child care sector are easily estimated for a state using Bureau of Economic Analysis multipliers in Figure 27. In Illinois, for example, an additional \$1 million in direct economic output in the child care sector is associated with \$510,000 in additional indirect output (calculated as the direct effect times the Type I multiplier of 1.51 minus 1) in other industry sectors across the state as a result of purchases made by child care providers.

Figure 27. Child Care Industry Input-Output Multipliers (RIMS) Output **Earnings** Employment Type I State Type II Type I Type II Type I Type II 1 32 Alabama 1.71 1.33 1.82 1.29 1.14 Alaska 1.64 1.30 1.26 1.21 1.53 1.13 Arizona 1.38 1.92 1.34 1.82 1.20 1.43 1.73 Arkansas 1.32 1.26 1.60 1.14 1.31 California 1.50 1.46 2.16 2.02 1.22 1.49 Colorado 1.47 2.13 1.43 2.00 1.23 1.52 Connecticut 1.43 1.94 1.39 1.82 1.17 1.35 1.82 1.30 1.63 1.30 Delaware 1.38 1.15 Dist. of Columbia 1.27 1.35 1.19 1.24 1.11 1.14 Florida 1.40 1.98 1.37 1.88 1.22 1.48 2.08 1.40 Georgia 1.44 1.94 1.18 1.40 Hawaii 1.34 1.82 1.29 1.70 1.18 1.41 ldaho 1.29 1.66 1.25 1.56 1.13 1.27 2.21 1.48 2.08 Illinois 1.51 1.20 1.45 Indiana 1.36 1.88 1.30 1.73 1.17 1.38 1.27 1.62 1.22 1.51 1.10 1.22 lowa Kansas 1.29 1.66 1.25 1.55 1.13 1.28 Kentucky 1.37 1.89 1.31 1.74 1.14 1.32 Louisiana 1.32 1.78 1.28 1.68 1.13 1.30 1.28 1.70 Maine 1.32 1.80 1.17 1.41 Maryland 1.41 1.92 1.38 1.82 1.19 1.41 Massachusetts 1.46 2.02 1.43 1.92 1.20 1.42 Michigan 1.79 1.36 1.91 1.32 1.34 1.15 Minnesota 1.44 2.02 1.39 1.87 1.20 1.44 1.27 1.23 1.28 Mississippi 1.69 1.58 1.12 1.45 2.04 1.37 Missouri 1.86 1.18 1.40 Montana 1.26 1.63 1.23 1.55 1.12 1.27 1.50 Nebraska 1.26 1.59 1.23 1.22 1.11 1.34 1 29 1 33 Nevada 1.77 1.66 1.16 **New Hampshire** 1.41 1.93 1.39 1.83 1.20 1.42 1.50 2.12 1.44 1.96 1.21 1.45 **New Jersey New Mexico** 1 29 1 26 1.61 1 33 1 70 1.15 New York 1.48 1.99 1.40 1.81 1.18 1.37 1.98 **North Carolina** 1.40 1.36 1.86 1.20 1.46 North Dakota 1.22 1.55 1.18 1.45 1.09 1.20 Ohio 1.43 2.06 1.37 1.90 1.15 1.36 1.33 Oklahoma 1.82 1.30 1.71 1.15 1.34 Oregon 1.40 1.91 1.35 1.79 1.17 1.37 Pennsylvania 1.46 2.09 1.40 1.93 1.20 1.46 1.40 1.88 1.36 1.39 Rhode Island 1.77 1.18 **South Carolina** 1.37 1.91 1.32 1.77 1.17 1.38 South Dakota 1.21 1.52 1.17 1.42 1.07 1.18 Tennessee 1.44 2.08 1.39 1.92 1.17 1.38 Texas 1.47 2.16 1.42 2.01 1.17 1.38 Utah 1.44 2.06 1.38 1.91 1.20 1.43 Vermont 1.32 1.74 1.27 1.63 1.15 1.32 Virginia 1.41 1.92 1.35 1.78 1.18 1.39 Washington 1.39 1.93 1.34 1.80 1.17 1.39 West Virginia 1.26 1.63 1.22 1.53 1.10 1.24 Wisconsin 1.37 1.88 1.32 1.76 1.17 1.40 Wyoming 1.19 1.48 1.16 1.41 1.12 1.26 U.S. Weighted Average 1.43 2.00 1.38 1.86 1.18 1.40

Source: Bureau of Economic Analysis—RIMS II

As added earnings from the direct and indirect effects are spent in the state economy, an additional \$700,000 in induced output (calculated as the direct effect times the Type II multiplier minus the Type I multiplier, or 2.21-1.51= 0.70) is generated statewide. Overall, \$1 million of new direct output in the child care sector produces an estimated \$1,210,000 in indirect and induced output, for a total of \$2,210,000 (Type II multiplier of 2.21) in total output statewide. Employment and earnings multipliers are use in a similar manner.

### Estimated National and State-Level Multiplier Effects

Estimated total indirect and induced effects for the child care industry are detailed in Figure 28.<sup>44</sup> The national effect is estimated indirectly by summing the individual state effects but can also be estimated directly using national multipliers.<sup>45</sup>

*U.S. Multiplier Effects*. At the national level, \$41.5 billion in direct output<sup>46</sup> generated within the organized child care industry supports an estimated \$41.6 billion in additional indirect and induced output in other industry sectors. In other words, each dollar of direct revenue produced by the child care sector supports roughly one additional dollar in output in other industry sectors nationwide. In total, output in the U.S. child care industry supports an estimated \$83.1 billion in total U.S. output, both directly and through indirect and induced multiplier effects.

The \$21.2 billion in employee compensation and proprietor's earnings generated directly within the child care industry is associated with an additional \$18.25 billion in estimated indirect and induced earnings nationally. This suggests that slightly less than one dollar (\$0.86) of additional earnings in the broader economy is supported by each new dollar earned by workers and proprietors in the child care sector. In total, multiplier-based estimates suggest that approximately \$39.5 billion in earnings in the U.S. is supported indirectly by child care sector earnings.

In terms of employment, 1.57 million proprietors and wage and salary employees working in the child care sector support an estimated 624,500 jobs in other industry sectors through indirect and induced effects. Each new direct child care job supports slightly less than one-half an additional job, a reflection of the relatively low employment multipliers (average of 1.4) for the child care sector across the states. In total, an estimated 2.2 million self-employed proprietors and wage and salary workers are supported both directly and indirectly by the organized child care sector.

State Multiplier Size. The estimated child care multipliers in Figure 27 differ greatly across the states. Output multipliers are highly correlated with the overall size of the economy, with larger states capable of meeting more of the demand for goods and services by child care establishments within the state. Larger states are also able to attract more local spending out of earnings by child care workers and proprietors.

States with the highest Type II output multiplier for the child care sector include Illinois (2.21), Texas (2.16), California (2.16), Colorado (2.13), New Jersey (2.12), and Pennsylvania (2.09). All rank among the largest state economies. Conversely, states with the smallest Type II output multipliers include Wyoming (1.35), South Dakota (1.52), North Dakota (1.55), Nebraska (1.59), Iowa (1.62), and Montana

(1.63). All are ranked among the smallest state economies. In fact, the Type II output multipliers (direct + indirect + induced effects) in the smallest states are only roughly equal in size to the typical Type I output multipliers (direct + indirect effects only) found in the largest states.

Fig	ure 28	. Chilo	d Care	Indus	try Gro	ss Eco	nomic	Multi	plier Eff	<b>ects</b> (20	)12)			
		Out	out			Earn	ings		Employment					
01-1-	Direct			T-4-1	Direct (millions) Indirect Induced			T-4-1	Direct	I	T.4.1			
State Alabama	(millions) \$416.6	Indirect \$138.2	\$204.5	*759.3		\$54.4	\$78.0	*320.0	(total jobs)	Indirect	3.147	<b>Total</b> 23,514		
Alaska	83.1	21.3	31.5	135.9	\$187.6 60.7	13.0	19.3	93.0	17,810 3.483	2,557 451	604	4,539		
Arizona	595.5	224.5	324.6	1,144.7	256.6	88.3	122.3	93.0 467.2	22,577	4,511	5,120	32,208		
Arkansas	273.5	86.9	112.1	472.6	148.7	39.2	50.4	238.3	12,490	1,787	2,104	16,381		
California	5,297.5	2,642.4		11,429.3	2,361.2	1,084.3	1,322.5	4,768.0	173,781	38,232	46,521	258,534		
Colorado	639.7	300.3	422.6	1,362.7	353.7	152.6	202.2	708.5	22,501	5,274	6,487	34,263		
Connecticut	625.3	267.4	317.9	1,210.5	320.2	123.4	137.6	581.1	20,587	3,432	3,771	27,790		
Delaware	168.6	63.9	74.2	306.7	92.9	27.9	30.9	151.6	5,436	805	817	7,059		
Dist. of Columbia	171.0	45.8	13.8	230.6	112.1	21.5	5.0	138.6	5,295	587	131	6,013		
Florida	2,532.0	1,011.3	1,463.3	5,006.6	1,069.1	397.9	541.3	2,008.4	81,031	17,730	20,995	119,755		
Georgia	1,404.6	623.2	888.4	2,916.2	703.8	280.0	379.0	1,362.8	57,018	10,275	12,590	79,882		
Hawaii	110.4	37.7	52.4	200.5	64.2	18.8	26.2	109.1	3,795	701	859	5,354		
Idaho	118.5	34.0	44.7	197.2	65.8	16.1	20.9	102.9	5,986	767	876	7,629		
Illinois	1,966.5	1,006.5	1,377.7	4,350.7	1,072.4	514.4	640.0	2,226.9	82,326	16,177	20,507	119,010		
Indiana	625.1	224.9	327.0	1,177.0	311.7	94.1	134.9	540.7	26,249	4,399	5,531	36,180		
lowa	447.6	119.6	157.3	724.5	291.7	63.8	83.7	439.3	22,716	2,356	2,735	27,807		
Kansas	371.1	108.8	136.7	616.6	201.7	51.0	60.5	313.1	15,612	2,084	2,217	19,913		
Kentucky	429.6	160.9	221.3	811.8	222.6	69.8	94.6	387.0	19,955	2,810	3,518	26,283		
Louisiana	465.9	148.0	215.6	829.5	237.0	67.1	94.8	398.9	21,817	2,854	3,656	28,327		
Maine	196.2	63.0	93.7	352.9	88.1	25.0	36.7	149.8	6,471	1,129	1,506	9,106		
Maryland	932.1	379.2	478.3	1,789.6	489.0	185.3	216.1	890.4	32,228	6,146	7,019	45,393		
Massachusetts	1,463.6	670.1	826.5	2,960.2	730.6	314.6	354.0	1,399.2	36,898	7,213	8,306	52,417		
Michigan	950.5	343.5	523.0	1,817.0	434.4	139.0	205.7	779.2	43,517	6,480	8,503	58,499		
Minnesota	883.2	391.5	505.7	1,780.5	523.2	204.0	253.5	980.7	32,292	6,355	7,715	46,362		
Mississippi	406.3	109.3	171.7	687.3	183.7	41.6	64.5	289.8	18,179	2,178	2,890	23,247		
Missouri	723.5	323.6	428.7		389.4	145.4	188.6	723.5	32,458	5,739	7,222	45,419		
Montana	103.3	26.4	38.8	168.5	55.5	12.5	17.8	85.9	4,867	588	721	6,176		
Nebraska	286.7	74.8	93.3	454.7	186.9	42.7	50.5	280.1	14,409	1,516	1,640	17,564		
Nevada	237.9 189.9	80.0 78.5	102.9 98.0	420.7 366.4	104.1 102.0	30.2 39.4	38.9 45.0	173.2 186.5	8,896	1,427 1,292	1,509 1,470	11,831		
New Hampshire New Jersey	1,761.5	879.7	1,094.1	3,735.3	826.1	365.3	427.3	1,618.7	6,567 50,780	10,572	12,324	9,328 73,676		
New Mexico	205.3	59.3	84.3	348.9	111.4	28.7	39.2	179.2	8,783	1,294	1,617	11,694		
New York	3,397.6	1.614.5	1.747.0		1.990.2	788.3	815.4	3,593.9	138,890	24,653	26,695	190,237		
North Carolina	1.367.2	547.7	797.1	2.712.0	639.4	230.1	317.8	1,187.3	46,512	9,493	11,856	67,861		
North Dakota	101.7	22.7	32.8	157.2	74.5	13.8	19.6	107.9	5,457	471	613	6,541		
Ohio	1,427.0	613.5		2.936.7	738.4	273.9	390.3	1.402.6	55,810	8.433	11,754	75,997		
Oklahoma	397.9	132.7	192.3	722.9	220.9	65.4	91.8	378.1	16,640	2,539	3,196	22,375		
Oregon	403.6	162.0	207.2	772.9	299.8	103.7	132.5	536.0	18,981	3,219	3,792	25,993		
Pennsylvania	1,597.9	731.0	1,010.7	3,339.6	815.3	323.7	433.6	1,572.5	58,636	11,874	15,087	85,596		
Rhode Island	182.7	72.9	88.3	344.0	82.0	29.8	33.6	145.4	5,163	954	1,067	7,184		
South Carolina	446.2	165.6	242.0	853.8	207.2	65.5	94.5	367.2	18,151	3,048	3,841	25,040		
South Dakota	140.6	29.2	43.5	213.3	80.6	13.3	20.6	114.4	5,776	395	618	6,789		
Tennessee	675.0	299.1	427.5	1,401.6	338.9	132.4	180.6	651.8	30,031	4,967	6,463	41,461		
Texas	2,976.1	1,396.7	2,069.9	6,442.7	1,611.0	676.3	949.4	3,236.7	128,233	21,479	27,416	177,128		
Utah	192.7	84.5	120.0	397.2	91.7	35.2	48.6	175.5	9,567	1,947	2,181	13,696		
Vermont	102.4	32.4	42.8	177.7	78.3	21.4	28.0	127.7	4,474	662	790	5,925		
Virginia	1,094.3	444.2		2,098.4	583.5	204.4	250.4	1,038.3	40,552	7,433	8,516	56,502		
Washington	860.9	337.0	463.1	1,661.0	448.2	151.3	205.3	804.8	26,616	4,613	5,648	36,876		
West Virginia	123.5	32.2	46.0	201.7	95.3	20.8	29.5	145.6	7,367	735	999	9,101		
Wisconsin	829.7	304.6	425.6	1,559.9	413.7	130.6	182.0	726.2	29,685	5,162	6,679	41,526		
Wyoming	66.0	12.6	19.3	97.9	44.7	7.3	10.9	62.8	3,227	373	477	4,077		
United States	41,465.3	17,779.7	23,845.3	83,090.3	21,211.4	8,038.7	10,216.2	39,466.3	1,566,576	282,165	342,317 2	2,191,059		

Source: Census Bureau, Bureau of Economic Analysis, and RegionTrack

Earnings multipliers at the state level tend to reflect the same relative rank as output multipliers in Figure 27. The close correspondence between output and earnings multipliers reflects the fact that earnings are a fairly constant share of output across all states and reflect similar underlying economic behavior. With few exceptions, states with the largest output multipliers tend to have the largest earnings multipliers. As with output multipliers, multiplier effects from increased earnings in the child care sector are expected to be largest in the largest states.

Employment multipliers have a similar tendency to be larger in the largest states. However, they vary across the states to a greater degree than output and earnings multipliers. The added variability mostly reflects widely differing levels of intensity in the use of labor at the industry level across state economies. For example, the highly labor-intensive Florida economy has only the sixteenth-highest Type II output multiplier but the third highest Type II employment multiplier. Conversely, Texas has the second-largest Type II output multiplier but only the twenty-second highest Type II employment multiplier. States with larger child care industry employment multipliers tend to make a greater share of purchases from industries that are more labor intensive, or child care workers and proprietors will spend their earnings in industries that are more labor intensive on average. A high employment multiplier can also simply reflect a higher overall labor intensity within a state economy.

## V. What Role Can Child Care Play in Regional Economic Growth?

Prior sections of the report examine both the direct economic benefits of child care to working parents and the direct and spillover effects generated by the child care industry itself. Not as well understood is the indirect role played by organized child care in regional economic growth and development. Child care works to stimulate regional growth primarily through its indirect support of increased labor force participation and education of the workforce in a region.

## Linkages from Child Care to Regional Economic Growth

Child care contributes to regional economic growth by helping to employ a region's existing labor resources more efficiently. Many parents, especially single parents and low-skilled workers, may opt to remain out of the labor force if they lack access to affordable child care.

Lack of access to dependable child care can contribute to inefficiency in the use of labor. Survey results from the Current Population Survey highlight some of the child care-related concerns faced by working parents.<sup>47</sup> In 2014, child care problems reportedly hindered a parent from spending more time at work or school in 6.2 percent of families. A parent in 6.6 percent of households suffered lost time either at work or school in the survey month due to paid child care failures, with an average lost time of 17.7 hours. A reported 3.0 percent of all families with a working parent have a child on a waiting list for organized care.

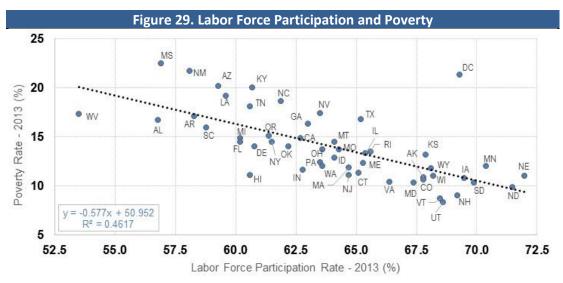
*Child Care and Workforce Development*. Child care supports a region's overall economic output through two distinct economic channels—increased labor force participation and added education and training. Education and training enhance the quality of the labor force while the participation rate affects the size of the labor force.

Increased labor force participation plays a role in regional economic growth in two primary ways. <sup>48</sup> First is the direct increase in total employment, household earnings, and total economic output in a region as child care assists new workers to enter the labor force. Second, demand increases in the market-based child care industry as a portion of parents entering the labor force choose to use organized child care services (*see Figure 9*).

Empirical research continues to demonstrate that the labor force participation rate is a fundamental determinant of both income levels and poverty rates across the states. <sup>49</sup> Poverty, in particular, is closely intertwined with a parent's work status. Labor force participation and poverty rates at the state level are shown in Figure 29, with high-participation rate states generally having much lower poverty rates.

States with high participation rates and low poverty rates are found primarily in the Mountain West (Utah, Colorado, Wyoming), Upper Midwest (Wisconsin, Minnesota), Farm Belt (Nebraska, North Dakota, Iowa), some of the Mid-Atlantic States (Virginia and Maryland), and portions of New England (New Hampshire and Vermont).

Regions with low participation rates and high poverty rates traditionally include much of the South (Mississippi, Alabama, Arkansas, and South Carolina), the Southwest (New Mexico and Arizona), portions of Appalachia (West Virginia, Tennessee, and Kentucky), and Louisiana.



Source: Bureau of Labor Statistics and Census Bureau

Labor force participation rates range from about 55 percent in the lowest-participation states to just above 70 percent in the highest-participation states. There is also approximately a 15 percent range in poverty rates at the state level, from just below 8 percent in many of the highest-participation states to more than 22 percent in the lowest-participation states. The wide range in participation rates suggests strong potential for reduced poverty rates in many states through increased employment. Based on the linear best-fit line in Figure 29, a 1 percent increase in the overall participation rate in a state is associated with a 0.57 percent lower rate of poverty on average.

As with poverty rates, labor force participation similarly helps explain differences in income levels across the states. Figure 30 illustrates the strong tendency for states with the highest participation rates to have the highest cost of living-adjusted median household incomes. Again, similar to poverty rates, there is tremendous variation in household income across the states. Residents living in the highest-participation rate states tend to earn on average \$20,000 more in annual income than the lowest-participation states after adjusting for differences in cost of living. The best-fit line in Figure 30 suggests that a 1 percent increase in labor force participation is associated with an additional \$1,145 in cost of living-adjusted median income on average across the states.

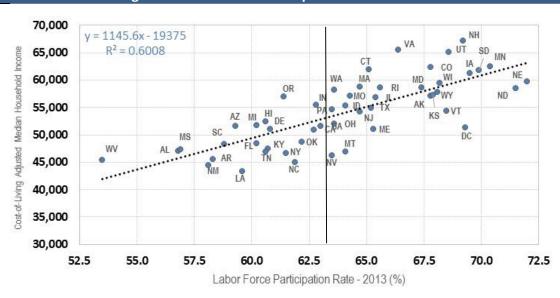


Figure 30. Labor Force Participation and Income Level

Source: Bureau of Labor Statistics; Bureau of Economic Analysis – Price Parity Index; Census Bureau

Child Care and Education. Access to affordable child care supports parents in seeking additional education and training. Access to affordable child care is most important for low-skilled workers with fewer employment opportunities but affects all parents with children of child care age who are seeking additional work-related skills. Among mothers enrolled in school and out of the labor force, more than one in four (26.2 percent) with a child ages 14 and under use organized care as a regular arrangement (see Figure 6). The share of mothers in school using paid care rises to 43.1 percent for those with children ages 4 and under.

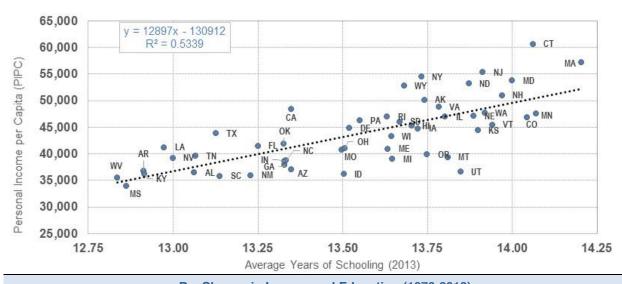
Most forms of education and training are believed to contribute to higher earnings over the work life. <sup>51</sup> Figure 31 illustrates the association between education and income at the state level, both currently and as education levels have changed over time. Panel A illustrates the current level of per capita personal income relative to the level of education measured by average years of schooling. Much like the labor force participation rate, higher education is consistently associated with higher income levels across the states. States with the highest income and education levels are traditionally found in the Northeast and include Connecticut, Massachusetts, Maryland, New Jersey, and New Hampshire. Other states outside the Northeast with high education and income levels include North Dakota, Colorado, Minnesota, Washington, Kansas, and Nebraska.

The linear best-fit line in panel A suggests that an additional year of average level of schooling for a state is associated with an additional \$12,897 in personal income per capita across the states.

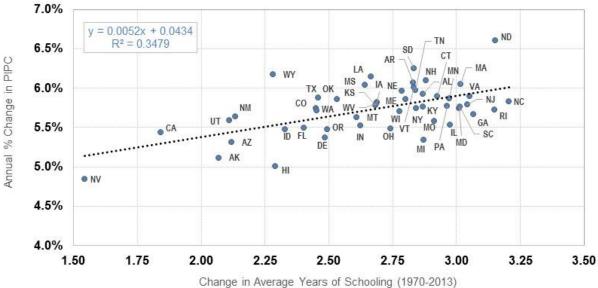
States with the lowest income and education levels are traditionally found in the South and include West Virginia, Mississippi, Arkansas, Kentucky, Alabama, Tennessee, Florida, and Louisiana. Other states outside the South with low income and education levels include Nevada, New Mexico, and Arizona.

### Figure 31. Income and Education

#### A. Income and Education (2013)



# B. Change in Income and Education (1970-2013)

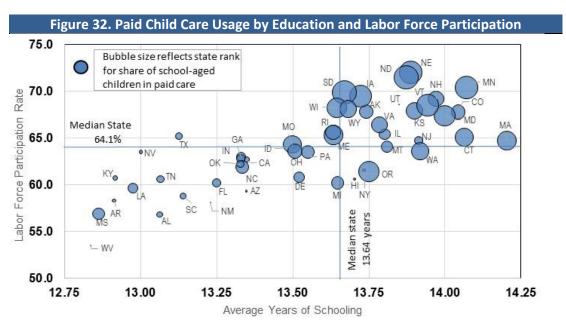


Source: Bureau of Labor Statistics and Census Bureau

# The Association between Labor Force Participation, Education, and Paid Child Care

Figure 32 illustrates the share of paid child care usage across the states relative to both labor force participation and education.

States trailing well behind on both measures are easily identified in the lower left quadrant of Figure 32. A tier of eleven states including West Virginia, Mississippi, Arkansas, Louisiana, Kentucky, Alabama, Tennessee, South Carolina, New Mexico, Florida, and Arizona all have very low labor force participation rates and education levels. They also tend to use very little paid child care. These states have a labor force participation rate that is at least 3 percentage points below that of the median state and average years of schooling at least 0.3 years below that of the median state. These eleven states also rank well below the median state based on both household income and poverty rate (*see Figure 33*).



Source: Bureau of Labor Statistics and Census Bureau

A second tier of eight states ranks well below the median state based on either labor force participation or education, or trails slightly on both measures. This tier includes Nevada, Texas, Georgia, Indiana, North Carolina, California, Oklahoma and Delaware. These states also use relatively little organized child care, with North Carolina the highest ranked at twenty-third in terms of paid child care usage. These states generally rank closer to the national average on income and poverty measures (*see Figure 33*) relative to the first tier. All of the states except Delaware have median-like labor force participation rates but rank well behind the median state in terms of education.

Eight states in a third tier fall slightly below the median state based on either the participation rate or education level in Figure 32. However, these states do not necessarily rank among the lowest-income or highest-poverty states (*see Figure 33*) and use a greater share of paid child care services. This tier includes Michigan, Pennsylvania, Ohio, Missouri, Idaho, Hawaii, New York, and Oregon. Four of these states—Missouri, Idaho, Pennsylvania, and Ohio—trail the median state in education. Conversely, Hawaii, New York, Michigan, and Oregon fall well below the median in labor force participation.

		Į,	come M	aaeuu				D	werty Me	acur	96			Laho	r Fore	ο Mo	acurec			
	Income Measures Price-							Poverty Measures Share of							Labor Force Measures  Labor Women's					
State	Median Income	Rank	Parity Adjusted Median	Rank	Per Capita Personal Income	Rank	Poverty Rate (%)	Rank	Minimum Wage Workers (%)	Rank	At-risk Employ- ment (%)	Rank	Average Years of School- ing		Force Part. Rate	Rank	Labor Force Part. Rate			
United States	51,939		51,939		44,765		14.5		4.3		31.0		13.33		63.3		58.5	;		
Alabama	41,381	46	46,970	42	36,481	45	16.7	39	6.8	48	34.3	42	13.06	45	56.8	50	54.0	50		
Alaska	61,137	10	57,084	19	50,150	10	10.9	10	3.0	7	35.2		13.74		67.8	13	66.1			
Arizona	50,602	31	51,582	31	36,983	42	20.2	48	4.1	17	32.2	31	13.35	35	59.3	45	55.5	46		
Arkansas	39,919	50	45,570	47	36,698	43	17.1	41	6.8	48	34.4	44	12.91	49	58.3	47	54.6	48		
California	57,528	15	50,955	36	48,434	12	14.9	34	1.3	2	34.4	44	13.35		62.7	33	57.9			
Colorado	63,371	5	62,373	5	46,897	18	10.6	8	3.2	9	26.8	14	14.04	5	67.8	13	63.3			
Connecticut	67,781	2	61,957	6	60,658	2	11.3	15	2.6	5	29.1	17	14.06		65.1	21	63.2			
Delaware	52,219	28	51,045	34	44,815	23	14.0	29	5.4	38	31.0	27	13.52		60.8	38	60.2			
Dist. of Columbia		12	51,332	33	75,329	1	21.3	49	3.7	14	42.3	51	14.53	1	69.3	6	65.3			
Florida	47,886	36	48,468	38	41,497		14.9	34	4.5	24	32.9		13.25		60.2	42	55.7			
Georgia Hawaii	47,439 61,408	37 9	51,564 52,396	32 28	37,845 45,204	41 22	16.3 11.1	38 13	4.8 4.6	30 26	32.6 27.1	34 15	13.33 13.70	37 22	63.0 60.6	31 40	58.8 60.5			
Idaho	51,767	29	55,307		36,146	47	12.9	23	7.1	50	25.6	10	13.70		64.1	25	57.8			
Illinois	57,196	16	56,855	21	46,980	17	13.3	25	3.2	9	30.2		13.80	16	65.4	18	61.3			
Indiana	50,553	32	55,492		38,622	40	11.6	16	6.2		29.9		13.33		62.8	32	59.4			
lowa	54,855	20	61,291	8	44,763	24	10.8	9	5.4	38	22.8	4	13.72		69.5	5	63.9			
Kansas	51,485	30	57,269	17	44,417		13.2		4.5	24	24.3	6	13.90		67.9	12	62.8			
Kentucky	42,158	44	47,475	40	36,214	46	20.0	47	4.3	21	34.0	40	12.92	48	60.7	39	55.4	47		
Louisiana	39,622	51	43,350	51	41,204	30	19.2	46	5.3	36	34.3	42	12.97	47	59.6	44	56.8	41		
Maine	50,121	34	50,988	35	40,924	32	12.3	21	3.3	12	31.7	29	13.63	27	65.3	19	60.8	21		
Maryland	65,262	4	58,636	12	53,826	6	10.3	5	4.9	32	25.8	12	14.00	6	67.4	15	65.2	6		
Massachusetts	62,963	7	58,734	11	57,248	3	11.9	18	3.4	13	30.6	25	14.20	2	64.7	22	63.4	12		
Michigan	48,801	35	51,696	30	39,055	38	14.5	31	3.8	15	33.4		13.65		60.2	42	57.9			
Minnesota	60,907	11	62,469	4	47,500	14	12.0	19	4.2	19	24.4	7	14.07	3	70.4	3	66.4			
Mississippi	40,850	48	47,280	41	33,913	51	22.5	51	6.1	43	38.7		12.86		56.9	49	54.5			
Missouri	50,311	33	57,107	18	40,663	33	13.7	27	4.7	27	30.5	24	13.50	33	64.3	24	60.1			
Montana	44,132	40	46,849	44	39,366	36	14.5	31	2.1	4	31.4	28	13.81	15	64.1	25	60.6			
Nebraska Nevada	53,774 45,369	25 39	59,683 46,201	9	47,157 39,235	15 37	11.0 17.4	11 43	5.1 2.6	34 5	21.6	<i>3</i>	13.89 13.00	12 46	72.0 63.5	1 29	65.9			
New Hampshire	71,322	1	67,158	1	51,013	9	9.0	3	3.0	7	33.8 25.3	8	13.00	7	69.2	7	60.7 64.7			
New Jersey	61,782	8	54,147	27	55,386	4	11.1	13	4.8	30	27.6	16	13.91	10	64.7	22	60.9			
New Mexico	42,127	45	44,438	50	35,965	48	21.7	50	4.3		34.5	46	13.23	41	58.1	48	56.0			
New York	53,843	24	46,658	45	54,462	5	14.5	31	4.3	21	32.2	31	13.73		61.5	36	58.8			
North Carolina	41,208	47	44,987	49	38,683	39	18.6	45	5.8	41	32.5	33	13.33	36	61.9	35	58.5			
North Dakota	52,888	27	58,504	14	53,182	7	9.9	4	3.2	9	20.4	1	13.87	13	71.5	2	65.8			
Ohio	46,398	38	52,016	29	41,049	31	13.7	27	4.1	17	31.8	30	13.51	31	63.6	27	59.5	28		
Oklahoma	43,777	41	48,695	37	41,861	28	14.0	29	6.3	46	29.9	20	13.33	39	62.2	34	56.2	43		
Oregon	56,307	17	56,991	20	39,848	34	15.1	36	1.2	1	32.9	35	13.75	18	61.4	37	58.5	33		
Pennsylvania	53,952	23	54,663	25	46,202	19	12.4	22	5.4	38	30.2	22	13.55	29	63.5	29	58.3	36		
Rhode Island	57,812	14	58,573	13	46,989	16	13.5	26	4.2	19	34.2	41	13.63	28	65.6	17	62.0	17		
South Carolina	43,749	42	48,235	39	35,831	49	15.9		5.8	41	34.8		13.14	42	58.8	46	57.4			
South Dakota	54,453		61,738	7	46,039		10.3			27	25.4		13.67		69.9	4	65.0			
Tennessee	42,499		46,857		39,558		18.1	44		51	33.9		13.07		60.6			42		
Texas	53,027		54,950		43,862		16.8			47	29.4		13.13		65.2			35		
Utah	62,967		65,049		36,640		8.3			27	20.8		13.85		68.6	8		27		
Vermont	54,842		54,353		45,483		8.7	2	3.8		29.4		13.94		68.5	9	64.3			
Virginia Washington	67,620	3	65,523		48,838		10.4			44	25.7		13.78		66.4			18		
Washington West Virginia	60,106	13 49	58,242		47,717 35,533		12.0		1.7		30.6		13.92		63.6		59.5			
Wisconsin	40,241		45,419		35,533		17.3		4.9		37.7 26.2		12.84		53.5 68.2			51		
** 1300113111	55,258	19	59,481	10	43,244	<b>4</b>	11.0	11	5.3	36	20.2	10	13.64	20	00.2	10	04.2	10		

 $Source: Bureau\ of\ Labor\ Statistics,\ Bureau\ of\ Economic\ Analysis,\ and\ Census\ Bureau$ 

Source: Bureau of Labor Statistics, Bureau of Economic Analysis, and Census Bureau

The remaining twenty-three states fall in the upper right quadrant of Figure 32. These states have a labor force participation rate at or above the median rate of 64.1 percent and average years of schooling equal to or higher than the median of 13.64 years. These states also generally have among the highest median household incomes and lowest poverty rates (*see Figure 33*), and nearly all rank among the top half of the states based upon their share of paid child care usage. Montana is the only state among this group that ranks among the bottom half of states based on poverty rate and median income.

## Is There an Economic Rationale for Using Child Care Assistance as a Policy Tool?

Equity concerns over the societal distribution of income typically underpin the provision of child care assistance to low-income households. A lack of affordable child care can serve as a significant barrier to sustained employment and improved economic status for many working parents, particularly those in low-income households.

Efforts to improve the economic status of low-income households intensified with passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), a major welfare reform initiative designed to aid parents receiving public assistance to move from welfare to work. A key aspect of the reform is the provision of child care assistance to low-income parents that enables them to work or enter job training or education programs.

Federal and state child care assistance programs (*see Figure 19*) remain an important policy tool used to assist low-skilled workers in obtaining affordable child care. The availability of affordable child care can enable new entrants to join the workforce and raise household earnings and spending in a region. In most states, child care subsidies are used in conjunction with organized child care providers, which stimulate added market-based activity in the child care sector.

Is Subsidized Child Care an Equity-Growth Tradeoff? Despite the known direct economic benefits of child care subsidies to both households and the child care industry, the public policy concern remains that the cost of subsidies may offset any potential net economic gain. If negative growth effects of any tax increases required to finance the subsidies offset any positive growth effects from employment gains and added child care industry activity, this would present a clear policy tradeoff whereby subsidies merely redistribute income among households at the expense of reduced overall economic growth.

Surprisingly, little research addresses the conditions under which child care subsidies may represent a tradeoff between equity and economic growth. Most existing studies examine only a partial set of potential economic effects from the provision of subsidies, focusing primarily on added labor force participation and child care industry demand. However, recent empirical simulations using a computable general equilibrium (CGE) model<sup>52</sup> examine the specific question of whether the use of child care subsidies to encourage work or training for low-skilled workers can produce net economic benefits at the state level. The simulations illustrate a wide range of potential direct and indirect benefits resulting from the provision of subsidized child care to low-skilled workers in Oklahoma derived from a custom CGE model of the state economy. CGE models provide a means for modeling the detailed impacts of child care on various sectors of the state economy, many of which are indirect and on the surface may appear

unrelated to child care subsidization. A unique feature of the CGE model is that organized child care is treated as a separate producing industry sector, with detailed linkages defined between the child care sector and the state economy.

In the model, the demand for organized child care services depends upon participation in the labor market and increases proportionately with total employment.<sup>53</sup> The decision by households of whether to use organized or informal care depends upon the price of organized child care, net of subsidies. Low-skilled workers are tracked as a component of the state labor force in the model and receive training benefits in the form of higher wages. Training benefits are assumed equal to the average realized wage gains for completers of Oklahoma's CareerTech full-time occupational training programs.<sup>54</sup> Simulations are then run assuming various funding mechanisms for an overall 10 percent increase in child care subsidies through state and local government.

*Channels of Economic Growth*. In all simulations using the CGE model, child care subsidies work as expected to encourage low-skilled workers to enter the labor force. The supply of low-skilled labor increases and pushes up earned income in the region net of child care costs. Output increases substantially in the organized child care sector, driven primarily by increased subsidy payments to the industry.

Beyond these effects, detailed linkages in the CGE model capture a number of additional economic channels linking child care assistance to the state economy. Increased subsidy payments trigger responses in wage rates, the mix of low- and high-skilled labor used in the state, prices of goods and services, and trade flows. Initially, the added supply of low-skilled entrants into the labor force puts slight downward pressure on the overall real wage rate earned by low-skilled workers. This simultaneously works to increase competition among low-skilled workers for existing low-skilled jobs in the state. Lower real wages for low-skilled workers also work to increase the competitiveness of state businesses both regionally and internationally, leading to increased exports and reduced imports. Industries that are most intensive in the use of low-skilled labor benefit the most from the newly available labor. These include agriculture, some manufacturing sectors, retail, transportation, and other low-skilled service sectors such as accommodations and food services. Increased production in these industries also increases the demand for capital goods. Increased low-skilled labor also works to increase the relative scarcity of high-skilled labor in the state, slightly increasing the wage rate of high-skilled workers.

Funding Child Care Assistance. The key factor in determining the size of any realized net benefit from child care subsidies is the manner in which they are funded. The most advantageous case, from an individual state's perspective, is if the funding is provided from outside the region (e.g., federal child care subsidies). In that instance, subsidized child care produces substantial net economic gains to the state. State output increases by roughly 3.8 dollars per dollar of additional spending on child care subsidies. There would, of course, be offsetting losses at the federal level.

Similarly, if funding for subsidies were shifted proportionately from all categories of state and local government spending in a nondistortionary<sup>56</sup> manner, subsidies for low-skilled workers would produce a similar sized increase in state economic output. This suggests that subsidization of low-skilled parents to

enter the labor force could produce more net economic activity, on average, than many alternative uses of state and local government spending.

However, when new taxes are levied on either income or capital to pay for the subsidies, the negative effects of the tax slightly more than offset the overall increase in economic activity from the subsidy. This outcome would be consistent with the presence of a general equity-growth tradeoff whereby added taxes outweigh the broader economic benefits from subsidies.

Child Care's Role in Economic Development. In sum, there can be an important role for child care to play as a facilitator of economic growth. The decision to work or seek additional education may depend upon the availability of affordable child care, especially for low-wage workers with children. Affordable child care may encourage low-skilled parents to maintain their connection to the labor force or to upgrade their skills through education, both of which contribute to economic growth and productivity over the longer term.

Overall, the simulated results from the CGE model illustrate that it is possible to raise the income of the least skilled and most disadvantaged workers in a state through subsidized child care. Most of the effects of child care subsidies on state economic activity work through the increase in low-skilled labor induced into the labor force by the child care subsidy. Low-skilled workers benefit through increased household income net of child care expenses, which makes additional income available for spending. The state's organized child care sector captures increased subsidy spending which subsequently produces spillover effects within the state economy. The results further suggest that child care subsidies can provide net economic benefits to a state economy even after accounting for the cost of subsidies, depending upon how those funds are raised. In short, child care provides a viable means for working parents, often the least skilled, to become more financially independent by engaging in productive work potentially without imposing economic burdens on the broader state economy.

#### VI. Conclusion

By providing regular care for 10.7 million children, the organized child care sector continues to serve its traditional role of helping working parents enter and remain in the workforce. Paid care allows one third of U.S. families with a working mother to participate in the labor force.

However, the use of organized care is not evenly distributed across U.S. households. Organized care is used most heavily by mothers with higher education and income levels, and those who are experiencing better workforce outcomes. In recent years, families continue to shift toward more informal forms of child care, and the share of families receiving assistance with the cost of child care is declining.

Demographic trends continue to influence the use of organized child care. Labor force participation rates for women have stabilized in recent years, but the participation rate of mothers with children under the age of 6 increased steadily between 2005 and 2013. Changing household arrangements are also closely tied to child care usage. More than one in four (27.8 percent) children in the U.S. lives in a household with only one parent present, and 40 percent of all children currently born in the U.S. have an unmarried

mother. Single parents and unmarried mothers are more likely to need access to affordable care to enter the labor force and generally experience less-positive workforce outcomes.

The cost of care remains a hurdle for many parents seeking to enter the labor force. Employed parents with children in paid care pay an average of \$143 per week (\$7,436 per 52-week year) for child care services. Child care costs consume an average of 7.2 percent of household income for those with children in paid care, and inflation-adjusted child care costs continued to rise until declining slightly in 2011 (the date of the latest available data). The share of household income spent on child care is much higher for families with more than one child in care and those with younger children. To give a sense of scale, many forms of organized child care now cost as much as higher education in many states.

Federal and state child care subsidies and tax credits remain key components of affordability for many families. Total federal and state child care subsidies and tax credits (\$15.8 billion) equal more than one third (37.8 percent) of total U.S. child care industry revenue. The child care industries in nine states (Alaska, Delaware, Hawaii, Illinois, Ohio, Oklahoma, Pennsylvania, Vermont, and West Virginia) and the District of Columbia are highly dependent upon public assistance programs, where they represent more than 50 percent of total child care industry revenue.

More than 768,500 child care establishments produced total revenue of \$41.5 billion in 2012. Child care establishments were staffed by 1.57 million workers and owners who received earnings of \$18.2 billion in 2012. The industry produces economic spillover effects through two direct channels: earnings paid to wage and salary and self-employed workers (\$21.2 billion) and purchases of goods and services (\$15.6 billion). Output in the U.S. child care industry supports an estimated \$83.1 billion in total U.S. output, both directly and through estimated multiplier effects. Revenues and payrolls of the child care industry are highest in states with a high share of children in care, a high average cost of care, and a greater share of children in higher-cost child care centers versus family child care homes.

Child care also works indirectly to stimulate regional economic growth through its indirect support of increased labor force participation and education of the workforce in a region. States with higher labor force participation rates and education levels consistently have higher incomes and lower poverty rates. Access to affordable child care plays a critical role in the process by helping low-skilled parents to enter the workforce or seek added training and education. One in four (24.9 percent) children ages 14 and under with a working mother is in organized care. Among mothers enrolled in school and out of the labor force, more than one in four (26.2 percent) with a child ages 14 and under use organized care as a regular arrangement. The share rises to 43.1 percent for those with children ages 4 and under.

Despite the economic benefits of child care subsidies to both households and the child care sector, the public policy concern remains that the cost of subsidies may offset any potential net economic gain. The CGE modeling simulation described in this report suggests that using child care subsidies at the state level to help low-skilled workers enter the labor force can produce net economic gains, even after accounting for the cost of subsidies, depending upon how funding for the subsidies is raised. Increased child care subsidies trigger a range of state-level economic responses, including changes in wage rates, the mix of low- and high-skilled labor used in the state, prices of goods and services, and trade flows. Most of the

effects of child care subsidies in the model work through the increase in low-skilled workers induced to enter the labor force by the child care subsidy. The outcomes that occur in the modeled results include increased output in the broader economy, increased exports and reduced imports, increased competitiveness for industries intensive in the use of low-skilled labor, greater capital spending, and wage increases among high-skilled workers.

Understanding the various economic roles played by child care and the forces shaping the size and structure of the child care industry are vital to forming effective child care policy in the current environment.

### VII. Endnotes

<sup>&</sup>lt;sup>1</sup> A few formal care arrangements including babysitters and nannies are also excluded.

<sup>&</sup>lt;sup>2</sup> Estimates for children served through CCDF suggest that 15 percent of children are served by child care providers that are either unregulated (14 percent) or the regulatory status is unknown (1 percent) in 2013.

<sup>&</sup>lt;sup>3</sup> Children ages 0-14 comprise 19.4 percent of total U.S. population based on revised population estimates released for 2013.

<sup>&</sup>lt;sup>4</sup> A shift in the SIPP survey procedure beginning in 1997 limits the ability to compare pre- and post-1997 data.

<sup>&</sup>lt;sup>5</sup> The share of care provided by a grandparent increased from 17.5 percent in 1997 to 21.1 percent in 2011. Care by fathers increased from 17.7 percent in 1997 to 19.6 percent in 2011.

<sup>&</sup>lt;sup>6</sup> See: Lynda Laughlin. "Continuity or Change in Father Provided Child Care Among Employed Mothers?" SEHSD, U.S. Census Bureau. Department of Commerce Annual Population Association of America Meeting, New Orleans, LA April 11-13, 2013. Graphic is available online at: https://www.census.gov/content/dam/Census/library/working-

papers/2013/demo/2013\_Laughlin.pdf. Working paper is available online at: http://paa2013.princeton.edu/papers/131076

The data reported in the SIPP survey is for children living with their mother. However, this includes most children given that only 4.1 percent of children living with one parent live with their father.

<sup>&</sup>lt;sup>8</sup> Several child-care specific questions are asked only as part of the March Supplement to the Current Population Survey. The March Supplement is also known as the Annual Social and Economic Supplement.

<sup>&</sup>lt;sup>9</sup> The survey question described in this section asks whether each child in the surveyed household was enrolled in any form of paid child care during the survey period.

<sup>&</sup>lt;sup>10</sup> Reduced sample sizes when examining the two age group categories will almost certainly contribute some added variation in the smallest states.

<sup>&</sup>lt;sup>11</sup> See: Bureau of Labor Statistics. "Employment Characteristics of Families." Table 5. Available online at: http://www.bls.gov/news.release/famee.t05.htm

<sup>&</sup>lt;sup>12</sup> See: Bureau of Labor Statistics. "Employment Characteristics of Families." Table 6. Available online at: http://www.bls.gov/news.release/famee.t06.htm

<sup>&</sup>lt;sup>13</sup> See: Child Trends Databank. 2015. "Births to Unmarried Women." Available online at: http://www.childtrends.org/?indicators=births-to-unmarried-women#sthash.MEFHUBKs.dpuf

<sup>&</sup>lt;sup>14</sup> For a review of empirical estimates of the elasticity of employment with respect to child care costs, see: Ziliak, James P., Charles Hokayem, and Bradley Hardy. June 2008. "Child Care Subsidies and the Economic Well-Being of Recipient Families: A Survey and Implications for Kentucky." University of Kentucky. Center for Poverty Research.

A Survey and Implications for Kentucky." University of Kentucky. Center for Poverty Research.

See: Lynda Laughlin. Census Bureau. April 2013. "Who's Minding the Kids? Child Care Arrangements: Spring 2011." Household Economic Studies. Available online at: http://www.census.gov/library/publications/2013/demo/p70-135.html This average will undoubtedly include some forms of paid child care that fall outside of the definition of organized care used throughout the report.

<sup>&</sup>lt;sup>16</sup> Similar average costs are found in an alternative survey administered by the Census Bureau as part of the Current Population Survey. A recent comparison of alternative surveys of child care costs suggest that they are close in magnitude. See: Macartney, Suzanne and Lynda Laughlin. January 2011 "Child Care Costs in the Current Population Survey's Annual Social and Economic Supplement (CPS ASEC): A Comparison to SIPP." SEHSD Working Paper Number 2011-1. Census Bureau. Housing and Household Economic Statistics Division. Available online at:

https://www.census.gov/hhes/povmeas/methodology/supplemental/research/ChildCareCPS.pdf

The simple correlation between child care cost and cost of living is highest for children under 5 years of age in both child care centers (0.78) and family child care homes (0.75). The cost of care for school-age children is slightly less correlated to cost of living than preschool care but remains far from a uniform national market. The simple correlation of child care costs with overall state prices is only 0.41 for school-age children. Other factors are at work in the cost of care for older children that make the market appear much more national in scope.

<sup>&</sup>lt;sup>18</sup> Regional Price Parity (RPP) indexes produced by the Bureau of Economic Analysis measure geographic differences in the price levels of consumption goods and services relative to the national average. A value of 100.0 for a state suggests that its overall price level matches the national price level. RPPs are especially useful for comparing the purchasing power of income across the states over time. In 2012, the District of Columbia's RPP (118.2) was higher than that of any state. The states with the highest RPPs were Hawaii (117.2), New York (115.4), New Jersey (114.1), and California (112.9). Mississippi (86.4), Arkansas (87.6), Alabama (88.1), Missouri (88.1), and South Dakota (88.2) had the lowest RPPs among the States. States with high (low) RPPs typically have relatively high (low) price levels for rents. States with RPPs closest to the national average

price level were Florida (98.8), Oregon (98.8), Illinois (100.6), and Vermont (100.9). A broader discussion of RPPs is available online at: http://www.bea.gov/newsreleases/regional/rpp/rpp\_newsrelease.htm

<sup>19</sup> CCDF Discretionary funding is subject to Congressional appropriation each year. CCDF Mandatory funding is a fixed amount of ongoing funding based upon the amount received in a prior base year. States can also receive CCDF Matching funds if they continue to maintain state-provided Maintenance of Effort funding as determined in a prior base year and if they commit additional state funds to draw down matching funds. A state can elect to transfer up to 30% of TANF block grant funds to the CCDBG program. Transferred TANF funds are treated as CCDF Discretionary funding and become subject to CCDF rules. Federal TANF Expenditures on Assistance and Non-Assistance are available as block grants to the states if they continue to maintain state-provided Maintenance of Effort funding as determined in a prior base year. Non-assistance includes spending that is not considered direct assistance under TANF and that doesn't fit into any other reporting category.

The estimates for CCDF Matching State Share and Maintenance of Effort (MOE) expenditures may include a small amount of "excess" state expenditures above the amount required to draw down the full allotment of FY2013 Federal matching funds. Four states—California, Florida, West Virginia, and Wyoming—reported excess state matching funds totaling \$46 million as of Sept. 30, 2013. For fiscal year 2013, six states—Alaska, Connecticut, Nebraska, New Hampshire, Ohio, and Vermont—reported excess state MOE expenditures totaling approximately \$57 million. These amounts are not included in the totals. Thirty-five states reported spending a total of \$296.45 million in Social Services Block Grant (SSBG) funding for child day care services, however California accounted for 68% (\$200.35 million) of the total. The reported amount for SSBG funding includes both an SSBG Allocation (\$66.23 million) and TANF transfers (\$230.22 million) for FY2012. A total of 3,709,055 individuals received child day care services from SSBG in FY2012.

<sup>20</sup> SSBG funding includes both the allocation of SSBG funding to child care and TANF transfer to SSBG for child care assistance. Thirty-five states used SSBG funding for child care assistance in FY2012. Only four states—California, Connecticut, New York, and Pennsylvania—used more than \$10 million of SSBG funding for child care assistance. California accounted for two-thirds (\$200.4 million) of all SSBG funding used for child care assistance in FY2012. The SSBG FY2012 Annual Report is available online at: http://www.acf.hhs.gov/programs/ocs/resource/ssbg-2012-annual-report.

<sup>21</sup> The TANF program has four stated purposes that reflect the demographic challenges faced by many families: (i) provide assistance to needy families so that children can be cared for in their own homes; (ii) reduce the dependency of needy parents by promoting job preparation, work and marriage; (iii) prevent and reduce the incidence of out-of-wedlock pregnancies; and (iv) encourage the formation and maintenance of two-parent families. Some funding provided to the states through the TANF program can be transferred to the Child Care and Development Block Grant (CCDBG) program. These transfers to CCDBG help low-income families, families receiving public assistance, and those transitioning from public assistance pay for the cost of child care services. CCDBG assistance is administered through vouchers or certificates which can be used by parents at the provider or program of their choice.

<sup>22</sup> All counts are adjusted numbers of families and children, unless otherwise indicated. These adjusted numbers represent the

All counts are adjusted numbers of families and children, unless otherwise indicated. These adjusted numbers represent the number funded through CCDF only (which includes Federal Discretionary, Mandatory, and Matching Funds; TANF transfers to CCDF; and State Matching and Maintenance of Effort Funds). The adjusted number is the raw or unadjusted number reported by the state multiplied by its pooling factor, as reported on the ACF-800. This report takes this factor into consideration in calculating the adjusted numbers or percentages.

<sup>23</sup> The exact share of the Child and Dependent Care Credit that goes to dependent care rather than child care is not reported by the Internal Revenue Service and remains unknown. It is believed that the great majority (>90 percent) of the credit is granted for child care expenses.

<sup>24</sup> Along with child care for children under the age of 13, the credit covers a spouse or other dependent person who is physically or mentally incapable of self care. While the great majority of the credit is believed to be for child care services, the exact share of the credit that is paid for child care versus other dependent care is unknown. For program details see: http://www.irs.gov/taxtopics/tc602.html

<sup>25</sup> The tax credit is not refundable for those low-income taxpayers with no net federal tax payments to offset.

<sup>26</sup> A detailed description of credits at the state level is available online from the Corporation for Enterprise Development at: http://scorecard.assetsandopportunity.org/latest/measure/child-and-child-care-tax-credits

<sup>27</sup> See: "ASPE Issue Brief: Estimates of Child Care Eligibility and Receipt for Fiscal Year 2011." February 2015. Office of the Assistant Secretary for Planning and Evaluation. U.S. Department of Health and Human Services. Available online at: http://aspe.hhs.gov/hsp/15/childcareeligibility/ib childcareeligibility.pdf

In calculating total employment in the industry, we treat each non-employer establishment as the equivalent of one job. Some non-employer establishments are part-time businesses, while others operate the business as their full-time occupation.

<sup>29</sup> This estimate is derived from the 2012 Economic Census. An alternative measure is provided by the National Association of Regulatory Agencies (NARA) which reports 107,286 licensed centers and a total of 312,254 licensed facilities in 2011. The

total number of licensed facilities includes child care centers, family and group child care homes, and other types of facilities reported by states (such as, part-day preschools and nursery schools, school-age care facilities, registered FCC homes, Head Start programs, child placing agencies, residential facilities, and others). The report is available online at: http://www.naralicensing.org/Resources/Documents/2011-2013 CCLS.pdf (page 676).

<sup>30</sup> Estimates for children served through CCDF suggest that 23 percent of children received care in either the child's home or in a family child care home, 76 percent received care through either a child care center or group home, and 1 percent was unknown in 2013.

<sup>31</sup> The measure of average earnings per employee is derived from the 2012 Economic Census and includes both full- and part-time workers.

<sup>32</sup> Determining the full size and scope of the U.S. child care sector is complicated by the fact that non-employer child care providers are not covered by most federal employment and wage surveys. The annual Census survey of non-employers provides most of the detailed information available describing these firms.

Nearly all (690,264) non-employer child care establishments are operated as sole proprietorships, with only about 3,000 organized as either corporations or partnerships. Those organized as corporations or partnerships are significantly larger, with average revenue of only about \$85,000 annually. Nevertheless, they remain small relative to child care providers with employees. In estimating total employment within the industry, we assume that each non-employer establishment is equivalent to one job for a single sole proprietor.

<sup>34</sup> Advocate groups typically define microbusinesses as an organization with less than five employees, small enough to require little capital (\$35,000 or less) to get started.

<sup>35</sup> An estimated 59.4 percent of revenue is earned as proprietor income. This estimate is derived from 2012 Economic Census data reported for the U.S. child care sector and the IMPLAN input-output model.

<sup>36</sup> Child care industry revenue per capita provides an alternative measure of industry size across states. Nationally, the U.S. child care sector produced \$132 in revenue per person in 2012. This measure ranges from a high of \$266 per capita in Washington D.C. to a low of only \$66.56 per capita in Utah. High cost-of-care states, including Massachusetts, New Jersey, Delaware, Rhode Island, Connecticut, and New York plus the District of Columbia, sit atop the rankings when measured by revenue produced per capita.

<sup>37</sup> Compensation is the sum of wage and salary accruals and supplements to wages and salaries. Supplements to wages and salaries consist of employer contributions for employee pension and insurance funds and employer contributions for government social insurance.

government social insurance.

38 Bureau of Economic Analysis defines gross operating surplus to include consumption of fixed capital, proprietors' income, corporate profits, and business current transfer payments.

<sup>39</sup> Industry revenue in 2012 is assumed to equal total output for the child care sector. Purchase coefficients are estimated from the U.S. input-output table for 2010 provided by the Bureau of Economic Analysis. The multipliers are based on 2010 national annual input-output data and 2010 regional data.

<sup>40</sup> The share of industry output devoted to taxes on production and imports, less subsidies is derived from the 2010 U.S. dataset for IMPLAN input-output model.

<sup>41</sup> State-level input-output multipliers are rarely derived from surveys of actual purchase behavior. This process is cost prohibitive. Instead, survey data of purchases by the child care industry at the national level is adjusted using information that reflects the unique structure of the region in question.

<sup>42</sup> The child care industry is defined as NAICS sector 6244.

<sup>43</sup> The share of purchases made from outside the region are equal to 1-RPC. The more purchases made in-state the larger the estimated multiplier. The RIMS II multipliers used in this report are regionalized using location quotients. LQs show the share of activity within an industry at the local level relative to the activity at the national level. An LQ of 1 suggests that the industry presence in the local region is the same as the national level. An LQ less (greater) than one suggests that the industry share in the local region is smaller (larger) than the national share. Other input-output models use varying approaches to regionalizing multipliers at the state level. IMPLAN uses either a trade-flow model or an econometric estimation.

<sup>44</sup> Caution must be exercised when using input-output multipliers to estimate the total economic activity 'supported' by an existing industry or firm. Input-output multipliers are designed to predict the gross effects resulting from only a small, incremental change in the current state of a regional economy. More specifically, the estimates provided for the child care industry reflect input-output model predictions of the incremental impact that would result if the \$41.5 billion in industry revenue in the existing child care industry was introduced to the respective state economies producing the revenue. The realized impact is determined by the overall adjustment process that would take place in each state as child care industry activity expands. These estimates also do not provide a net measure of economic impact. For an accessible discussion of how multiplier-based estimates of spillover effects are frequently misused and often overstate resulting spillover effects, see:

Hughes, David W. 2003. "Policy Uses of Economic Multiplier and Impact Analysis." Choices. 2nd Quarter. Available online at: http://www.choicesmagazine.org/2003-2/2003-2-06.htm. For additional discussion of the variation in multipliers across regions, see: Olfert, M.R. and J. C. Stabler, (1994), "Community Level Multipliers for Rural Development Initiatives." Growth and Change, 25: 467–486.

<sup>45</sup> A slightly different outcome would result by using multipliers for the U.S. economy.

<sup>46</sup> Output in the child care sector is assumed to equal revenue.

<sup>47</sup> Estimates are derived from the March Supplement of the 2014 Current Population Survey administered by the Census Bureau.

<sup>48</sup> Labor force participation has long been viewed as a potential source of added economic growth (Aaronson et al. 2014). More efficient employment of existing labor resources directly increases the potential output of a region. This view was substantiated by the long-run influx of women into the U.S. labor force during much of the Post-World War II period. Common efforts to increase labor force participation rates include subsidized job training following mass layoffs, high-school completion programs, targeted employment tax credits, and expanded child care availability. See: Aaronson, Stephanie, Tomaz Cajner, Bruce Fallick, Felix Galbis-Reig, Christopher Smith and William Wascher. "Labor Force Participation: Recent Developments and Future Prospects." Fall 2014. Brookings Papers on Economic Activity.

<sup>49</sup> A thorough review of the literature and empirical analysis of labor market factors and their effect on poverty rates is found in: Hoynes, Hilary W., Marianne E. Page and Ann Huff Stevens. "Poverty in America: Trends and Explanations." Journal of Economic Perspectives, Volume 20, Number 1. Winter 2006. pp. 47-68. Available online at:

http://poverty.ucdavis.edu/sites/main/files/file-attachments/stevens\_2006jep.pdf

<sup>50</sup> Income is adjusted for cost-of-living to avoid potential distortions in those states with an unusually high or low cost-of-living. The same strong relationship is found when using both nominal median household income and per capita personal income.

The exact process by which education raises income levels remains an area of intense academic debate, with several conduits proposed. Suggested channels include the positive effects higher levels of education exert on worker productivity (Delong et al. 2003), entrepreneurial activity and creativity (Glaeser and Saiz, 2004), ability to innovate new ideas and processes or adopt them elsewhere (Benhabib and Speigel, 1994; Barro, 1997), and degree of worker adaptability to transfer skills and knowledge across industries (Bauer et al. 2006). Regardless of the precise source, the historical link from education to income remains strong in theory and empirically (Yamarik 2010). See: Delong J. B., Goldin C, Katz L. F. 2003. "Sustaining U.S. economic growth." In: Aaron, H. (ed.) Agenda for the Nation. The Brookings Institution, Washington, pp 17–60; Glaeser, E. and A. Saiz. 2004. "The Rise of the Skilled City," Brookings-Wharton Papers on Urban Affairs; Benhabib, Jess and Mark M. Spiegel "The Role of Human Capital in Economic Development Evidence from Aggregate Cross-Country Data." Journal of Monetary Economics 34 (1994) 143-173; Barro, R. 1997. Macroeconomics. Cambridge, MA: MIT Press; Bauer, Paul W., Mark E. Schweitzer, and Scott Shane. 2006. "State Growth Empirics: The Long-Run Determinants of State Income Growth." Federal Reserve Bank of Cleveland Working Paper 06-06; and Yamarik, Steven. 2010. "Human Capital and State-Level Economic Growth: What is the Contribution of Schooling?" The Annals of Regional Science. August 2011, Volume 47, Issue 1, pp 195-211

Granger, C. and P. Newbold. 1974. "Spurious Regressions in Econometrics." Journal of Econometrics 2 (2): 111–120. 
<sup>52</sup> See: Rickman, Dan S. and Mark C. Snead. "A Regional Comparative Static CGE Analysis of Subsidized Child Care." 
Growth and Change. Mar. 2007. Vol. 38, No. 1, pp. 111-139. The study uses a custom computable general equilibrium (CGE) model of the state of Oklahoma to evaluate the distributional economic impacts of child care subsidies for low-skilled, low-wage workers.

The elasticity of supply response to real wages equals 0.8 for low-skilled labor and 3.0 for high-skilled labor.

<sup>54</sup> For a recent evaluation of the wage gains realized by Oklahoma CareerTech full-time program completers, see: Snead, Mark. 2013. "Cost-Benefit Analysis of Career Majors (FY11)." Oklahoma Department of Career and Technology Education.

This finding is consistent with the empirical results in Bartik (2002) for welfare reform that potential losers from subsidies include low-skilled workers not receiving the subsidies but who face increased competition in the labor market. See: Bartik, Timothy J. 2002. "Spillover effects of welfare reforms in state labor markets." Journal of Regional Science 42(4): 667–701.

<sup>56</sup> A nondistortionary reduction assumes government spending is reduced proportionately across all categories of spending.

### VIII. Data Notes

Child Care in State Economies uses a consistent data set for all states that reflects the use of paid, or market-based, child care services. The overall size of the paid child care industry (i.e., number of establishments, employment, and revenue) at the national and state levels is determined using U.S. Census Bureau data for 2012.

The definition of child care varies greatly across the states (i.e., licensed care, registered care, listed care, certified care, license-exempt care, etc.). Therefore, industry estimates may vary state by state depending upon the data sources used.

The U.S. Census Bureau data used in this report reflects data sets located at https://www.census.gov/econ/nonemployer/index.html for sole proprietors (businesses that have no paid employees and are subject to federal income tax who report child care income) and at https://www.census.gov/econ/census/ for data related to child care centers (businesses with paid employees in the child care industry sector).

