



Economic Impact of  
**Early Care and  
Learning in Alaska**

October 2015  
Final Report



Prepared for  
Alaska Early Childhood  
Coordinating Council

Prepared by  
  
**McDowell  
GROUP**

# *Economic Impact of Early Care and Learning in Alaska*

*Prepared for:*  
**Alaska Early Childhood Coordinating Council**



*Juneau • Anchorage*

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# Executive Summary

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The purpose of this study was to assess the economic impacts of early care and learning services in Alaska. This study details the economic benefits of the sector as a source of employment and income. It also considers the role of early care and learning services in providing opportunities for parents to join Alaska's workforce and earn income. Finally, the report describes the long-term economic and other societal benefits of high-quality early care and learning services, as documented by research conducted elsewhere in the nation.

This study was conducted under the auspices of the Alaska Early Childhood Coordinating Council through **thread**, Alaska's statewide Child Care Resource and Referral Network.

Study methods included a statewide telephone survey of households with children, collection of a wide array of demographic data concerning Alaska children and families, economic impact modeling (to assess the multiplier effects of spending on early care and learning services), and a national literature review.

This report is similar to a study conducted by McDowell Group for System for Early Education Development (SEED) in 2006. While the 2006 study focused on early care and learning for children under six years of age, this 2015 study includes children under 13 years of age. Where appropriate, results of the two studies are compared to identify trends in early care and learning in Alaska.

## Early Care and Learning: The Industry

*Alaska's early care and learning industry includes over 2,000 private and public providers.*

Alaska's early care and learning sector includes a variety of approved, licensed, or otherwise regulated providers. It includes Early Head Start/Head Start and pre-elementary programs, center-based and before and after school care, and care in someone else's home or in the child's own home. In addition to providers, a number of employees work in government and other agencies focused on early care and learning. Further, an unknown number of unregulated providers also operate in the state.

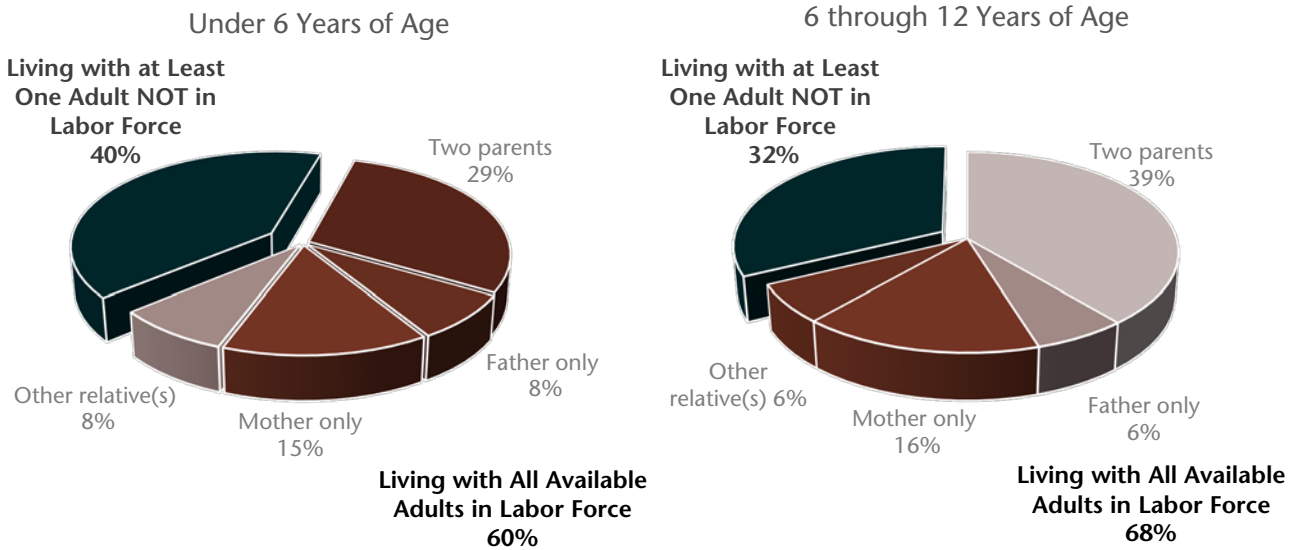
## Demand for Early Care and Learning Services

*Demand for Alaska early care and learning services includes a population of nearly 90,000 children under 13 years of age.*

In 2014, an estimated 137,676 children under 13 years of age lived in Alaska. Of these children, 47 percent were under six years of age, while 53 percent were six through 12 years of age. Over the past decade, Alaska's population of children under 13 years of age has grown by an average annual rate of 0.7 percent.

The number of children living in households with all available adults in the labor force provides an approximation of need for early care and learning services. In 2014, approximately 39,000 children younger than six years of age and almost 50,000 children six through 12 years of age lived in households in which all available adults participated in the labor force.

## Alaska Children in Households, by Labor Force Status and Living Arrangement of Household, 2014 Estimates



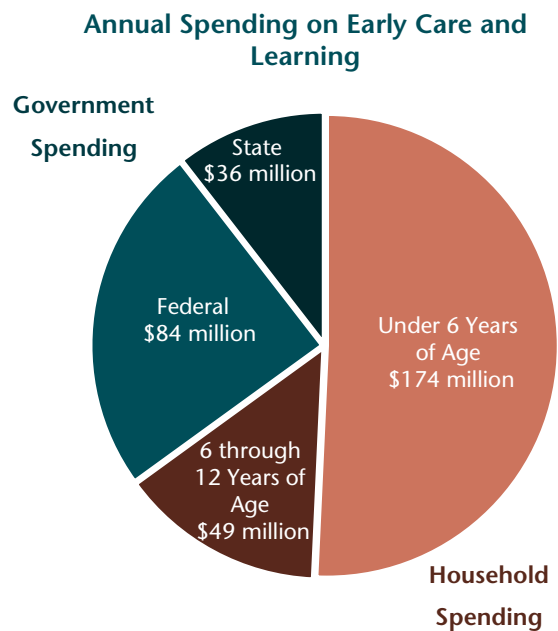
In total, demand for early care and learning services includes an estimated 88,800 children under 13 years of age. This number of children equates to approximately 26,400 Alaska households with children under six years of age in need of early care and learning services of some type in 2014 and 28,000 households with children six through 12 years of age. These numbers may underestimate the true number of Alaska households with early care and learning needs, as survey results for this study suggest many households with an adult who does not participate in the labor force still regularly use early care and learning services.

### Economic Impact

*The early care and learning sector accounts for a half billion dollars of economic activity in Alaska.*

#### Spending on Early Care and Learning

- Alaska families spend approximately \$223 million on early care and learning services for children under 13 years of age. This includes \$174 million for children under six years of age and \$49 million for children six through 12 years of age.
- Government spending on early care and learning programs and services in Alaska totaled \$120 million in FY 2014, including \$84 million in federal spending and \$36 million in State expenditures.
- In total, Alaska's early care and learning sector accounts for \$343 million in annual spending.

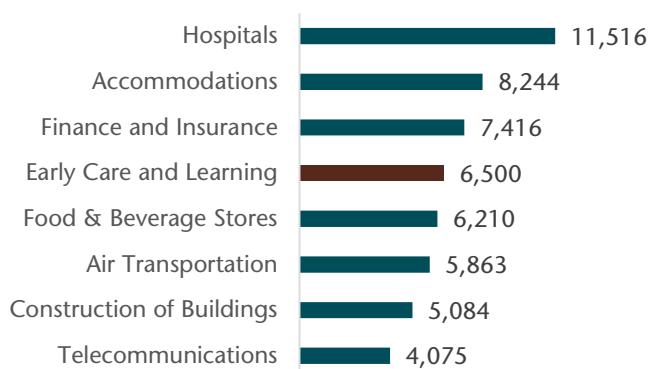


- This estimate of total spending is conservative. It does not include spending by school districts that provide programs and services for children under six years of age or before and after school programs. Programs and spending vary widely among school districts, largely depending on funding availability. The estimate also does not include spending by the private sector on employer-provided early care and learning services. There is no data available on private sector spending of this sort, though this spending category is likely small relative to parent and government spending.

## Jobs and Income

- The total number of Alaskans participating in Alaska’s early care and learning industry likely exceeds 10,000. In 2014 agencies and a wide range of approved, licensed, or otherwise regulated providers employed 8,000 workers. An unknown number of providers serve four or fewer children, and are therefore exempt from government approval or licensing requirements.
- Based on economic modeling of spending impacts, Alaska’s early care and learning sector accounts for 6,500 direct jobs, as measured in terms of annual average full and part-time employment. Annual labor income totals an estimated \$170 million.
- Recognizing that there are differences between industries in terms of average hours worked and average wages, the early care and learning sector is on par with prominent Alaska industries, in terms of annual average full and part-time employment.
- Spending on early care and learning in Alaska has secondary economic impacts. Including all direct, indirect, and induced impacts (the “multiplier effect”) this sector of Alaska’s economy accounts for a total of 7,700 jobs and \$230 million in labor income.

**Early Care and Learning Employment Compared to Other Sectors in Alaska, 2014**



**Table ES-1. Economic Impact of the Early Care and Learning Sector in Alaska, 2014**

Impact Type	Full & Part-time Employment	Labor Income (\$Millions)	Output (\$Millions)
Direct	6,500	\$170	\$343
Indirect	400	\$20	\$65
Induced	800	\$40	\$105
<b>Total Impacts</b>	<b>7,700</b>	<b>\$230</b>	<b>\$512</b>

Source: McDowell Group estimates. Columns may not sum to totals due to rounding.

- The estimated \$343 million in direct spending, including household and public sector expenditures on early care and learning, translates into \$512 million in total output. Including all multiplier effects, the early care and learning sector is a half-billion dollar industry in Alaska.
- Early care and learning programs and services for children under six years of age account for the majority – approximately 80 to 85 percent – of this economic activity.



## Workforce and Household Income Support

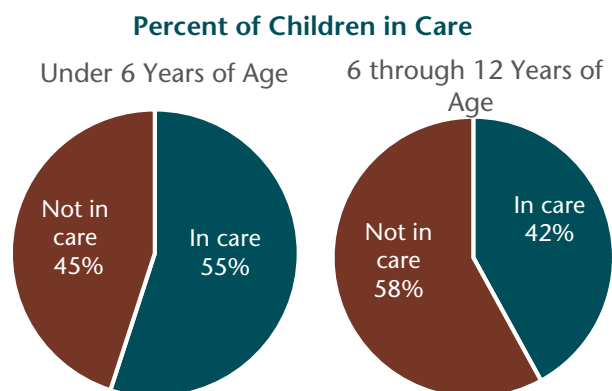
- In addition to creating jobs and income for Alaskans, early care and learning services make it possible for parents to join the labor force or be more fully employed than would be possible in the absence of those services.
- Adults who are in the workforce because early care and learning services are available for their young children (under six years of age) represent eight percent of the Alaska resident workforce. If these workers also earn approximately eight percent of resident wages in the state, they earn a total of about \$1.1 billion in wages. These earnings equate to an average of approximately \$40,000 for each individual who participated in the labor force with the support of early care and learning services.
- Adults who are in the workforce with the help of early care and learning services for children six through 12 years of age account for seven percent of the Alaska resident workforce and earn an estimated \$900 million in wages.
- In total, approximately 15 percent of Alaska resident workers are able to participate in the workforce because of early care and learning services, and earn an estimated \$2.0 billion in wages.
- Other data reflect the impact of early care and learning services on family income. According to census data, the average income for an Alaska family with one worker in 2013 was \$72,145. The average for a family in which both a husband and wife worked was \$121,206, a difference of just over \$49,000.

## Survey of Alaska Families

In April 2015, McDowell Group conducted a statewide telephone survey of Alaska households with children under 13 years of age. The purpose of the survey was to better understand early care and learning services usage and needs in Alaska. The survey sample included 574 randomly selected households with a total of 1,049 children under 13 years of age.

### Use of Early Care and Learning Services

- 55 percent of children under six years of age typically receive care by someone other than a parent or a guardian.
- 42 percent of children age six through 12 years of age typically receive care by someone other than a parent or guardian.



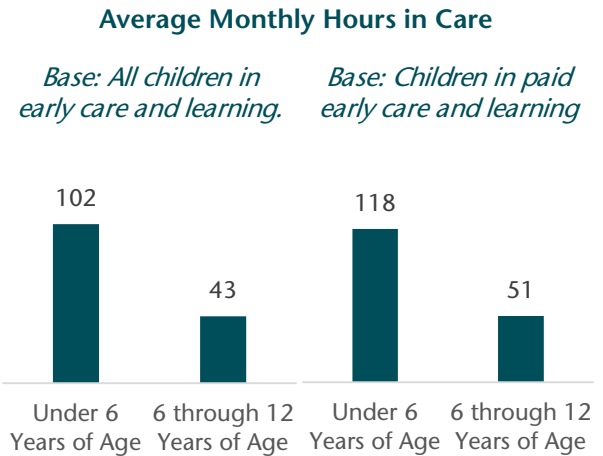
### Type of Early Care and Learning Services

- Among children under six who received care the month prior to the survey, 41 percent were in pre-elementary school or licensed center-based care, 34 percent received care at someone else's home, 30 percent received care in the child's home, eight percent were in Early Head Start/Head Start programs, and four percent received various other forms of care (some children received care from more than one type of provider).
- 41 percent of children six through 12 years of age received care in their own home, by family (other than a parent), friends, or another provider. 22 percent of children in this age group received care in

someone else's home, 17 percent were cared for through participation in school-sponsored after school activities, and another 17 percent were involved in other (not school sponsored) activities after school. Only six percent of children in this age group were in center-based care, and seven percent received some other form of care.

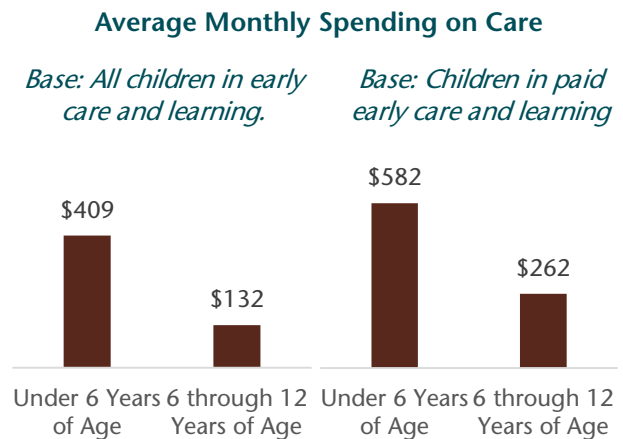
## Time in Early Care and Learning Services

- Children under six years of age who spent time in early care and learning services spent an average of 102 hours per month in the month preceding the survey, or an average of 24 hours per week. Those who were in care paid for by the household spent an average of 117 hours in care, or 27 hours per week.
- Children six through 12 years of age spent less than half the time in early care and learning services on average than did children under six. These older children received a monthly average of 43 hours of care the month preceding the survey, an average of about ten hours per week. Children in paid care spent an average of 51 hours in care, or 12 hours per week.



## Cost of Early Care and Learning Services

- Households in the survey spent \$409 on average in the month prior to the survey on early care and learning services for each child under six years of age. This average includes children receiving full-time, part-time, or occasional care. Spending on paid services for households (not including care at no cost or financial assistance) averaged \$582.
- Spending on early care and learning services for children six through 12 years of age averaged \$132. For households that paid for care, spending averaged \$262.
- Care was paid for, at least in part, by some form of financial assistance (employer or government) for 15 percent of children under six years of age and nine percent of children six through 12 years of age.



## Access to Early Care and Learning Services

- Finding early care and learning services for children under six years of age was easy or very easy for half (50 percent) of children this age, and difficult to very difficult for 46 percent.

- Finding early care and learning services for children six through 12 years of age was easier than for younger children. Finding care was very easy or easy for 65 percent of children in this age group, and difficult or very difficult for 28 percent.

### **Employer Accommodation of Early Care and Learning Needs**

- Slightly more than half (54 percent) of respondents who were employed, though not self-employed, described their employer as very accommodating around early care and learning needs, while another third (33 percent) reported their employer is somewhat accommodating. Nine percent believed their employer is not accommodating. Four percent responded “don’t know” or refused to answer.

### **Long-Term Benefits of Early Care and Learning**

A growing body of research is finding that early childhood education and quality child care positively impact the economy and society. The early care and learning sector plays an important role in improving educational, societal, and workforce outcomes for children, while allowing parents of young children to more effectively participate in the workforce. Further, a key ingredient in economic growth is the quality of the workforce. It is increasingly evident that the most efficient means to boost productivity in the workforce over the next few decades is to invest in today’s children.

Early childhood education can reduce negative and costly outcomes for government and society. Studies document the inverse relationship between crime and education, as well as other societal benefits derived from quality care and early education. Research suggests that savings realized by government and society from reduction in crime, delinquency, reliance on welfare, lost wages, and health care treatment outweigh costs of investing in education and care programs. One study found early learning initiatives realize a benefit to society of \$8.60 per dollar invested. About half of this amount derives from increased future earnings for children.

Research on the long-term economic and societal benefits of early care and learning has not been focused specifically on Alaska. However, it is evident the state and its residents would experience many of the same benefits that have been measured elsewhere in the country, from further investment in early care and learning.

# Introduction and Methodology

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## Introduction

McDowell Group contracted with **thread**, Alaska's statewide Child Care Resource and Referral Network, to quantify and communicate the economic impact of early care and learning services in Alaska. This study updates and expands upon a 2006 report, *Economic Impact of Early Education and Child Care Services in Alaska*, also by McDowell Group. This 2015 study details the economic benefits of early care and learning services in Alaska, identifies trends in the Alaska early care and learning sector over the past decade, and reports on recent research into long-term economic benefits of high-quality early care and learning.

## Methodology

To measure the economic impacts of early care and learning services in Alaska's economy, McDowell Group employed a number of study methods: a statewide telephone survey, secondary data collection, and a national literature review. While the 2006 study focused on education and care of children under six years of age, this 2015 study broadens some aspects of the analysis to include services for children under 13 years of age.

For purposes of this study, the terms child care and "early care and learning" services are generally defined as any care of children by anyone other than the child's parent or guardian at any time of day. This includes Early Head Start/Head Start programs, pre-elementary school (pre-Kindergarten), center-based care, before and after school care, care in someone else's home, or care in the child's own home. It includes babysitting by family, friends, or neighbors whether paid or unpaid.

## Household Survey

A statewide telephone survey, the *2015 Alaska Household Early Care and Learning Survey*, was conducted to identify the types of early care and learning services Alaska families use and to understand household expenditures on early care and learning services. The 2015 survey focused exclusively on households with children under 13 years of age, a change from the 2006 survey which included all households along with a subsample of households with children under six years of age. The 2015 survey sample size totaled 574 households. An original statewide target sample size of 425 was supplemented with an additional 149 Anchorage households with children under 13 years of age. That supplemental Anchorage sample was funded by Cook Inlet Tribal Council (CITC).<sup>1</sup>

The total sample produced survey results with a maximum margin of error of  $\pm 4.2$  at the 95 percent confidence level. Readers are cautioned to consider the tolerance levels (error margins) around survey results based on small subsamples. The following table provides tolerances (plus or minus) for various sample sizes. Survey results approach the minimum margin of error when responses represent a strong majority/minority finding (90

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<sup>1</sup> CITC also funded an additional survey of Anchorage households with Alaska Native/American Indian youth under the age of 13. In addition, Mat-Su Health Foundation funded a supplemental survey of 150 Mat-Su households with youth under the age of 13. Separate reports provide survey results specifically for Anchorage and Mat-Su.

percent/10 percent). Survey results approach the maximum margin of error when responses represent an evenly balanced finding (50 percent/50 percent).

### Survey Sample Size Tolerance Ranges

Sample Size	Minimum Margin of Error	Maximum Margin of Error
574*	0.83%	4.2%
400	0.89%	5.0%
300	1.1%	5.8%
200	1.4%	7.1%
100	2.0%	10.0%
50	2.8%	14.2%
25	4.0%	20.0%

\*2015 survey statewide sample size.

## Secondary Data Collection

To support the economic impact analysis of the early care and learning sector in the Alaska economy economic and demographic data was collected on Alaska households with children under 13 years of age, on employment and wage information for Alaska jobs in the sector, and on state and federal expenditures within the sector. This and survey data made it possible to measure economic impacts as measured in terms of employment, spending on early care and learning services, and the role early care and learning services play in making it possible for Alaska families to earn income.

Data sources include the Alaska Departments of Education and Early Development, Health and Social Services, and Labor and Workforce Development; Alaska Public School Districts; the U.S. Department of Health and Human Services Office of Child Care; Bureau of Labor Statistics; Bureau of Economic Analysis; U.S. Census Bureau; Municipality of Anchorage; **thread**; and Esri spending information<sup>2</sup>.

## Literature Review

A literature review gathered and documented recent research into the long-term socio-economic benefits of early care and learning services. The scope of the review includes benefits to individuals, to businesses, and the overall benefits to society. Findings from the review are summarized in this report. When possible, the relevance to Alaska of findings from the review are highlighted in the summary.

## Report Organization

The first chapter of the report profiles the current population of households in Alaska potentially in need of early care and learning services. The second chapter profiles the various providers of early care and learning services in Alaska. An analysis of the economic impact of early care and learning services is provided in chapter 3. Results of the households surveyed are summarized in chapter 4. The final chapter summarizes national research on the socioeconomic benefits of high quality early care and learning services and opportunities.

<sup>2</sup> Based on the Bureau of Labor Statistics Consumer Expenditure Survey, 2011-2012.

# Chapter 1. Profile of Alaska Families Potentially in Need of Early Care and Learning Services

## Demand for Early Care and Learning Services

This chapter analyzes the demand for early care and learning services in Alaska by profiling the characteristics of households with children under 13 years of age. One measure of demand for early care and learning services is the number of households with children under 13 years of age in which all available adults are in the labor force. As described later in this chapter, other types of households may also have need for early care and learning services.

The chapter begins with an analysis of the size of, and trends in, Alaska's population under 13 years of age.

### Alaska's Population Under 13 Years of Age

An estimated 137,676 children under 13 years of age lived in Alaska in 2014.<sup>3</sup> Of these children, 64,365 (47 percent) were under six years of age, while the remaining 73,311 (53 percent) were six through 12 years of age.

Table 1. Alaska Population, by Age, 2004 to 2014

Year	Alaska Population Under 6 Years of Age	Alaska Population 6 through 12 Years of Age	Total Alaska Population Under 13 Years of Age
2004	58,250	72,161	130,411
2005	58,879	70,694	129,573
2006	59,943	69,565	129,508
2007	60,572	69,234	129,806
2008	61,590	69,153	130,743
2009	63,185	69,871	133,056
2010	64,173	71,233	135,406
2011	66,011	71,872	137,883
2012	65,777	72,654	138,431
2013	65,437	73,465	138,902
2014	64,365	73,311	137,676

Source: ADOLWD.

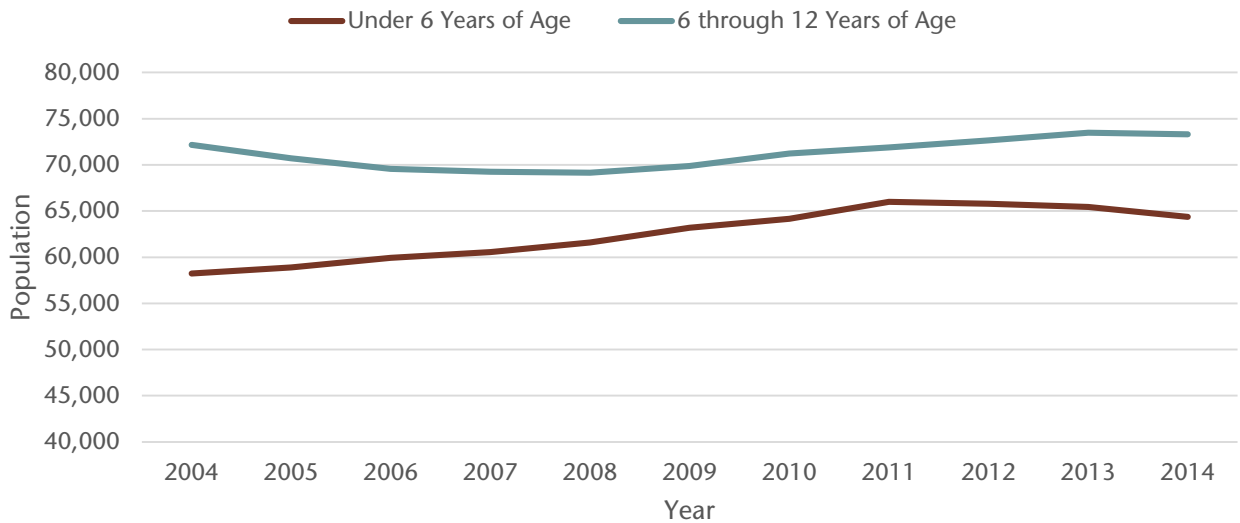
Though declining slightly in 2014, over the past decade, Alaska's population of children under 13 years of age grew at an average annual rate of 0.7 percent. In 2004, 130,411 children under 13 years of age lived in Alaska, including an estimated 58,250 children under six years of age and 72,161 six through 12 years of age. This

<sup>3</sup> Alaska Department of Labor and Workforce Development (ADOLWD) estimates.

population growth rate of these Alaska youth was slower than the overall Alaska population growth rate of 1.2 percent during that time period.

The population of children under six years of age rose between 2005 and 2011, from 58,879 to 66,011 in 2011. Since 2011, however, the population of this age group has declined. The population of children six through 12 years of age fell slightly from 70,694 in 2005 to 69,871 in 2009 before rising again to 73,465 by 2013.

**Figure 1. Population of Alaska Children 2004 to 2014**

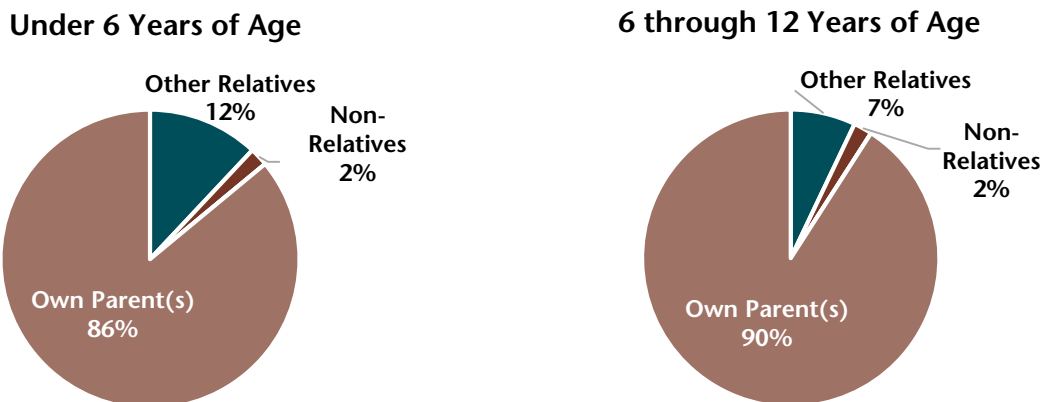


Source: ADOLWD.

## Living Arrangements

According to 2010 U.S. Census data, 86 percent of Alaska children younger than six years of age live with either one or both of their own parents, while 12 percent live with other relatives, two percent with non-relatives, and less than one percent in group quarters.

**Figure 2. Living Arrangements for Alaska Children in Households, 2010**



Note: Less than 1 percent of children under 13 years of age lived in group quarters.

For Alaska children six through 12 years of age, 90 percent live with either one or both of their own parents, seven percent with other relatives, two percent with non-relatives, and less than one percent in group quarters. These percentages are applied to 2014 ADOLWD population estimates in the table below to calculate total number of Alaska youth by living arrangement.

**Table 2. Estimated Number of Alaska Children in Households, by Living Arrangement, 2014**

Living Arrangement	Percent of Total Population Under 6 Years of Age in Households (%)	Number of Alaska Children Under 6 Years of Age in Households	Percent of Total Population 6 through 12 Years of Age in Households (%)	Number of Alaska Children 6 through 12 Years of Age in Households
With Own Parent(s)	86	55,317	90	66,252
With Other Relatives	12	7,547	7	5,376
With Non-Relatives	2	1,190	2	1,405
In Group Quarters	<1	312	<1	278
<b>Total</b>	<b>100</b>	<b>64,365</b>	<b>100</b>	<b>73,311</b>

Source: McDowell Group estimates based on 2014 ADOLWD population estimates and 2010 Census percentages from Summary File 2. Table PT25, Household Type by Relationship by Age for Population Under 18 Years.

Note: Columns may not sum to 100 percent due to rounding.

The percentage of youth living with their own parents has fallen slightly for each age group, while those living with other relatives rose slightly since 2000. In 2000, the U.S. Census reported 90 percent of children under age six lived with their own parents, while in 2010 the percentage was 86 percent. Similarly, 93 percent of children six through 12 years of age lived with their own parents in 2000, while 90 percent were in such a living arrangement in 2010. The percentage of children under six years of age living with other relatives rose from eight percent in 2000 to 12 percent in 2010 and the percentage of children six through 12 years of age in this living arrangement rose from five to seven percent during the same time period.

#### CHILDREN IN GRANDPARENT HOUSEHOLDS

A portion of households with children who live with relatives other than parents are grandparent households. According to 2009-2013 American Community Survey (ACS) estimates, 6,618 households with children under six years of age in Alaska and 4,249 with children six through 12 years of age have a grandparent householder.

ACS data also reported there were 15,843 grandparents in Alaska living with their own grandchildren, of which 7,089 were responsible for their own grandchildren under age 18<sup>4</sup>. Of those grandparents responsible for their grandchildren, 4,624 were in the labor force, while 2,465 were not. Thus, an estimated 65 percent of grandparents responsible for their grandchildren were in the labor force.

It is difficult to discern from the data if the grandparents are single householders or if both grandparents are in the labor force in the case of married couples. Thus, it is challenging to estimate total numbers of grandparent householders in need of early care and learning services. If the 65 percent number is applied to total grandparent-led households, an estimated 4,301 grandparent householders with children under six years of

<sup>4</sup> 2009-2013 American Community Survey 5-Year Estimates. B10050. Grandparents Living with Own Grandchildren Under 18 Years by Responsibility for Own Grandchildren by Length of Time Responsible for Own Grandchildren for the Population 30 Years and Over.

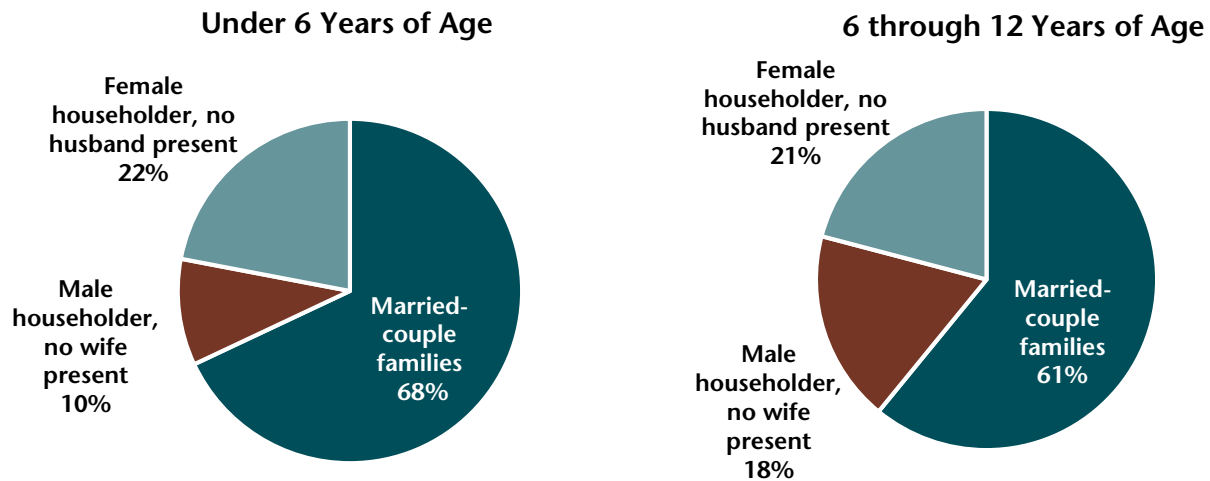


age and an estimated 2,761 grandparent householders with grandchildren six through 12 years of age may be in need of early care and learning service in Alaska

**MARRIED COUPLE AND SINGLE PARENT HOUSEHOLDS**

Among households that include related children under six years of age, approximately 68 percent are married-couple households, while ten percent have a male householder only, and 22 percent have only a female householder, according to 2009-2013 ACS data. Within the six through 12 age group, 67 percent of households are married-couple households, while ten percent have only a male householder, and 23 percent only a female householder.

**Figure 3. Alaska Households with Related Children, by Living Arrangement, ACS 2009-2013 Estimates**



The percentage of married-couple households has fallen (from 72 percent in the 2000 Census to 68 percent in ACS 2009-2013 five-year estimates), while the percentage of single householders has increased, from eight percent of male householders to ten percent, and from 19 percent of female householders to 22 percent.

An estimated 43,100 family households with related children under six years of age lived in Alaska in 2014, including married-couple households and households with single householders.<sup>5</sup> These families have an average of 1.49 children under six years of age.

Alaska is home to approximately 40,290 families with children six through 12 years of age. These families have an average of 1.82 children of that age.

<sup>5</sup> McDowell Group estimate using ACS 2009-2013 5-Year Estimates. Table B11004. Family type by presence and age of related children under 18 years.

**Table 3. Living Arrangements of Alaska Households with Related Children Under 13 Years of Age, 2014**

Living Arrangement	Percent of Households with Children Under 6 Years of Age (%)	Number of Households with Children Under 6 Years of Age	Percent of Households with Children 6 through 12 Years of Age (%)	Number of Households with Children 6 through 12 Years of Age
Married-couple families	68	29,346	67	26,941
Male householder, no wife present	10	4,403	10	3,904
Female householder, no husband present	22	9,388	23	9,445
<b>Total</b>	<b>100</b>	<b>43,137</b>	<b>100</b>	<b>40,290</b>

Source: McDowell Group estimates based on 2009-2013 ACS 5-Year Estimates Table B11004 and 2014 ADOLWD population estimates. Note: Related children in a family include own children and all other children under 18 years old in the household who are related to the householder by birth, marriage, or adoption. Columns may not sum due to rounding.

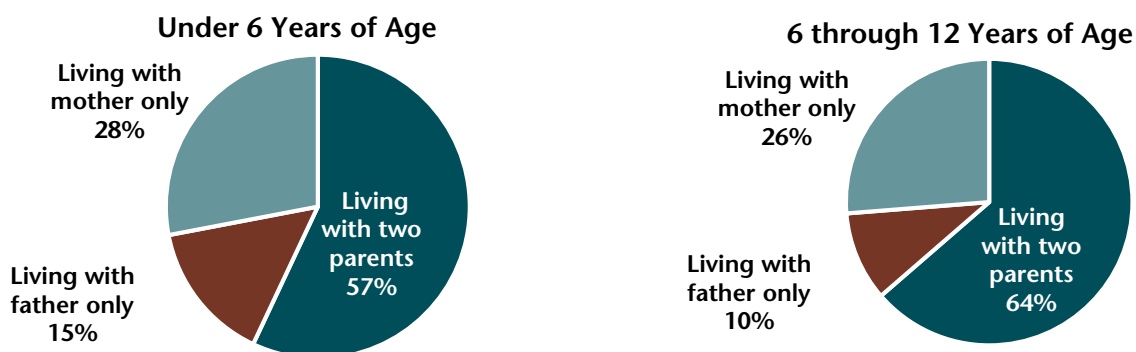
### Parent Employment Status

According to American Community Survey 2009-2013 5-Year Estimates, 60 percent of Alaska children under six years of age who live with at least one of their own parents live in a household in which all available parents are in the labor force. Among children six through 12 years of age, 69 percent who live with at least one of their own parents live in a household in which all available parents are in the labor force.

Among children under six years of age who live with all available parents in the labor force, 57 percent live with both parents and both are in the labor force, while 28 percent live only with their mother and she is in the labor force, and 15 percent live only with their father and he is in the labor force.

Data suggests that as children age and enter the school system, more parents in two-parent homes enter the labor force. For Alaska children six through 12 years of age who live with their own parents who are in the labor force, 64 percent live with both parents, ten percent live only with their father (a smaller percent than children under six years of age), and 26 percent live with only their mother.

**Figure 4. Alaska Children in Households with Own Parent(s) in the Labor Force, ACS 2009-2013 Estimates**



Source: McDowell Group estimates based on Tables B23008 (ACS 5-Year Estimates) and P049 (2000 Census): Age of own children under 18 years in families and subfamilies by living arrangements by employment status of parents. Note: A parent may be included in labor force data and not work full time. A parent may not be classified as in the labor force but may work seasonally.

In total, in 2014 an estimated 33,200 children under six years of age lived in a household in which all parents the children lived with were in the labor force. In addition, almost 45,400 children six through 12 years of age lived in a household in which all parents the children lived with were in the labor force.

**Table 4. Alaska Children in Households with Own Parent(s) in the Labor Force, 2014 Estimates**

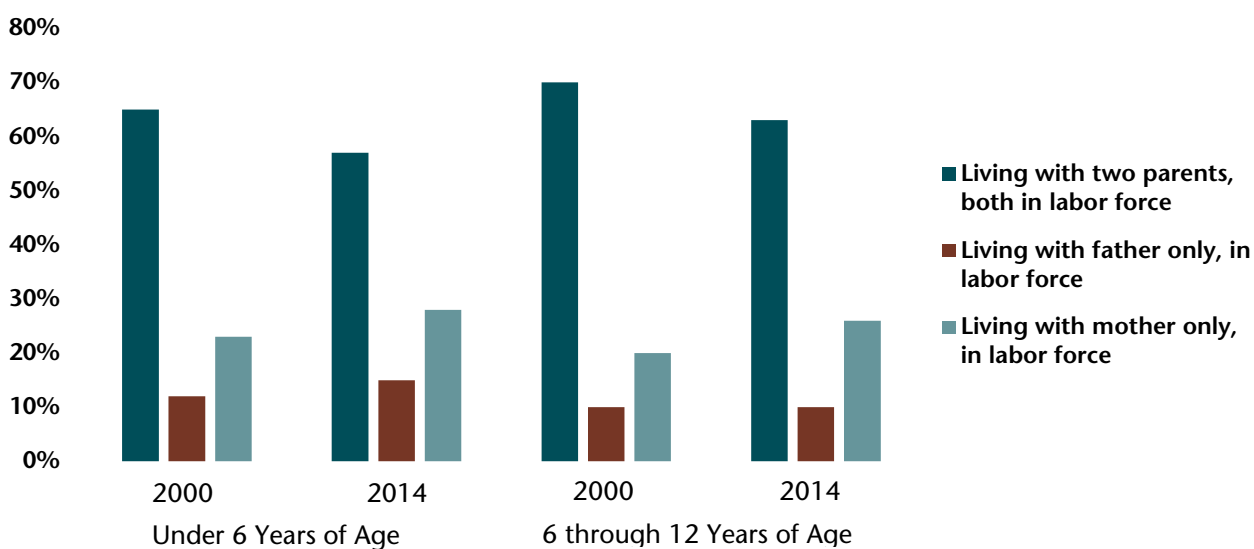
Living Arrangement	Percent of Children Under 6 Years of Age (%)	Number of Children Under 6 Years of Age	Percent of Children 6 through 12 Years of Age (%)	Number of Children 6 through 12 Years of Age
Living with two parents, both in labor force	57	18,903	63	28,565
Living with father only, in labor force	15	4,962	10	4,911
Living with mother only, in labor force	28	9,350	26	11,909
<b>Total</b>	<b>100</b>	<b>33,215</b>	<b>100</b>	<b>45,385</b>

Source: McDowell Group estimates of number of children based on percentages from 2009-2013 American Community Survey 5-year estimates Table B23008 Age of own children under 18 years in families and subfamilies by living arrangements by employment status of parents, and 2014 ADOLWD population estimates.

Note: A parent may be included in labor force data and not work full time. A parent may not be classified as in the labor force but may work seasonally. Columns may not sum due to rounding.

Among children who live with related parents who are in the labor force, the percentage who live with both parents dropped from 65 percent in 2000 to 57 percent in 2013, while the percentage of children living with single parents rose. Children living with only their father rose from 12 percent in 2000 to 15 percent in 2013. Children living with only their mother rose from 23 percent in 2000 to 28 percent in 2013. It is worth noting that parents recorded as “in the labor force” are not necessarily working in a full-time capacity.

**Figure 5. Alaska Children in Households with Own Parent(s) in the Labor Force, 2000 and 2014**



Source: McDowell Group estimates based on Tables B23008 (ACS 5-Year Estimates) and P049 (2000 Census): Age of own children under 18 years in families and subfamilies by living arrangements by employment status of parents.

Note: A parent may be included in labor force data and not work full-time or not be classified as in the labor force and work seasonally.

## **Children Potentially in Need of Early Care and Learning Services**

As noted above, in 2014 an estimated 33,200 children under six years of age lived in a household in which all parents the child lives with were in the labor force, representing 60 percent of all children under six years of age who live with their own parents. If this percentage (60 percent) is applied to children who are living with relatives or non-relatives rather than their own parents, 5,250 children under six years of age are living in households in which all available relative and non-relative caregivers are in the labor force. In total, in 2014 there were an estimated 38,500 children under six years of age in Alaska households in which all available adults are in the labor force.

Also in 2014, 45,400 children six through 12 years of age lived in a household in which all parents the children lived with were in the labor force. This represents 68 percent of children in this age group who lived with their own parents (single parents and two-parent households). When children living with other relatives and non-relatives are included using this same percentage, an estimated total of 49,600 children six through 12 years of age live in a household in which all available adults are in the labor force.

In total, an estimated 88,100 children in Alaska lived in families in which all parents the children lived with were in the labor force.

If the average 1.49 children under six years of age per household is assumed to hold true for households in which all parents are in the labor force, there would be approximately 25,800 Alaska households with children under six years of age in need of early care and learning services of some type in 2014. This includes children living in households with relatives and non-relatives.

Similarly, there were an estimated 27,200 households with children six through 12 years of age also likely in need of some type of early care and learning service. These numbers may underestimate the true number of Alaska households with early care and learning needs, as households with a parent out of the labor force may still need services. This includes children living in households with relatives and non-relatives.

In summary, as of 2014, an estimated 88,100 children under 13 years of age in approximately 53,000 households are potentially in need of some form of early care and learning services in Alaska.

# Chapter 2. Early Care and Learning Industry Profile

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Alaska's early care and learning sector comprises a wide variety of services and providers. Providers may be generally categorized as government (federal/state) regulated child care providers, Early Head Start/Head Start programs, public and private pre-elementary school programs, private and public elementary school programs, and tribally-approved child care providers. The sector is further varied in that providers for younger children (typically those under six years of age) often differ in type of program offered from those who serve older children (six through 12 years of age).

## Licensed and Approved Early Care and Learning Providers

The State of Alaska Department of Health and Social Services (DHSS) Alaska Child Care Program Office (CCPO) monitors, regulates, licenses, and approves early care and learning providers in Alaska. The State delegates authority to the Municipality of Anchorage (MOA) Department of Health and Human Services for the licensure of early care and learning providers within the MOA.

The CCPO or local Child Care Assistance Office (designee) evaluates and approves the following types of early care and learning providers for participation the State of Alaska Child Care Assistance Program (CCAP), also known as the Parents Achieving Self-Sufficiency (PASS) Program.

- Licensed by DHSS or the MOA
- Approved by the U.S. Department of Defense or U.S. Coast Guard
- Approved by a tribal entity (for facilities that meet or exceed DHSS standards)
- Approved or accredited by a national entity
- Approved Relative, Approved Non-Relative, and In-home providers who are exempt from licensure

## Licensed Child Care Providers

The CCPO licenses three types of child care providers: Licensed Center, Licensed Group Home, and Licensed Home. The Municipality of Anchorage licenses two types of child care providers: Licensed Centers and Licensed Homes.

**Licensed Child Care Centers** provide care for 13 or more children. There were 243 licensed child care centers operating in Alaska in 2014, with 4,549 staff.

**Licensed Child Care Group Homes** provide care for nine to 12 children at one time. There were 83 licensed child care group homes operating in Alaska in 2014, with 373 staff.

**Licensed Child Care Homes** provide care for up to eight children at one time. In 2014 there were 291 licensed child care homes operating in Alaska, with 543 staff.

## **Approved Child Care Providers**

Several types of child care providers are exempt from licensure, though they must be approved by DHSS in order to participate in the State of Alaska Child Care Assistance Program. These provider types include: Approved Non-Relative, Approved Relative, PASS I In-home and PASS II/PASS III In-home Child Care Caregivers.

**Approved Non-Relative Child Care Providers** operate child care for up to four children unrelated to the provider. Approved Providers may care for no more than a total of five different children under 13 years of age, including the provider's own children. No more than two of these children may be under 30 months of age. This category of provider needs to be licensed within 12 months to continue to be eligible for payment through the Child Care Assistance Program. In 2014, 81 Approved Non Relative Child Care Providers operated in Alaska, with 82 total staff. The number of providers in this category declined markedly from 2006 as a result of some providers being classified in 2015 as Pass I In-home providers.

**Approved Relative Child Care Providers** care for no more than five children under 13 years of age in the provider's residence, including the provider's own children. This total may include no more than two children under the age of 30 months. Eligible children include the caregiver's grandchildren, great-grandchildren, siblings who reside in a separate residence, niece or nephew, and great-niece or nephew. These providers are not required to be licensed to continue to be eligible for payment through the State of Alaska Child Care Assistance Program, though a new application for approval is required every two years. In 2014, 592 Approved Relative Child Care Providers operated in Alaska, with 600 total staff.

**Approved PASS II/ PASS III In-Home Child Care Caregivers** care for children in the home of a child whose parents receive PASS II or PASS III child care assistance. There were 135 approved PASS II/PASS III In-home Child Care providers operating in Alaska in 2014, with 270 total staff.

**Pass I In-Home Child Care Caregivers** care for children whose parents receive Alaska Temporary Assistance benefits while seeking work or engaging in educational activities that may lead to employment. The providers may also include their own children in care, with the permission of the other parents. The providers must also meet Division of Public Assistance child care requirements. PASS I child care assistance is available for children under 13 years of age, up to 19 years of age if the child has a developmental disability, or 13 through 18 years of age if the children are under court supervision and required to be in the care of an adult. A total of 98 Pass I In-home Child Care Caregivers operated in Alaska in 2014, with 98 total staff.

**Legally-exempt child care providers** are legally exempt from licensing requirements as long as they care for no more than four children unrelated to them. The number of such providers in Alaska is not known.

## **Approved Military Providers**

The U.S. Department of Defense and United States Coast Guard certify child care facilities in Alaska that serve the military population. The State of Alaska does not license military facilities but does ensure they meet or exceed State licensing regulations.

**Facilities on military bases.** Child development centers and school age programs operate at Joint Base Elmendorf Richardson (JBER), Eielson Air Force Base, Fort Greely, Fort Wainwright, and the Kodiak Coast Guard Base. In 2014, nine military child development centers, along with at least four school age youth programs were operating in Alaska, in addition to family child care homes and home providers. In total, an estimated 450 people were employed in military child development centers and school age programs.

## **Early Head Start/Head Start Programs**

Early Head Start and Head Start programs are federal programs designed to serve low-income children. Early Head Start programs provide care, either in a center or through home visits, to children from birth through three years of age. The program also provides services to pregnant women for prenatal health. Head Start programs serve children ages three to five years old and are typically provided in a center-based environment.

**Early Head Start/Head Start programs.** In total, 107 Early Head Start/Head Start programs operate across Alaska. The programs are administered by 16 Head Start grantees. Thirteen of the programs are licensed by DHSS or the MOA. As of May 2015, enrollment in Head Start programs throughout Alaska totaled 2,670. Early Head Start program enrollment totaled 494. Staffing levels for Head Start are available for 2013-2014. In that year, 358 staff were employed in program classrooms. Based on 2006 numbers, it is assumed that an additional 542 staff are employed throughout the state in Early Head Start/Head Start program management and administration for an estimated total of 900 Early Head Start/Head Start program staff.

## **Public and Private Pre-Elementary School Programs**

In total, at least 158 pre-elementary school programs are known to be operating across Alaska. In State fiscal year 2015 (July 1, 2014 through June 30, 2015), 125 pre-elementary school (pre-Kindergarten) programs (usually serving children three to five years of age) were reported in a total of 20 school districts across Alaska.<sup>6</sup> Also, 26 other private pre-elementary school programs in Alaska applied for and met State criteria for pre-elementary school programs. Seven additional pre-elementary school programs are licensed as child care facilities. Within programs that have sought approval to operate through the Alaska Department of Education and Early Development, 450 staff are employed. Other pre-elementary school programs operate in Alaska without meeting such criteria. Employment data for these programs is unavailable.

## **Tribally-Approved Child Care Providers**

In 2006, there were 136 family child care providers who were tribally approved, but not State approved or licensed. There were also 142 tribally-approved in-home child care providers. More recent data is not available, so these figures are assumed to hold true presently. This represents a conservative estimate, and the number of Alaska Native children potentially in need of early care and learning services has grown substantially. Over the past decade, the population of Alaska Native/American Indian children under six years of age increased from an estimated 14,180 children in 2004 to 18,850 in 2013, an increase of one-third. The population of

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<sup>6</sup> Programs with less than five students enrolled are not included in this data.

children six through 12 years of age increased by 21 percent from 14,630 to 17,690 during the same time period.

In addition to providers, tribal entities in Alaska hire staff to administer federal Child Care and Development Funds (CCDF). At least thirty entities operate in Alaska, and, thus, an estimated 30 individuals help administer the funding.

## Summary of Early Care and Learning Providers

In total, at least 2,059 early care and learning providers operated in Alaska in 2014. These providers accounted for at least 8,366 jobs.

**Table 5. Alaska Early Care and Learning Providers and Staff, 2014**

Provider Type	Number of Providers	Total Staff
Licensed Child Care Center*	230	4,300
Licensed Child Care Group Home	83	373
Licensed Child Care Home	291	543
Approved PASS II/PASS III In-Home Child Care Caregiver	135	270
Approved Non-Relative Child Care Provider	81	82
Approved Relative Child Care Provider	592	600
Pass I In-Home Child Care Caregiver	98	98
Military Approved Providers	13	450
Early Head Start/Head Start Programs	107	900
Private and Public Pre-Elementary School Programs**	151	450
Tribally-Approved Child Care Providers	278	300
<b>Total</b>	<b>2,059</b>	<b>8,366</b>

Source: Alaska DHSS, military centers, and DEED.

\*This number does not include State-licensed Early Head Start/Head Start programs.

\*\*This number only includes pre-elementary programs certified by DEED or approved by DHSS.

Note: Military center and home provider data does not include in-home providers.

Other early care and learning providers likely operate in Alaska who are not licensed or approved by the State of Alaska or the Municipality of Anchorage. Those who care for more than four unrelated children are considered to be operating illegally and therefore cannot be tracked for purposes of measuring employment.



# Chapter 3. Economic Impact Analysis

## Employment and Wages

No single data source provides a full measure of employment in Alaska’s early care and learning sector. A substantial number of early care and learning workers are self-employed and, thus, are not reported by Alaska Department of Labor and Workforce Development (ADOLWD) or other government sources of employment data. In addition, many early care and learning workers employed by large corporations or organizations may not be categorized under early care and learning employment, and rather are reported as part of the industry for which they work (such as hospital early care and learning employees, whose positions would be recorded in the health care sector in government data sets). Nevertheless, ADOLWD data offers a measure of employment and wages among the larger providers in the state and provides an indication of trends in the sector.

### ALASKA DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

ADOLWD data for 2014 indicates 150 employers in the Child Day Care sector employed a monthly average of 1,636 workers. These workers earned a total of \$33.8 million in annual wages. Employment in this sector has been trending down since peaking in 2010 when employment averaged 1,731. Reported total annual wages have plateaued since 2010, though, after considering the effects of inflation, wages are down along with employment.

**Table 6. Alaska Child Day Care Sector Employers, Employment and Wages, 2004 to 2014**

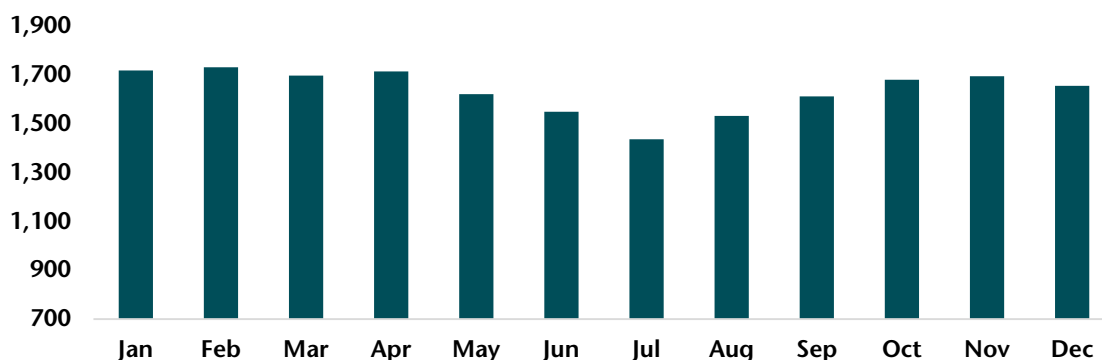
Year	Employers	Average Monthly Employment	Total Annual Wages (\$million)
2004	167	1,532	\$24.7
2005	168	1,545	25.3
2006	164	1,560	25.1
2007	140	1,556	25.7
2008	146	1,559	26.7
2009	142	1,646	29.5
2010	141	1,731	33.1
2011	146	1,691	32.0
2012	147	1,649	33.2
2013	141	1,632	33.0
2014	150	1,636	33.8

Source: Alaska Department of Labor and Workforce Development.

The total number of people working as “childcare workers” in Alaska in 2014 totaled 3,655, according to ADOLWD occupational data. These workers earned a total of \$28.7 million in annual wages. These figures differ from the average monthly employment and annual wage data presented in the preceding table because the occupational data does not include managers and others employed in the sector but not specifically in the occupation of “childcare worker.”

Child Day Care sector employment exhibits some seasonality. In 2014, employment was at its highest point in February, at 1,731 jobs, while the low-point was July at 1,436.

**Figure 6. Alaska Child Day Care Employment by Month, 2014**



Source: Alaska Department of Labor and Workforce Development.

#### ALASKA DEPARTMENT OF HEALTH AND SOCIAL SERVICES

Alaska DHSS data on licensed and approved child care providers includes employment information by type of care provider. According to this data, a total of 6,541 employees worked in child care at some point in 2014 in Alaska. The largest proportion, 70 percent, or 4,549 employees, worked at licensed child care centers (including some pre-elementary and Early Head Start/Head Start programs). Presumably, all the employment reported in the ADOLWD data is included in this group.

As shown in Table 6 above, Approved Relative Providers accounted for nine percent of the employment reported in the DHSS data, or 600 workers. Licensed Child Care Homes employed eight percent of these workers, with 543 employees. The remaining 13 percent of this employment was made up of 373 Licensed Group Home employees, 270 workers in Approved In-home care, 98 Pass 1 In-home Providers, 82 Approved Providers, 23 military child care center employees, and three military home child care workers.

Alaska DHSS does not collect wage or salary data from child care providers.

#### Federal Data Sources

The federal Bureau of Labor Statistics (BLS) publishes statewide employment and wage statistics for the “Child Day Care Services” sector. BLS provides data for private establishments and federal establishments. BLS reports a total of 2,004 workers employed by 154 establishments in 2014, with total annual wages of \$43.4 million.

**Table 7. Alaska Child Day Care Establishments, Employment, and Wages, 2014**

	Establishments	Employment	Total Annual Wages (\$million)
Private	148	1,636	\$33.8
Federal	6	368	\$9.6
<b>Total</b>	<b>154</b>	<b>2,004</b>	<b>\$43.4</b>

Source: Bureau of Labor Statistics, preliminary 2014 data.

Private employment and annual wages as reported by BLS are identical to ADOLWD data (the data is drawn from the same original documents filed by employers). Federal child day care employment is not included in the ADOLWD figures.

The U.S. Census Bureau provides non-employer statistics, which includes information on self-employed individuals. The Census Bureau reported total “gross receipts” for individuals self-employed in the Child Day Care Services sector of \$23.2 million in 2013 (the most recent data available). Gross receipts for a total of 1,500 self-employed child day care providers were included in this total.

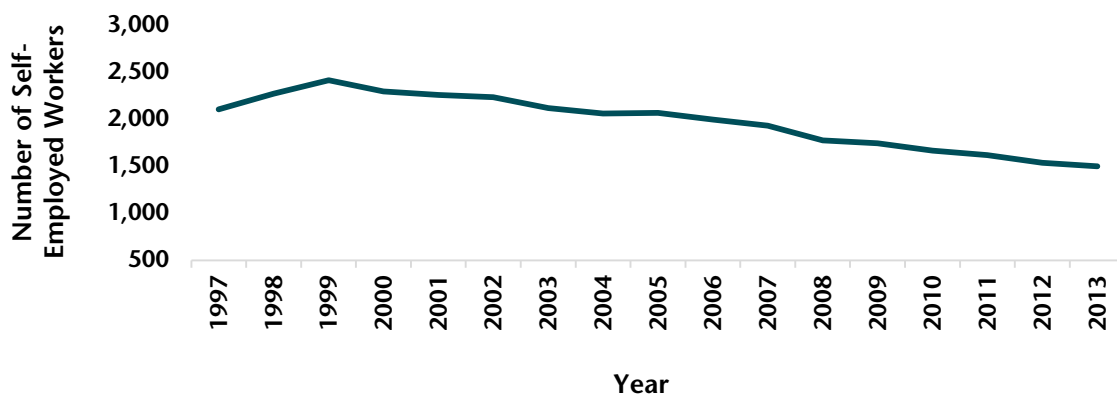
**Table 8. Alaska Child Day Care Services, Self-Employed Worker Statistics 1997 to 2013**

Year	Self-Employed Workers	Annual Gross Receipts (\$Millions)	Year	Self-Employed Workers	Annual Gross Receipts (\$Millions)
1997	2,106	20.4	2006	1,995	26.7
1998	2,274	22.3	2007	1,932	25.8
1999	2,415	23.9	2008	1,775	24.5
2000	2,297	23.3	2009	1,744	24.3
2001	2,260	24.3	2010	1,667	25.1
2002	2,236	25.4	2011	1,618	25.1
2003	2,118	25.2	2012	1,538	24.8
2004	2,063	26.4	2013	1,500	23.2
2005	2,069	25.7			

Source: U.S. Census Bureau Non-employer Statistics.

Historical data shows a steady decline in the number of self-employed Child Day Care Services workers in Alaska. The number of self-employed workers in the sector apparently peaked at 2,415 in 1999, but then declined every year (but one) to its 2013 level of 1,500, a 38 percent drop over the 14 year period. The reason for this decline is unclear.

**Figure 7. Alaska Self-Employed Child Day Care Services Workers, 1997 to 2013**



Source: U.S. Census Bureau Non-employer Statistics

## **Other Sources of Early Care and Learning Employment**

### **EARLY HEAD START/HEAD START**

Early Head Start/Head Start employment information is available for 2013-2014. In that period, 152 Head Start pre-elementary school teachers, 36 Early Head Start teachers, and 170 pre-elementary school assistant teachers were employed in Alaska. In addition, an estimated 542 managerial and administrative staff worked in Alaska Early Head Start/Head Start programs in 2013-2014.

### **TRIBAL PROVIDERS**

Tribal providers that are not State approved or licensed account for approximately 300 workers, including at least 30 people employed by tribal organizations to administer federal child care funds.

### **PRE-ELEMENTARY PROGRAMS**

Among the programs with approval to operate through the Department of Education and Early Development (DEED) in Alaska, approximately 60 people are employed in private pre-elementary schools and 390 in school district pre-elementary programs.

### **BEFORE AND AFTER SCHOOL PROGRAMS**

Data is not available on the number of before or after school programs in the state, including summer care and education programs. An estimated 25,631 children in K-12 in Alaska participate in after school programs.<sup>7</sup> A portion (not quantified) of licensed care serves elementary school aged children and is, thus, already counted in this study. One available data set shows that, in the 2013-2014 school year, 4,835 students (K-12) statewide participated in one of the 37 21st Century Community Learning Centers programs. These programs are some of the more widespread after school programs in the state. Sixty-two percent of children in these programs were regular attendees (3,011 children). Additional before and after school programs in the state include Boys and Girls Clubs, Campfire, RALLY, and various other after school faith-based, sports, and educational programs.

### **GOVERNMENT AND REFERRAL AGENCIES**

Finally, there are 36 people employed by the State of Alaska Child Care Program Office; five in the Alaska Department of Education and Early Development; 11 people employed by the Municipality of Anchorage child care licensing office; 47 people with the three child care resource and referral agencies; 43 people employed by grantees who determine child care assistance eligibility; and one employee in the Alaska Afterschool Network for a total of 143 people in program administration, licensing, and other agency operations.

## **Workforce Summary**

The various sources of early care and learning sector staffing described above account for 8,085 jobs for serving children under six years of age. This should be viewed as a conservative estimate in that it does not include an undetermined number of early care and learning providers who care for four or fewer unrelated children or any number of related children and, therefore, are not required to be licensed or approved.

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<sup>7</sup> Afterschool by the Numbers in Alaska. The Afterschool Alliance. March 2015.

## Average Wages in the Early Care and Learning Sector

A variety of data is available about wages in the early care and learning sector in Alaska. All illustrate the relatively low wages paid in the sector.

Monthly wages for workers in the Child Day Care sector averaged \$1,723 in 2014.<sup>8</sup> This average equals about 40 percent of the average for all employers in Alaska, which was \$4,404 in 2014. Wages in the Child Day Care sector have been trending up over the past decade, but at a slower rate than Alaska monthly wages overall.

**Table 9. Alaska Child Day Care Sector Average Monthly Wages, 2004 to 2014**

Year	Child Day Care Sector	Alaska Private Sector	Alaska Public Sector	All Alaska Employers'
2004	\$1,342	\$3,126	\$3,477	\$3,218
2005	1,366	3,212	3,588	3,309
2006	1,340	3,366	3,679	3,445
2007	1,378	3,568	3,804	3,627
2008	1,429	3,741	3,895	3,779
2009	1,494	3,838	4,026	3,886
2010	1,595	3,906	4,179	3,977
2011	1,625	3,995	4,297	4,071
2012	1,676	4,111	4,369	4,175
2013	1,685	4,195	4,434	4,253
2014	1,723	4,360	4,544	4,404
<b>'04 -'14 Pct. Change</b>	<b>28%</b>	<b>39%</b>	<b>31%</b>	<b>37%</b>

Source: Alaska Department of Labor and Workforce Development.

Occupational wage rate data from ADOLWD indicates Child Day Care workers earned an average hourly wage of \$12.06 in 2014, with a median hourly wage of \$11.58. The annual mean wage was \$25,080. Nationally, the median hourly wage in 2014 was \$9.48, the mean was \$10.44, and the mean annual wage was \$21,710. Hourly wage rates for Child Day Care workers rose over the past decade, from an average of \$9.11 in 2004.

**Table 10. Child Day Care Worker Wages, Alaska and U.S., 2014**

	Median Hourly Wages	Mean Hourly Wage	Mean Annual Wage
Alaska	\$11.58	\$12.06	\$25,080
U.S.	\$9.48	\$10.44	\$21,710
Pct. Difference	22%	16%	16%

Source: ADOLWD and Bureau of Labor Statistics, Occupational Employment and Wages, May 2014.

According to the Bureau of Labor Statistics Quarterly Census of Employment and Wages, average weekly wages for private sector Child Day Care workers in Alaska was \$397, with an annual average wage of \$20,668. Federally-employed Child Day Care workers earned an average \$503 per week and \$26,146 annually.

<sup>8</sup> Alaska Department of Labor and Workforce Development.

**Table 11. Alaska Child Day Care Wage Rates, 2014**

	Employment	Average Weekly Wage	Average Annual Pay
Private	1,636	\$397	\$20,668
Federal	368	\$503	\$26,146

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, preliminary 2014 data.

## Household Spending on Early Care and Learning

Results of the McDowell Group *2015 Alaska Household Early Care and Learning Survey* indicate that 55 percent of Alaska children under six years of age typically receive some form of early care and learning services in a typical month. In 2014, 64,365 children under six years of age lived in Alaska, according to ADOLWD. If survey results are applied to this population estimate, an estimated 35,400 children under six years of age received early care and learning services during the year in Alaska in 2014.

Survey results indicate 42 percent of children six through 12 years of age received early care and learning services in the month prior to the survey. If this percentage is applied to ADOLWD figures for the population of children in this age group in Alaska in 2014, 73,311, an estimated 30,800 children six through 12 years of age received early care and learning services in 2014.

On average, survey results for children who receive care indicate a monthly average of \$409 in early care and learning spending per child for children under six years of age and \$132 for children six through 12 years of age. Total average annual spending on early care and learning services for children under six years of age is estimated at \$174 million in 2014. Total average annual spending for children six through 12 years of age is estimated at \$49 million. In total, annual household spending on early care and learning services in Alaska for children under 13 years of age is estimated at \$223 million. This spending is for all types of care, including part-time, full-time, and occasional care.

### Monthly Costs for Early Care and Learning Services

The estimates derived from the survey for monthly spending on early care and learning services include all the full range of spending on occasional, regular part time and regular full-time care. It also includes instances where children received care but surveyed parents reported no spending on that care. Data from the State of Alaska Child Care Program Office provides measures of the monthly cost of various types of care. According to the 2013 Alaska Child Care Market Price Survey Report, monthly early care and learning spending at licensed centers and homes ranged from \$150 for part-time care to over \$1,110 for full-time care.

**Table 12. Child Care Provider Monthly Price Range in Alaska, 2013**

	Infant	Toddler	Preschool Age	School Age
<b>Full-Time</b>				
Licensed Center Care & Group Home	\$600-\$1,197	\$492-\$1,225	\$275-\$980	\$520-\$895
Licensed Home	\$500-\$900	\$492-\$1,042	\$495-\$1,150	\$483-\$825
<b>Part-Time</b>				
Licensed Center Care & Group Home	\$428-\$825	\$270-\$825	\$150-\$855	\$215-\$700
Licensed Home	\$303-\$680	\$295-\$716	\$180-\$624	\$250-\$694

Source: Alaska DHSS Child Care Program Office, 2013 Alaska Child Care Market Price Survey Report.

This data clearly indicates that some families are paying far more than the \$409 average per child under six years of age measured in the survey. In fact, survey results (described in more detail in the next chapter) indicate that about one-quarter of children under six years of age who are receiving care are receiving that care at a monthly cost above \$750. Fifteen percent are in the \$500 to \$750 range, 15 percent are in the \$250 to \$500 range, and about 20 percent are in the \$1 to \$250 range. Care for 30 percent of the children was at no out-of-pocket cost to the parents.<sup>9</sup>

## **State and Federal Program Funding**

Government funding for early care and learning assistance programs and early childhood development and education programs derives from both State and federal sources. This funding is an important part of the economic impact of Alaska's early care and learning sector.

### ***State of Alaska Department of Education and Early Development (DEED)***

The State of Alaska, through the Department of Education and Early Development (DEED) administers a competitive grant program, funded at \$2 million in FY14 and FY15, for development and implementation of pre-Kindergarten (pre-K) programs. Grants are available to public school districts and their partners.

The DEED also administers an Early Learning Coordination Program funded at \$9.5 million in FY14 and FY15. Funded programs within Early Learning Coordination include \$6.9 million for Head Start, \$0.9 million for Best Beginnings, and \$0.7 million to the Parents as Teachers program.

The 21st Century Community Learning Center (21st CCLC) initiative is a program under DEED. The initiative is Alaska's only federally-funded program dedicated exclusively to before and after school and summer learning programs. Funding for this program is approximately \$5 million a year (\$5.6 million currently).

### ***State of Alaska Department of Health and Social Services (DHSS)***

The Alaska DHSS Child Care Program Office State Fiscal Year (SFY) 2015 operating budget totaled \$47.3 million, virtually the same budget as in the previous fiscal year. Of that total, \$37.7 million came from federal sources, \$9.2 million from the State general fund, and \$325,000 from other sources.

The Alaska DHSS Office of Children's Services operates the Infant Learning Program, with 7 Full Time Equivalent employees (FTE) in SFY14 and SFY15. The program's total budget was \$12.6 million in SFY14 and \$12.5 million in SFY15. The SFY15 budget includes \$2.3 million in federal funding, \$9.2 million in State funding, and an additional \$900,000 from other sources.

### ***U.S. Department of Health and Human Services***

U.S. Department of Health and Human Services funding for Head Start programs in Alaska totaled \$35.0 million in FY14. Of that total, \$20.3 million was awarded to tribal entities in the state.<sup>10</sup>

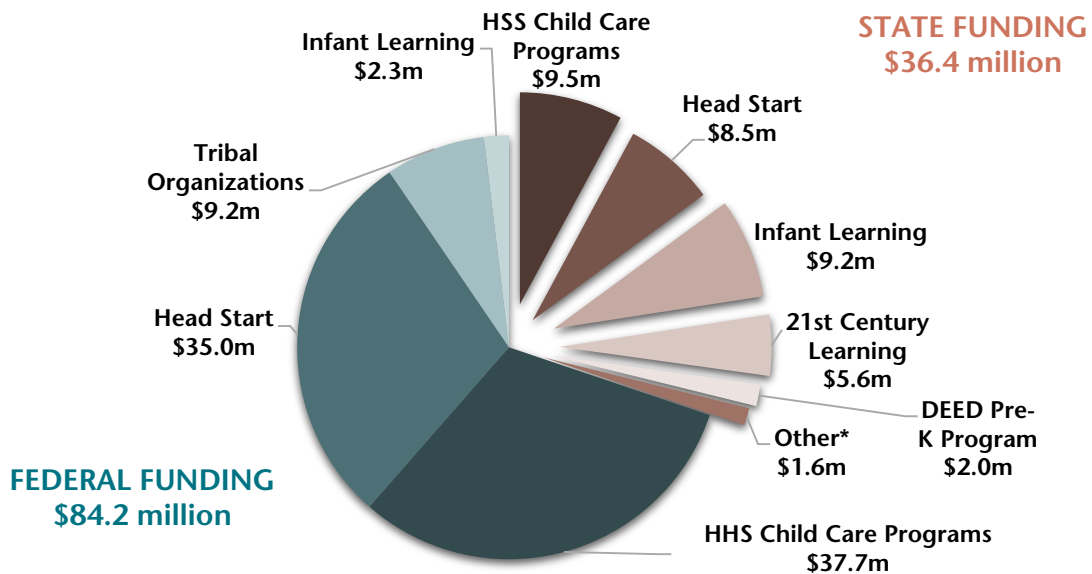
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<sup>9</sup> The survey measured expenditures for the month of March, 2015.

<sup>10</sup> U.S. Department of Health & Human Services, Administration for Children & Families. *Head Start Program Facts Fiscal Year 2014*. <http://eclkc.ohs.acf.hhs.gov/hslc/data/factsheets/2014-hs-program-factsheet.html>.

The DHHS Office of Child Care funds tribal entities through the Child Care Development Fund (CCDF). In federal FY14, CCDF funding for Alaska tribes totaled \$9.2 million. Funding was dispersed among 30 separate tribal organizations and ranged from \$22,859 to \$2.0 million per organization. Tribal entities that received over \$1 million from this funding source include the Association of Village Council Presidents, Central Council Tlingit & Haida Indian Tribes, Cook Inlet Tribal Council, and Tanana Chiefs Conference, Inc.<sup>11</sup> FY15 funding increased to \$10.4 million for 31 tribal entities.

**Figure 8. Government Funding for Early Care and Learning**



\*Other is a combination of Best Beginnings (\$0.9 million) and Parents as Teachers (\$0.7 million).

## Summary of Revenue and Spending Related to Early Care and Learning in Alaska

The economic impact of the early care and learning sector in Alaska is driven by household spending on those services and government spending on various related programs and services. Spending by parents for children under six years of age is estimated at \$174 million. Another \$49 million is spent by parents on care for children six through 12 years of age. Therefore, total spending by parents is estimated at \$223 million.

Based in FY 2014 budgets, federal spending on early care and learning totaled approximately \$84 million. State spending (not counting funds from federal sources) totaled approximately \$36 million.

Based on these estimates, the early care and learning sector in Alaska accounts for \$343 million in annual spending. The full economic impact of that spending, including direct, indirect, and induced impacts, is considered in the next section.

<sup>11</sup> U.S. Department of Health & Human Services, Administration for Children & Families, Office of Child Care. FY 2014 CCDF Final Tribal Allocations. <http://www.acf.hhs.gov/programs/occ/resource/fy-2014-ccdf-final-tribal-allocations>.



# The Economic Impact of the Early Care and Learning Sector in Alaska

## Total Employment, Income, and Output

Measuring the full economic impact of spending on early care and learning is complex, but can be supported with input-output models. Economic models, such as IMPLAN, are useful in understanding the magnitude of total direct, indirect, and induced economic effects of industry activity. IMPLAN is one of the most widely used U.S. input-output models for analyzing the economic impact of industrial and commercial activity. It uses county-level and statewide employment, payroll, and other data to define linkages between industries in the local economy and multipliers that predict the total impact of an economic stimulus. Multipliers can show either the number of direct, indirect, and induced jobs created per million dollars of output (spending), or the number of jobs or payroll dollars created in the support sector for each direct job or direct payroll dollar. IMPLAN measures jobs in terms of annual average full and part-time employment.

With the estimate of \$343 million in total direct spending in the early care and learning sector, it is possible to estimate the direct, indirect, and induced economic effects of that spending. Indirect impacts occur when early care and learning providers purchase goods and services in support of their business. Induced impacts are the result of workers in the early care and learning sector spending their wages on various goods and services.

Based on IMPLAN multipliers, \$343 million in spending has a direct employment effect of 6,500 jobs, measured in terms of annual average full and part-time positions. This differs somewhat from 8,100 jobs estimate noted previously in this report, which was a partial measure of participation in the industry rather than an annual average. Including the direct, indirect and induced effects, the early care and learning sector accounts for an estimated 7,700 annual average full and part-time jobs.

IMPLAN analysis indicates direct labor income in the early care and learning sector totaled \$170 million. Including direct, indirect and induced impacts, labor income totaled approximately \$230 million. The analysis also indicates that \$343 million in direct spending translates into \$512 million in total output, making the early care and learning sector a half billion dollar industry in Alaska.

**Table 13. Economic Impact of the Early Care and Learning Sector in Alaska, 2014**

Impact Type	Full & Part-time Employment	Labor Income (\$Millions)	Output (\$Millions)
Direct	6,500	\$170	\$343
Indirect	400	\$20	\$65
Induced	800	\$40	\$105
<b>Total Impacts</b>	<b>7,700</b>	<b>\$230</b>	<b>\$512</b>

Source: McDowell Group estimates. Columns may not sum to totals due to rounding.

Early care and learning programs and services for children under six years of age accounts for the majority of this economic activity, approximately 80 to 85 percent.

This analysis indicates that for every dollar spent on early care and learning in Alaska, there is \$1.50 in total economic activity.

Recognizing that there are differences between industries in terms of average hours worked and average wages, it is informative to compare employment in the early care and learning workforce and employment in other sectors of the Alaska economy. The table below provides measures of total full and part-time employment for a select group of Alaska sectors, to illustrate the relative importance of the early care and learning sector in terms of employment.

**Table 14. Early Care and Learning Employment Compared to Other Sectors in Alaska, 2014**

Sector	Employment
Hospitals	11,516
Accommodations	8,244
Finance and Insurance	7,416
<b>Early Care and Learning</b>	<b>6,500</b>
Food & Beverage Stores	6,210
Air Transportation	5,863
Construction of Buildings	5,084
Telecommunications	4,075

Source: Estimates based on 2013 Bureau of Economic Analysis data. Early care and learning is McDowell Group estimate. Includes direct employment only.

In 2013, there were 461,935 jobs in the Alaska economy.<sup>12</sup> Based on that number, the early care and learning sector directly accounts for approximately 1.4 percent of total employment in the state and 1.7 percent when multiplier effects are included.

## **Labor Force Participation and Household Income**

An estimated 53,000 households in Alaska operate with all available parents in the labor force. Of these households, 25,800 include children under six years of age. These figures suggest that at least 25,800 adults are able to participate in the labor force by employing some type of early care and learning service for children under six years of age. The 25,800 estimate represents one adult from each household.

According to ADOLWD, in 2013 (most recent data available), Alaska's workforce included 419,465 total workers. Seventy-nine percent of these workers, or 333,174, were Alaska residents. These residents earned an estimated \$13.4 billion in total annual wages. Adults who are in the workforce because early care and learning services are available for their young children represent eight percent of the Alaska resident workforce. If these workers also earn approximately eight percent of resident wages in the state, they earn a total of about \$1.1 billion in wages. These earnings equate to an average of approximately \$40,000 for each individual who participated in the labor force with the support of early care and learning services.

There are approximately 27,200 households with children six through 12 years of age that also have all available parents in the labor force. The household survey suggests that 15 percent of these children may stay home alone en lieu of receiving early care and learning services. If it is assumed that these children represent 15 percent of households (likely a gross over estimate as younger children may be in the same house), 23,100 adults, one adult for each of the remaining households are likely able to more fully participate in the labor force

<sup>12</sup> Bureau of Economic Analysis.

due to early care and learning services. Adults who are in the workforce with the help of early care and learning services for children six through 12 years of age account for seven percent of the Alaska resident workforce. If these workers also earn approximately seven percent of resident wages in the state, they earn a total of approximately \$900 million in wages.

In total, an estimated 48,900 adults are able to participate in the labor force in Alaska because of early care and learning services. They earn approximately \$2 billion in total annual wages.

Mean family income in Alaska in 2013 was \$99,002.<sup>13</sup> Thus, the average annual income earned for each family that includes a member in the workforce with the help of early care and learning services makes up 40 percent of mean family income. The average earnings made possible by early care and learning services per family equates to the same amount of additional average earning from having an additional family member in the labor force. Mean family income for a family with one worker in 2013 was \$72,145. Mean family income for families in which both a husband and wife worked was \$121,206.<sup>14</sup> The difference between one worker and two in the family (for families that include a husband and wife) is \$49,061.<sup>15</sup>

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<sup>13</sup> 2009-2013 American Community Survey 5-Year Estimates, S1901 Income in the Past 12 Months (in 2013 Inflation-Adjusted Dollars), Alaska families.

<sup>14</sup> 2009-2013 American Community Survey 5-Year Estimates S1902. Mean Income in the Past 12 Months (in 2013 Inflation-Adjusted Dollars).

<sup>15</sup> Nationally, 75.1 percent of mothers with children 6 to 17 years are in the labor force (2012), 64.8 percent of mothers with children under 6 are in the labor force. 57 percent for mothers with children under 1 year. [http://www.bls.gov/opub/ted/2013/ted\\_20130510.htm](http://www.bls.gov/opub/ted/2013/ted_20130510.htm)

## Chapter 4. Household Survey Results

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In April 2015 McDowell Group conducted a statewide telephone survey of Alaska households with children under 13 years of age. The purpose of the survey was to better understand use of and need for early care and learning services in Alaska. The survey sample included 574 randomly selected households with a total of 1,049 children under 13 years of age.

A similar survey was conducted in 2006, though that survey focused on households with children under six years of age (and also surveyed households without young children). Where appropriate, results of the 2015 survey are compared to the 2006 survey.

Survey results are organized by size of community into three categories:

**Urban:** communities with more than 8,000 residents. Survey results include 489 households located in Urban communities.

**Rural I:** communities with 2,000 to 8,000 residents. Survey results include 47 households located in Rural I communities.

**Rural II:** communities with fewer than 2,000 residents. Survey results include 38 households located in Rural II communities.

The survey inquired about types of early care and learning services (termed “child care” in the survey instrument) used by Alaska families, as well as frequency of use, spending on care, ease of finding care, and impacts of early care and learning needs on household member employment. The survey also queried whether and how the household benefited from child care assistance. Responses to these questions are reported below. Results are presented separately for children under six years of age and children six through 12 years of age, as care often differs between the two age groups. Several questions focus on early care and learning activity in the month prior to the survey. These results refer specifically to March 2015. Survey results have a margin of error of  $\pm 4.1$  at the 95 percent confidence level for the total sample.

### Utilization of Early Care and Learning Services

Approximately half (52 percent) of children under six years of age in surveyed households received early care and learning services in the month prior to the survey. This percentage holds true for households in most communities included in the survey regardless of community population size. An additional three percent of children in this age group typically receive early care and learning services but did not in the past month. In 2006, 58 percent of children under six years of age were in early care and learning services; a number similar to 2015 results (within the margin of error if the percentage of children who typically receive early care and learning services but did not in March are included).

**Table 15. Utilization of Early Care and Learning Services for Children Under 6 Years of Age in the Past Month (%)**

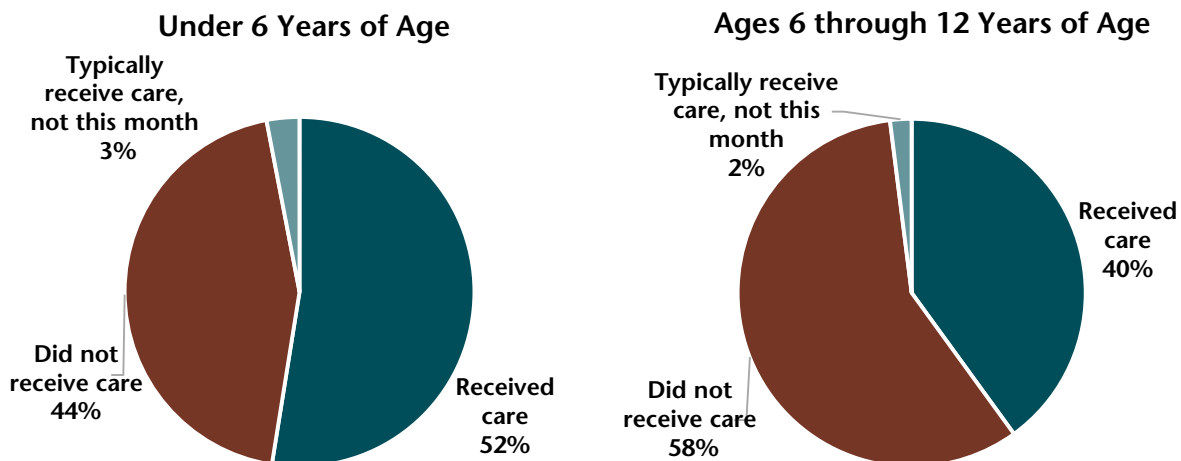
	Total (n=470)	Urban (n=392)	Rural I (n=32)	Rural II (n=46)
Received child care	52	53	53	48
Did not receive child care (typically do not in other months)	44	44	44	52
Did not receive child care (typically do in other months)	3	3	3	--
Don't know/refused	<1	<1	--	--

A smaller percentage of older children (six through 12 years of age) received early care and learning services in the month prior to the survey. In total, 40 percent of children six through 12 years of age received early care and learning services in that month. While children of this age in urban Alaska received care at a rate similar to the total, fewer children in Rural I areas (35 percent) and about half (49 percent) of children of this age in Rural II communities received care. For all communities combined, an additional two percent of children in this age group typically receive early care and learning services but did not in the past month.

**Table 16. Utilization of Early Care and Learning Services for Children 6 through 12 Years of Age in the Past Month (%)**

	Total (n=579)	Urban (n=494)	Rural I (n=48)	Rural II (n=37)
Received child care	40	40	35	49
Did not receive child care (typically do not in other months)	58	59	59	48
Did not receive child care (typically do in other months)	2	1	6	3
Don't know/refused	<1	<1	--	--

**Figure 9. Utilization of Early Care and Learning Services in March 2015, Percent of Children by Age Category**



## Alternatives to Early Care and Learning Services

Of the children under six years of age who did not receive early care and learning services in the month prior to the survey, almost all (96 percent) were cared for by a parent.

**Table 17. Children Under 6 Years of Age Cared for at Home by a Parent Rather than Receiving Early Care and Learning Services (%)**  
(Base: Children who did not receive child care services in March 2015)

	Total (n=212)	Urban (n=174)	Rural I (n=14)	Rural II (n=24)
Yes	96	97	93	96
No	3	3	-	4
Don't know/refused	<1	-	7	-

Seventy-nine percent of children ages six through 12 years of age who did not receive early care and learning services in the month prior to the survey were cared for by a parent at home and 15 percent cared for themselves at home alone after school. Children could also have been in both types of care in the past month.

**Table 18. Children Ages 6 through 12 Years of Age Cared for at Home by a Parent Rather than Receiving Early Care and Learning Services (%)**  
(Base: Children ages 6 through 12 who did not receive child care services in March 2015)

	Total (n=336)	Urban (n=291)	Rural I (n=27)	Rural II (n=18)
Yes	79	79	81	83
No	21	21	19	17
Don't know/refused	<1	<1	--	--

**Table 19. Children 6 through 12 Years of Age Who Care for Themselves at Home Alone After School (%)**  
(Base: Children ages 6 through 12 who did not receive child care services in March 2015)

	Total (n=241)	Urban (n=207)	Rural I (n=19)	Rural II (n=15)
Yes	15	15	16	7
No	84	84	84	87
Don't know/refused	1	1	--	7

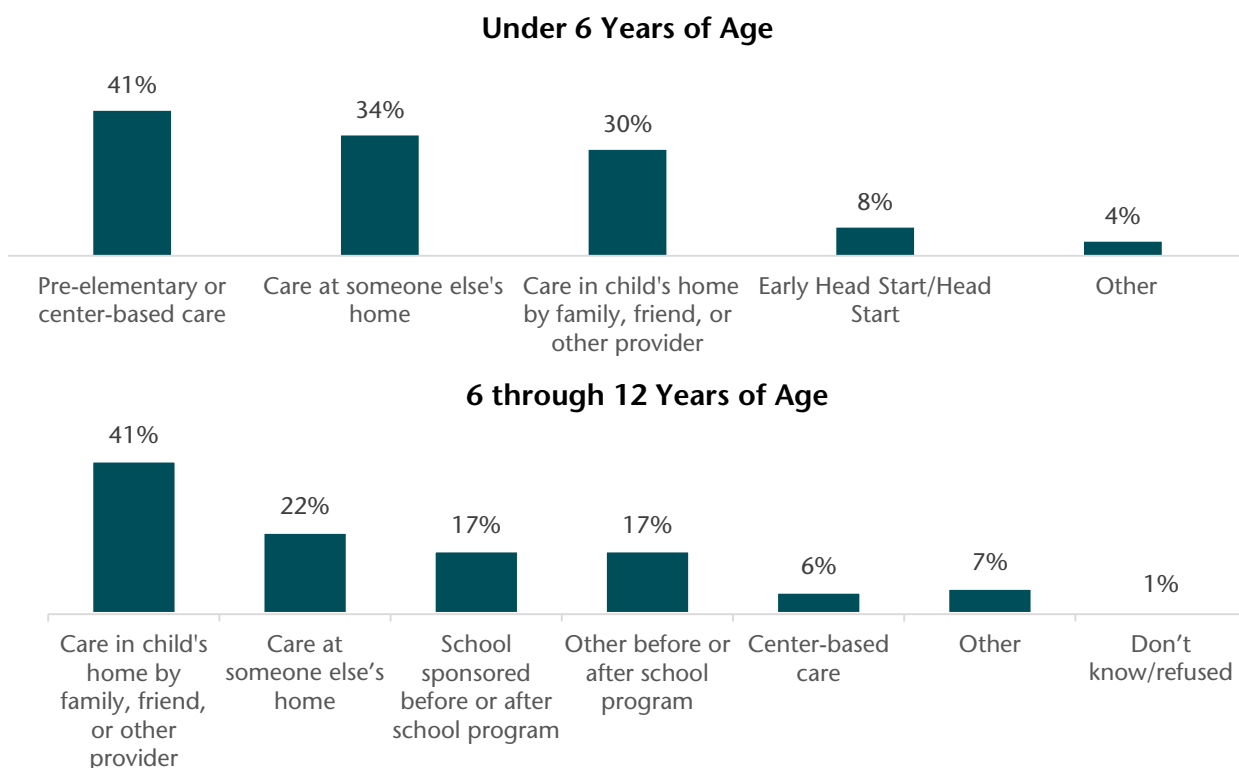
## Type of Care Received

In the month preceding the survey, 41 percent of children under six years of age received care in a pre-elementary school (termed "preschool" in the survey instrument) or other child care center, 34 percent were cared for in someone else's home, 30 percent received care in their own home, eight percent were in Early Head Start/Head Start programs, and four percent received some other form of care. Children could have received care in multiple types of care during the month. Care in smaller, Rural II communities differed from care in the larger communities. A smaller percentage of children under six years of age received care in pre-elementary schools or centers or in their own home than in larger communities. Ten percent of children in

Rural II communities received care in a pre-elementary school or child care center, versus 35 percent in Rural I communities, and 44 percent in urban areas. A larger proportion of Rural II children received care in an Early Head Start/Head Start program (29 percent, versus 12 percent in Rural I communities, and six percent in Urban areas).

Forty-one percent of children six through 12 years of age received care in their own home. This care was provided by family, friends, or another provider. Twenty-two percent of children in this age group received care in someone else's home. Children six through 12 years of age also often receive different forms of care in comparison to children under six, including after school programs. Seventeen percent of children in this age range were cared for through participation in school-sponsored after school activities, and another 17 percent were involved in other (not school sponsored) activities after school. Only six percent of children in this age group were in center-based care, and seven percent received some other form of care, such as private religious schools and other programs.

**Figure 10. Types of Early Care and Learning Services Received in Previous Month**  
*(Base: Children who received child care services in March 2015, multiple responses allowed)*



Results from the previous survey show a lower percentage of children under six years of age in pre-elementary school or center-based care in 2015 than in 2006, with 49 percent in this type of care in 2006 and 41 percent in 2015. These results are slightly outside the margin of error for the surveys. Approximately the same percentage of children were reported in care in their own or someone else's home for both survey years (roughly one-third of children who received care). Results were also similar for Early Head Start/Head Start participants for both surveys.

A larger percentage of Urban children under six years old received care in a pre-elementary school or center (44 percent) versus children in Rural I (35 percent) or Rural II (10 percent) areas. Part of this difference may be because of less availability of this type of care in smaller communities. A larger proportion of children in this age group in Rural II communities received care in someone else’s home and in Early Head Start/Head Start programs than did children in larger communities, while a smaller percentage of children in Rural II areas received care in their own home in comparison to children in larger communities.

**Table 20. Types of Early Care and Learning Services Received (%)**  
*(Base: Children who received child care services in March 2015)*

<b>Under 6 Years of Age</b>	<b>Total (n=243)</b>	<b>Urban (n=205)</b>	<b>Rural I (n=17)</b>	<b>Rural II (n=21)</b>
Pre-elementary school or center-based care	41	44	35	10
Care at someone else’s home	34	33	29	48
Care in child’s home	30	32	29	19
Early Head Start/Head Start	8	6	12	29
Other	4	4	--	10
Don’t know/refused	--	--	--	--
<b>6 through 12 Years of Age</b>	<b>Total (n=229)</b>	<b>Urban (n=194)</b>	<b>Rural I (n=17)</b>	<b>Rural II (n=18)</b>
Care in child’s home	41	40	59	44
Care at someone else’s home	22	22	18	33
School sponsored before or after school program	17	18	12	17
Other before or after school program	17	16	24	28
Center-based care	6	7	--	--
Other	7	7	6	--
Don’t know/refused	1	1	--	--

Note: multiple answers allowed.

## Length of Time in Early Care and Learning Services

Children under six years of age who spent time in early care and learning spent an average 102 hours per month in such services in the month preceding the survey, or an average of 24 hours per week. Children of this age in services paid for by their household spent an average of 117 hours in care, or 27 hours per week. Hours per week in care often include several types of services and vary widely depending on the child. Children of this age who spent time in Early Head Start/Head Start programs spent an average of 19 hours per week in the program. Children in pre-elementary or center-based care spent an average of 21 hours per week there. Children cared for in someone else’s home spent a weekly average of 20 hours in that form of care, while children spent an average of 19 hours per week in care in their own home.

These averages compare to 2006 survey results in which children in this age group spent an average of 26 hours per week in pre-elementary or center-based care, 25 hours per week in someone else’s home, 20 hours in care in their own home, and 18 hours in Early Head Start/Head Start programs. Average hours per week may not compare exactly to 2015 numbers as the methodology for calculating these figures varied slightly between the years.



**Table 21. Estimated Time in Early Care and Learning Services by Type of Care, Children Under 6 Years of Age**

*(Base: Children under 6 years of age who received child care services in March 2015)*

	Average Hours/Month	Average Hours/Week
Early Head Start/Head Start (n=20)	81	19
Pre-elementary or center-based care (n=98)	93	21
Care at someone else's home (n=79)	92	21
Care in child's own home (n=69)	81	19
Other (n=11)	76	18

Note: An average of 4.35 weeks per month was used to calculate average hours per week.

The 2006 survey found that children under six years of age spent an average of 23 hours per week in early care and learning services. The 2006 study reported children were in Early Head Start/Head Start programs for an average of 18 hours per week, in a pre-elementary school or child care center for an average of 26 hours per week, in care in someone else's home for an average of 25 hours per week, in care in their own home for an average of 20 hours per week, and in other care for 11 hours per week on average.

Children six through 12 years of age spent less than half the time in early care and learning services in March on average than did children under six years of age. In total, children in this older group received a monthly average of 43 hours of care in March. Children of this age in services paid for by their household spent an average of 51 hours in care, or 12 hours per week. Children in this age group who were cared for in someone else's home spent an average of ten hours per week in this form of care, while those who were cared for in their own home received care for an average of nine hours per week. Those who spent time in school-sponsored before or after school activities spent an average of nine hours per week in those activities, while those involved in other before or after school activities spent an average of ten hours per week on them. Though few children six through 12 years of age spent time in center-based care, those who did spent an average of 13 hours per week in that form of care.

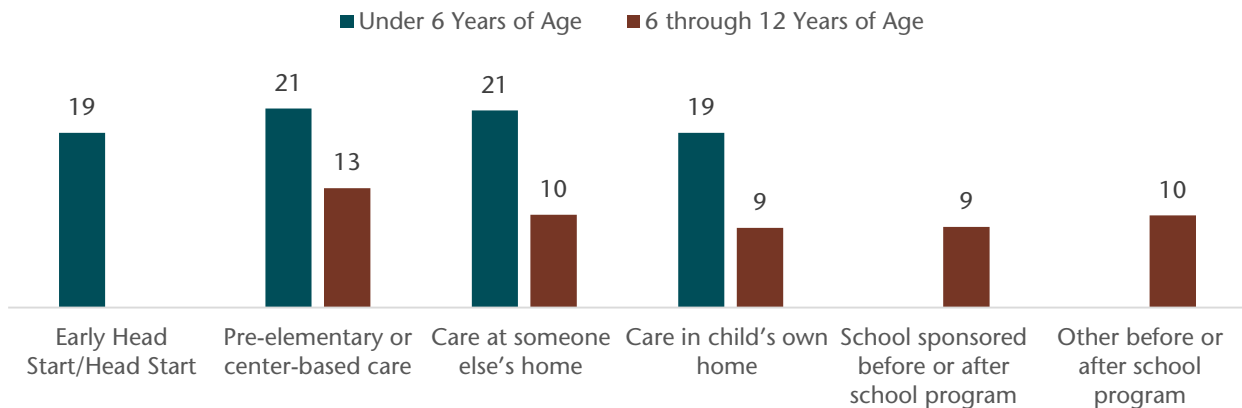
**Table 22. Estimated Time in Early Care and Learning Services by Type of Care, Children 6 through 12 Years of Age**

*(Base: Children ages 6 through 12 who received child care services in March 2015)*

	Average Hours Per Month	Average Hours Per Week
Center-based care (n=14)	55	13
Care at someone else's home (n=49)	43	10
Care in child's own home (n=85)	37	9
School sponsored before or after school program (n=37)	37	9
Other before or after school program (n=40)	43	10
Other (n=15)	79	18

Note: An average of 4.35 weeks per month was used to calculate average hours per week.

**Figure 11. Estimated Time (Hours per Week) in Early Care and Learning Services, by Type of Care and Age Group**



Note: Early Head Start programs are only available for children birth through three years of age, Head Start programs are available for children three through five years of age, and school programs only for six through 12 years of age.

## Spending on Early Care and Learning Services

Overall, households in the survey sample spent an average of \$409 in the month prior to the survey on all types of early care and learning services for each child under six years of age. Spending for children of this age in services paid for by the household (not including care at no cost or financial assistance) averaged \$582. Average costs for specific types of care vary considerably. Average monthly early care and learning service expenses for children in Early Head Start/Head Start programs averaged \$102 per month, though many children in this type of care receive care at no cost. Spending on pre-elementary school/center-based care averaged \$459 per month. Care in someone else's home averaged \$342 per month, and care in the child's own home averaged \$299. Other care for this age group averaged \$236 per month. In 2006, average monthly spending per child totaled \$318 (\$387 in 2014 dollars).<sup>16</sup>

**Table 23. Average Monthly Spending on Early Care and Learning Services by Type of Service, Children Under 6 Years of Age**

*(Base: Children under six years old who received child care services in March 2015)*

Type of Care	Under 6 Years of Age	Under 3 Years of Age	4 to 5 Years of Age
Early Head Start/Head Start (n=20)	\$102	\$213	\$74
Pre-elementary or center-based care (n=92)	\$459	\$438	\$474
Care at someone else's home (n=78)	\$342	\$327	\$363
Care in child's home by family, friend or other provider (n=65)	\$299	\$341	\$218
Other (n=9)	\$236	N/A	\$141

Note: some children were in multiple types of care.

Average spending on early care and learning services in the month prior to the survey for children six through 12 years of age totaled \$132. Households that paid for care spent an average of \$262 per child of this age. This decrease from average spending for children under six years of age is due largely to children in this age group entering the public school system and, therefore, needing less early care and learning service hours (43 average

<sup>16</sup> Adjust for inflation (2014 dollars) with the Anchorage Consumer Price Index (CPI).

monthly hours versus 102 for children under six years of age). Spending varied by type of care, with monthly spending averaging \$246 for center-based care, \$78 for care in someone else’s home, \$52 for care in the child’s own home, \$211 for school-sponsored before and after school programs, \$182 for other programs before or after school, and \$124 for other forms of early care and learning services.

**Table 24. Average Monthly Spending on Early Care and Learning Services by Type of Service, Children 6 through 12 Years of Age**

*(Base: Children ages 6 to 12 who received child care services in March 2015)*

Type of Care	Average Monthly Spending
Center-based care (n=12)	\$246
Care at someone else’s home (n=48)	\$78
Care in child’s home by family, friend or other provider (n=88)	\$52
School-sponsored before or after school program (n=36)	\$211
Other before or after school program (n=39)	\$182
Other (n=14)	\$124

Note: some children were in multiple types of care.

## Financial Assistance

Care was paid for, at least in part, by some form of financial assistance (employer or government) for 15 percent of children under six years of age and nine percent of children six through 12 years of age who received care in the month prior to the survey. This level of assistance is approximately the same as in 2006, when 14 percent of children under six years of age were assisted financially with early care and learning service expenses.

**Table 25. Child Care Financial Assistance Received from the Government or an Employer (%)**

*(Base: Children who received child care services in March 2015)*

	Children Under 6 Years of Age (n=248)	Children 6 through 12 Years of Age (n=230)
Received Assistance	15	9
No Assistance	85	89
Don’t know/refused	<1	2

The amount of child care assistance received in the month prior to the survey averaged \$404 for each child under six years of age who received assistance. In 2006, average assistance totaled \$539 (small sample sizes in both the 2006 and 2015 surveys limit the validity of comparison of survey results for average amount of financial assistance).

Children six through 12 years of age required less child care assistance on average per child, at \$284. This lower level of assistance for older children is consistent with less child care spending overall for this age group.

**Table 26. Average Child Care Financial Assistance Received from the Government or an Employer in Month Prior to Survey (%)**

*(Base: Children who received child care assistance in March 2015)*

	Children Under 6 Years of Age (n=24)	Children 6 through 12 Years of Age (n=11)
\$0; nothing	--	--
\$1 – 250	29	36
\$251 – 500	54	55
\$501 – 750	8	9
\$751+	8	-
<b>Average amount of assistance</b>	<b>\$404</b>	<b>\$284</b>

Note: columns may not sum to 100 percent due to rounding.

## Access to Early Care and Learning Services

Survey respondents report finding early care and learning services for their children under six years of age was easy or very easy for half (50 percent) of the children, and difficult to very difficult for the other half (46 percent). Survey respondents only report finding early care and learning services very difficult for 14 percent of children in this age group. Respondents could choose more than one answer.

**Table 27. Ease of Finding Early Care and Learning Services, Children Under 6 Years of Age (%)**

*(Base: Children under six years old who received child care services in March 2015)*

	Total (n=247)	Urban (n=208)	Rural I (n=16)	Rural II (n=23)
Very easy	12	12	19	4
Easy	38	38	44	43
Difficult	32	33	31	17
Very difficult	14	13	6	30
Don't know/refused	4	5	--	4

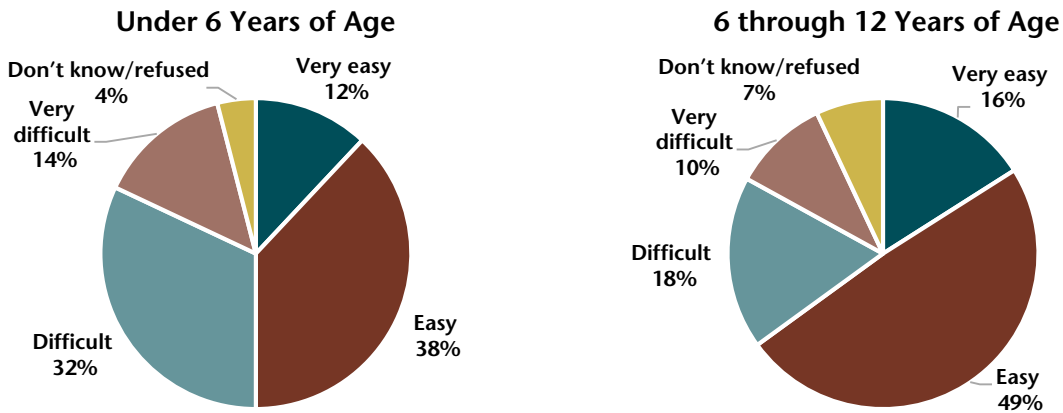
Overall, finding early care and learning services for children six through 12 years of age was easier than for younger children. Survey respondents report that finding early care and learning services was very easy or easy for 65 percent of children in this age group, and difficult or very difficult for 28 percent.

**Table 28. Ease of Finding Early Care and Learning Services, Children 6 through 12 Years of Age (%)**

*(Base: Children 6 to 12 who received child care services in March 2015)*

	Total (n=231)	Urban (n=195)	Rural I (n=18)	Rural II (n=18)
Very easy	16	16	22	11
Easy	49	49	61	39
Difficult	18	18	6	28
Very difficult	10	10	11	-
Don't know/refused	7	7	--	22

**Figure 12. Ease of Finding Early Care and Learning Services, by Age Group**  
*(Base: Children 6 through 12 years of age who received child care services in March 2015)*



### Barriers to Finding Early Care and Learning Services

Among respondents who reported finding early care and learning services for a child under six years of age difficult or very difficult, 63 percent reported the reason as lack of availability or absence of a provider. Other relatively frequently stated reasons for difficulty included issues with quality (40 percent), cost (40 percent), lack of convenience (17 percent), and other reasons (15 percent).

For children six through 12 years of age, cost was a factor for slightly more than half (52 percent) of children for which care was difficult to find, followed by lack of availability/lack of a provider (47 percent), quality (28 percent), convenience (13), and other issues (22 percent).

**Table 29. Reasons for Difficulty Finding Early Care and Learning Services (%)**  
*(Base: Children who received child care services in March 2015 for which it was difficult or very difficult to find child care)*

	Children Under 6 Years of Age (n=111)	Children 6 through 12 Years of Age (n=64)
Availability/lack of provider	63	47
Quality	41	28
Cost	40	52
Convenience	17	13
Other	15	22
Don't know/refused	1	-

### Early Care and Learning Needs as a Barrier to Employment

Approximately one-quarter (24 percent) of households with children who received early care and learning services in the month prior to the survey reported that an issue with early care and learning services prevented someone in the household from seeking employment or restricted the number of hours worked.

**Table 30. Quality, Availability, or Cost of Early Care and Learning Services as a Barrier to Seeking Employment or Restriction of the Number of Hours Worked (%)**  
*(Base: Households with children who received child care services in March 2015)*

	Total (n=574)	Urban (n=489)	Rural I (n=43)	Rural II (n=42)
Yes	24	24	35	21
No	74	74	65	79
Don't know/refused	2	3	--	--

Aspects of early care and learning services that prevented or restricted household member employment include quality, availability, and cost. Of these three impacts, the cost of early care and learning services was reported as a major impact for 65 percent of respondents, availability for 53 percent, and quality for 29 percent.

**Table 31. Factors in Early Care and Learning Services Impacting Household Members' Ability to be Employed or Work More Hours (%)**  
*(Base: Households in which the quality, availability, or cost of child care prevented anyone from seeking employment or restricted the number of hours they could work)*

(n=139)	Quality	Availability	Cost
Major impact	29	53	65
Minor impact	36	17	19
No impact	29	26	12
Does not apply	2	--	--
Don't know/refused	4	4	4

## Labor Force and Employment Information

### Employment Status

Sixty-nine percent of survey respondents were employed year-round, at least part-time, with an additional six percent employed seasonally. The proportion of respondents employed year-round was also close to 70 percent in Urban and Rural I communities, while 53 percent of respondents from Rural II communities were employed year-round and 14 percent seasonally. Fourteen percent of employed respondents were self-employed. Seven percent of respondents were employed in the early care and learning industry or otherwise paid to care for children.

**Table 32. Employment Status (%)**

	Total (n=574)	Urban (n=489)	Rural I (n=43)	Rural II (n=42)
Full-time year-round	59	59	72	43
Part-time year-round	10	11	--	10
Full-time seasonally	4	4	--	7
Part-time seasonally	2	1	5	7
Unemployed, not looking for work	3	3	5	--
Unemployed, looking for work	3	2	7	14
Student	1	2	--	--
Homemaker	10	10	9	14
Retired	3	3	2	--
Disabled	2	2	--	2
Refused	2	2	--	2

**Table 33. Self-Employed (%)***(Base: Those employed full-time, part-time, year-round, and seasonally)*

	Total (n=432)	Urban (n=371)	Rural I (n=33)	Rural II (n=28)
Yes	14	15	12	7
No	85	85	88	89
Don't know/refused	<1	--	--	4

**Table 34. Employment in the Early Care and Learning Industry or Paid to Care for Children (%)**

	Total (n=574)	Urban (n=489)	Rural I (n=43)	Rural II (n=42)
Yes	7	7	7	10
No	90	90	93	86
Don't know/refused	3	3	--	5

## Employer Early Care and Learning Services Accommodations

Slightly more than half (54 percent) of respondents who were employed, though not self-employed, described their employer as very accommodating around early care and learning needs, while another third (33 percent) reported their employer is somewhat accommodating. Nine percent believed their employer is not accommodating.

**Table 35. Employer Accommodation for Early Care and Learning Needs (%)**  
*(Base: Those employed, excluding those self-employed)*

	Total (n=371)	Urban (n=317)	Rural I (n=29)	Rural II (n=25)
Very accommodating	54	54	55	60
Somewhat accommodating	33	34	17	36
Not accommodating	9	9	10	4
Don't know/refused	5	3	17	-

## **Labor Force Participation and Early Care and Learning Services Utilization**

Survey results were analyzed to discern differences in early care and learning services utilization between respondents in the labor force (employed or seeking employment) and those who were not. Of the total 574 respondents in the survey sample, 21 percent were not in the labor force. This number only indicates labor force participation for the individual who responded to the survey, not for all adult household members. Thus, it is not an indication of how many households in the survey include a potential caregiver (someone who is not in the labor force). What this number does provide is information on early care and learning services utilization for households that include at least one member not in the labor force.

### **UTILIZATION OF EARLY CARE AND LEARNING SERVICES**

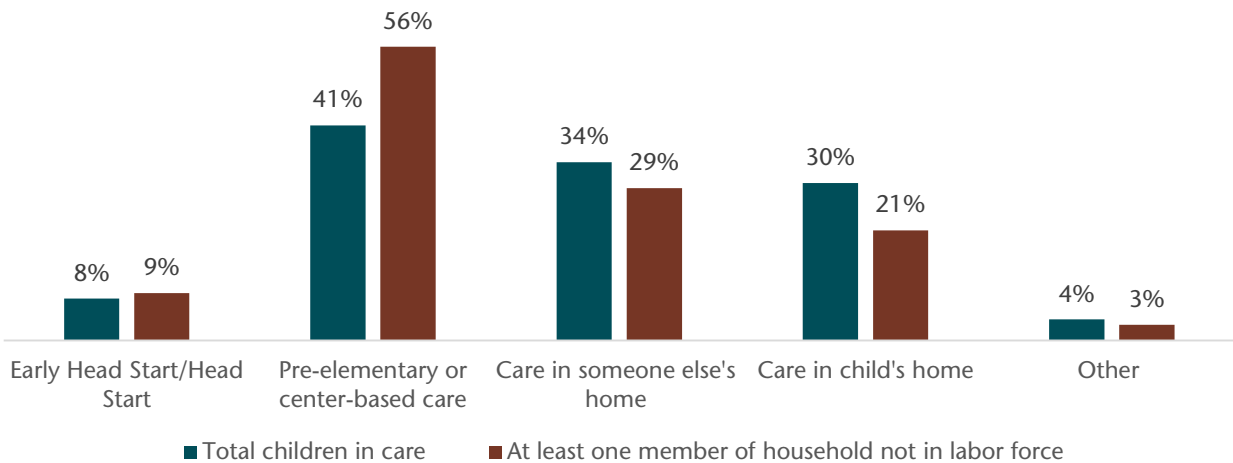
Based on labor force participation of respondents, survey results suggest other factors aside from labor force participation influence early care and learning services utilization. Almost one third (32 percent) of children under six years of age who live in a household in which at least one member was not in the labor force received some type of early care and learning services in the month prior to the survey. An additional one percent of children in this age group and living situation typically receive early care and learning services but did not that month. One quarter (24 percent) of children six through 12 years of age who live with a household member not in the labor force received early care and learning services in the month preceding the survey, while an additional three percent typically receive care.

### **TYPE OF CARE UTILIZED**

Among children under six years of age who live in a household in which at least one member is not in the labor force and received early care and learning services in the month preceding the survey, 56 percent attended a pre-elementary school or received center-based care. This percentage is significantly higher than in the total population of children in the sample who received this type of care (41 percent). This result suggests that some households that include a member of the household who is not in the labor force may enroll children in early learning opportunities, such as pre-elementary school, whether or not early care and learning services are needed.



**Figure 13. Percent of Children Under 6 Years of Age in Early Care and Learning Services by Type of Service, Labor Force Status of Household**



Twenty-nine percent of children under six years of age who received early care and learning services and live in a household with at least one member not in the labor force received care in someone else’s home, 21 percent received care in their own home, and nine percent were enrolled in Early Head Start/Head Start programs. These percentages suggest some households with a member not in the labor force do have a need for early care and learning services. Some of these households include students who may need early care and learning services when pursuing their studies.

Among children six through 12 years of age, type of care did not vary as significantly by household member participation in the labor force as it does for children under six years of age. Almost half (47 percent) of children in this age group who received care in the preceding month and live in a household with at least one member not in the labor force received care in their own home, while 27 percent received care in someone else’s home. Seventeen percent of these children received care in a school sponsored before or after school program, which may indicate some of these children did not necessarily need early care and learning services and participate in programs for further social or academic enrichment.

#### **LENGTH OF TIME IN EARLY CARE AND LEARNING SERVICES**

##### ***Children Under Six Years of Age***

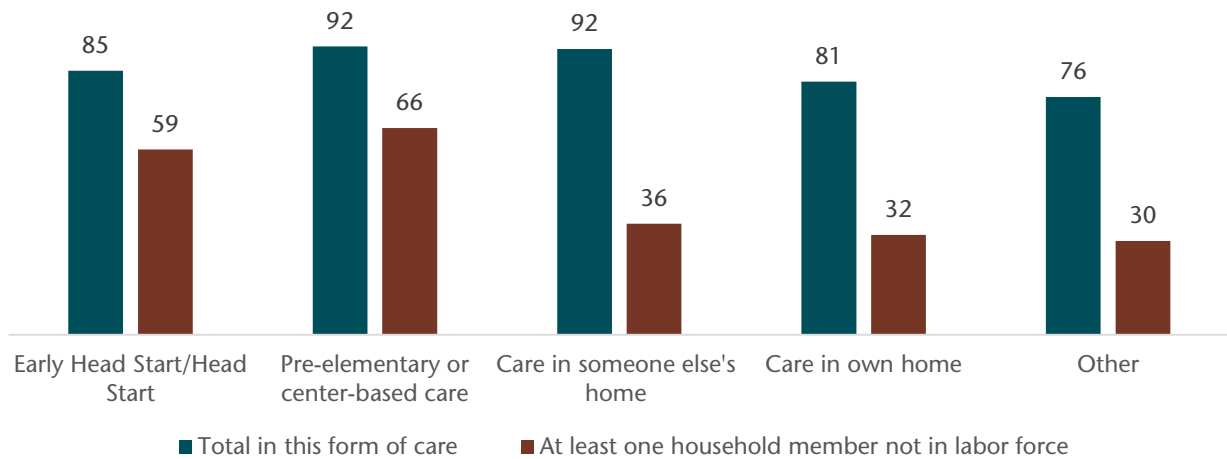
Children under six years of age in households with at least one member not in the labor force who did receive early care and learning services tended to spend less time in care on average than the overall survey population in care. Children of this age who were enrolled in a pre-elementary school or center-based care spent fewer hours in that care: 92.3 hours in the month prior to the survey on average for all children enrolled in this type of care versus 66.2 hours in the month for children with at least one household member not in the labor force.

Difference in length of time in care is more pronounced among children under six years of age who received care in someone else’s home: 91.5 hours on average in the month for all children of this age in this type of care versus 35.5 hours for children living with at least one household member not in the labor force. The same trend holds true for children in care in their own home: 81.1 average hours in the month for all children of this age

in this form of care versus 32.0 hours in the month for children with a household member not in the labor force.

Sample sizes for hours in care for other forms of care, including Early Head Start/Head Start programs, were too small to meaningfully analyze differences in these populations.

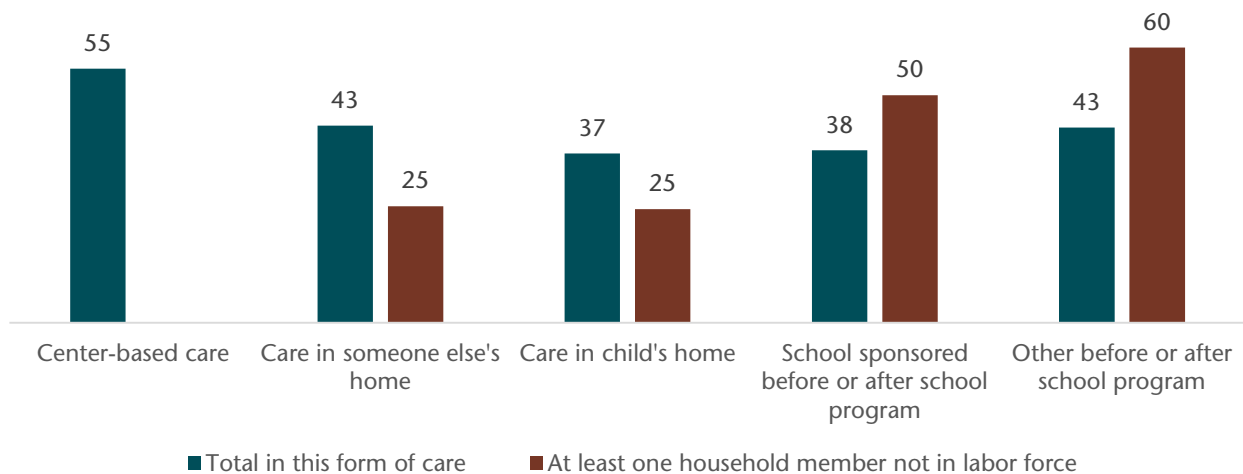
**Figure 14. Average Hours in Care in the Month Prior to the Survey for Children Under 6 Years of Age, by Type of Care, Labor Force Status of Household**



**Children Six through 12 Years of Age**

Children six through 12 years of age who received care in the month prior to the survey and who lived in a household in which at least one member was not in the labor force spent less time on average in the month in care in centers or in homes. Survey results suggest that children in this age group who lived with at least one household member not in the labor force spend more time on average in before or after school program, though sample sizes are small and, therefore, this finding would need further inquiry to verify.

**Figure 15. Average Hours in Care in the Month Prior to the Survey for Children 6 through 12 Years of Age, by Type of Care, Labor Force Status of Household**



## EARLY CARE AND LEARNING NEEDS AS A BARRIER TO PARTICIPATION IN THE LABOR FORCE

Also of note, 16 percent of respondents who were not in the labor force reported that in the last 12 months, the quality, availability, or cost of early care and learning services prevented someone in the household from seeking employment or restricted the number of hours they could work. This number reinforces the possibility that a certain percentage of households that include a member who is not in the labor force are, in fact, potentially in need of early care and learning services.

## Demographics

### Children in Survey Sample

Eighty-three percent of children under six years of age who are included in the survey sample live in Urban areas of Alaska (communities with a population over 8,000), as do 85 percent of children six through 12 years of age in the sample. In the sample of children under six years of age, seven percent live in Rural I areas (communities with populations between 2,000 and 8,000) and 12 percent in Rural II communities (under 2,000 people). Among children six through 12 years of age, eight percent live in Rural I communities and six percent in Rural II areas.

**Table 36. Geographic Distribution of Children in Survey Sample, by Age**

	Count (n=1,049)	Percent (%)
<b>Under 6 Years of Age</b>		
Urban	392	83
Rural I	32	7
Rural II	46	12
<b>Total</b>	<b>470</b>	<b>100</b>
<b>6 through 12 Years of Age</b>		
Urban	494	85
Rural I	48	8
Rural II	37	6
<b>Total</b>	<b>579</b>	<b>100</b>

Note: Urban: communities with population over 8,000; Rural I: communities with 2,000 to 8,000 people; Rural II: communities with populations under 2,000.  
Column totals may not sum due to rounding.

**Table 37. Age Distribution of Children in Survey Sample**

	(n=1,049)	Percent (%)
Under 1		6
1		6
2		8
3		8
4		9
5		9
6		9
7		9
8		7
9		6
10		8
11		7
12		8

### Respondents in Survey Sample

Sixty percent of survey respondents are female. This percentage is higher in Rural II areas, where females make up 69 percent of the sample. The average age of survey respondents is 39.7 years old. Age does not differ significantly with geography. Sixty-eight percent of respondents are married, 24 percent single, five percent divorce/separated, and one percent widowed. In Rural II areas, 55 percent of respondents are married and 40 percent single. Household income averages \$72,700 for the survey sample.

Overall, 62 percent of survey respondents identify as White, 18 percent as Alaska Native, five percent as Asian. In Rural II and Rural I communities, the percentage of respondents who identify themselves as Alaska Native is much higher: 51 percent in Rural II communities and 64 percent in Rural I communities. Of the households sampled, 29 percent include Alaska Native children and seven percent include American Indian children.

**Table 38. Household Demographics (%)**

	Total 2015	Urban 2015	Rural I 2015	Rural II 2015
<b>Gender</b>	<b>(n=574)</b>	<b>(n=489)</b>	<b>(n=43)</b>	<b>(n=42)</b>
Female	60	59	58	69
Male	40	40	42	31
Don't know/refused	<1	<1	--	--
<b>Age</b>	<b>(n=574)</b>	<b>(n=489)</b>	<b>(n=43)</b>	<b>(n=42)</b>
18 – 24	6	7	--	7
25 – 34	28	28	28	33
35 – 44	39	39	44	24
45 – 54	16	16	19	14
55 – 64	7	6	7	17
65+	4	4	2	5

	Total 2015	Urban 2015	Rural I 2015	Rural II 2015
<b>Average age</b>	<b>39.7</b>	<b>39.5</b>	<b>40.6</b>	<b>41.2</b>
<b>Marital Status</b>	<b>(n=564)</b>	<b>(n=482)</b>	<b>(n=40)</b>	<b>(n=42)</b>
Married	68	69	75	55
Divorced/separated	5	6	3	2
Widowed	1	<1	3	2
Single	24	23	20	40
Other	<1	<1	--	--
Don't know/refused	2	2	--	--
<b>Income</b>	<b>(n=574)</b>	<b>(n=489)</b>	<b>(n=43)</b>	<b>(n=42)</b>
Less than \$15,000	6	6	5	14
\$15,001 – \$25,000	7	6	9	10
\$25,001 – \$35,000	9	9	5	7
\$35,001 – \$50,000	12	12	16	10
\$50,001 – \$75,000	14	15	7	12
\$75,001 – \$100,000	15	16	12	10
Over \$100,000	27	26	37	29
Don't know/refused	10	10	9	10
<b>Average household income</b>	<b>\$72,700</b>	<b>\$72,600</b>	<b>\$79,000</b>	<b>\$67,400</b>
<b>Ethnicity of Respondent</b>	<b>(n=574)</b>	<b>(n=489)</b>	<b>(n=43)</b>	<b>(n=42)</b>
White	62	66	40	31
Alaska Native	18	11	51	64
American Indian	3	3	2	--
Black or African-American	2	2	--	--
Hispanic or Latino	3	3	--	--
Asian	5	6	7	2
Native Hawaiian or Pacific Islander	3	4	--	2
Other	1	1	--	--
Refused	6	7	2	5
<b>Ethnicity of Children in Household</b>	<b>(n=571)</b>	<b>(n=487)</b>	<b>(n=42)</b>	<b>(n=42)</b>
Alaska Native	29	22	67	74
American Indian	7	8	5	--
No Native children	63	69	31	21

# Chapter 5. Literature Review

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## Investment in Early Childhood Yields High Returns

Crucial lifetime skills are developed in the first years of a child's life, including cognitive, social, persistence, attention, self-regulation, and executive function skills (voluntary control of attention and behavior). The flexibility and capacity for change in cognitive functioning and brain development is also greatest in young children. Differences in ability between youth begin in the early years, before traditional school starts and, thus, the importance of early care and learning is becoming increasingly evident.

A growing body of research provides evidence that early childhood education and quality early care and learning services positively impact the economy and society. Currently, the U.S. labor force is decreasing in size due to aging baby boomers. A key ingredient of economic growth is the quality of the workforce. Investment in human capital development is important in developing such a workforce, as researchers postulate that education and human skills are important factors in economic productivity. Rolnick and Grunewald<sup>17</sup> and others argue that the most efficient means to boost productivity in the workforce over the next few decades is to invest in today's youngest children.

The early care and learning sector plays an important role in improving educational, societal, and workforce outcomes for children, while allowing parents of young children to more effectively participate in the workforce. Investment in children in the early years, including early education, increases productivity of schools (because better-quality students enter the schools) and, therefore, the workforce that emerges from schools increases in quality. Researchers emphasize that investment in early care and learning makes the most impact for children prior to kindergarten, especially for at-risk children. In fact, some argue that such investment yields a higher rate of return than most government-funded economic development initiatives. One study found that early learning initiatives realize a benefit to society of approximately \$8.60 per dollar invested. About half of this amount derives from increased future earnings for children.<sup>18</sup>

"The best way to improve the schools is to improve the early environments of the children sent to them....Early skills breed later skills because early learning begets later learning. Both on theoretical and empirical grounds, at current levels of funding, investment in the young is warranted. Returns are highest for investments made at younger ages and remedial investments are often prohibitively costly."

-Heckman and Masterov

While all children may benefit from early education and care, research shows that later impacts on economic productivity for society are most marked for investment in at-risk children. An increasing proportion of children born in the United States are born into adverse environments. Such environments may include absence of a parent, inadequate financial resources, low parent education levels, lack of cognitive and emotional stimulation, and limited parenting skills. Children in these environments are more likely than other children to grow up to be less educated and less skilled and are more likely to commit crime. High school drop-out rates are higher

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<sup>17</sup> Federal Reserve Bank of Minneapolis.

<sup>18</sup> Executive Office of the President of the United States. December 2014.

for this population, as is lower college enrollment, and more teen pregnancy. Researchers find investment in disadvantaged children is most effective for children before they enter school. Participation in Head Start programs, for example, has been shown to increase rates of graduation from high school by 8.5 percent, increase likelihood of attending one year of college by 6 percent, and decrease poor health by 7 percent.<sup>19</sup>

Investing in human capital formation early in the life cycle, particularly in quality child care and pre-elementary education, is likely more efficient than mitigating disadvantage at older ages. Studies find that “conventional school-based policies start too late to effectively remedy early deficits,” noting that job training and GED programs do not produce high rates of return and do not lift participants out of poverty. Instead, they find the “most effective policy for improving the performance of schools is supplementing the childrearing resources of the disadvantaged families sending children to the schools.”<sup>20</sup>

Economists conducted case studies that examined the costs and benefits derived from individual early education programs for at-risk children. Overall, the studies show that annual rates of return on these investments yield between 7 and 18 percent. Based on their findings from these studies, the economists identify elements for success for early childhood development programs:

- The program is market-based;
- Focuses on at-risk children;
- Encourages parental involvement;
- Produces measurable outcomes; and
- Establishes a long-term commitment.

## **Societal Benefits**

Early childhood education can reduce negative and costly outcomes for government and society. Studies document the inverse relationship between crime and education, as well as other societal benefits derived from quality care and early education. Research suggests that savings realized by government and society from reduction in crime, delinquency, reliance on welfare, lost wages, and health care treatment outweigh the cost of investing in education and care programs.

### **CRIME RATES AND CRIME-RELATED COSTS DECREASE**

Early childhood education programs have been shown to decrease crime. Studies demonstrate pre-elementary programs can result in fewer juvenile and lifetime arrests for program participants.<sup>21</sup> By reducing crime, early childhood education lowers criminal justice system and victimization costs. Lochner and Moretti documented social savings from crime reduction associated with completing secondary education. They showed a one percent increase in the high school graduation rate yields \$1.8 billion in social benefits.<sup>22</sup>

### **HIGH SCHOOL GRADUATION RATES IMPROVE**

Heckman and Masterov advocate increasing high school graduation rates is an effective crime prevention strategy. They further argue that one of the most effective methods to increase graduation rates is investment

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<sup>19</sup> Deming, 2009.

<sup>20</sup> Heckman and Masterov, 2006.

<sup>21</sup> Heckman and Masterov, 2006.

<sup>22</sup> Lochner and Moretti, 2003.

in at-risk children, who are more likely to drop out of school. Their research strongly suggests that such investment is most effective prior to kindergarten.

#### **TEENAGE BIRTH RATES DROP**

Early childhood education programs have been shown to decrease teenage birth rates.<sup>23</sup> In turn, a reduction in teenage childbearing lowers health care costs.

#### **EMPLOYMENT RATES INCREASE AND WELFARE AND HEALTH CARE COSTS DECREASE**

Early care and learning programs allow parents more opportunities to work or attend school, and therefore employment rates increase. This increase in labor force participation as a result of early childhood education can boost children's earnings later in life by 1 to 10 percent.<sup>24, 25</sup> Such opportunity reduces dependence on welfare.

Also, early childhood education results in improved health outcomes, meaning less immediate and future costs to the health care system. Kilburn and Karoly document that early childhood education programs result in less child maltreatment, which lower costs to the child welfare system.<sup>26</sup> Weiss et al. report the cost of prenatal care, sound parental skills, and quality pre-K programs are a fraction of the "pay later" price of low birth weight babies, child abuse and neglect, and high school dropouts.<sup>27</sup>

### **Academic and Earnings Outcomes**

Every year, approximately 4 million children enter kindergarten in America.<sup>28</sup> These children, in part because of their economic, ethnic, and geographic circumstances, enter with varying degrees of social and emotional, as well as cognitive, readiness. Recent research shows pre-elementary programs can indeed improve school readiness, both in academic preparation and behavioral aspects. Quality pre-elementary programs have been positively associated with improved emotional and social competence, as well as cognitive skills, in kindergarten. Test scores, particularly in math and reading, at six years of age have been shown to significantly predict the level of schooling and academic achievement completed in the future.<sup>29</sup> Early childhood education has been demonstrated to increase cognitive and achievement scores by an average 0.35 standard deviations.<sup>30</sup>

#### **REDUCED PUBLIC EDUCATION COSTS**

Pre-elementary school attendance has been shown to reduce future grade repetition. In one study, children who attended a pre-elementary school program in New Jersey when they were three and four years of age were half as likely to be held back before second grade.<sup>31</sup> Students who repeat grades are between two and eleven times more likely to drop out of high school than other students.<sup>32</sup> Reduced grade repetition also reduces

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<sup>23</sup> Heckman and Masterov, 2006.

<sup>24</sup> President's Council of Economic Advisors, 2014.

<sup>25</sup> Bartik et al, 2012.

<sup>26</sup> Kilburn and Karoly, 2008.

<sup>27</sup> Weiss et al., 2011.

<sup>28</sup> U.S. Department of Education, 2015.

<sup>29</sup> Bernal and Michael, 2011 and Duncan et al, 2007.

<sup>30</sup> President's Council of Economic Advisors, 2014.

<sup>31</sup> Frede et al, 2009.

<sup>32</sup> MacGillvary and Lucia. 2011. Economic Impacts of Early Education in California.



public education costs. Early childhood education programs have reduced special education enrollment as well, reducing the need for special education placements and remedial education.<sup>33</sup>

#### **INCREASED WORKFORCE PARTICIPATION AND EARNINGS**

Early learning programs increase adult employment rates. Students of one program studied were 42 percent more likely to be consistently employed as adults.<sup>34</sup> An estimated gain in a child's future career earnings of between \$9,000 and \$30,000 has been estimated after accounting for the cost of some programs. This represents a cumulative gain to national gross domestic product (GDP).

Access to high-quality early care and learning services also allows parents, particularly mothers, to participate in the workforce. This increase in employment rates, and subsequently in family incomes, may also benefit children's outcomes. In Canada, initiatives provided public kindergarten and gave subsidies for child care for four year-old children. The researchers assessed the impacts of these initiatives on the labor supply of mothers, and found labor participation rates increased by 8 percent, hours worked per year by 231, and weeks worked per year by 5.2.<sup>35</sup>

#### **TAX REVENUE**

Early childhood education results in increased tax revenue resulting from greater labor force participation and earnings, both in parental participation and future earnings and participation of children.

### **Economic Returns**

Overall, government, the economy, and society benefit in numerous ways from early care and learning. These benefits include real and substantial economic gains for individuals and the economy. A 2006 study assessed potential impacts of two voluntary, high-quality, publicly-funded pre-Kindergarten education programs in the U.S. One program targeted the poorest 25 percent of children, while the other provided universal pre-Kindergarten education for all children.

Results from the study suggest that benefits from both programs outweigh the costs, after six years for the program for low-income children and nine years for the universal program. Projections suggest that, if these programs were implemented in 2007, the program for low-income children would yield a monetary value of \$315 billion by 2050 (in 2006 dollars). This value includes government budgets that would benefit \$83 billion, an increase in compensation for individuals of \$156 billion, and savings to individuals as a result of reduced crime and child abuse of \$77 billion. The universal program would yield a total of \$779 billion: government budgets would benefit \$191 billion, compensation for individuals would increase by \$432 billion, and savings to individuals as a result of reduced crime and child abuse would amount to \$156 billion. Overall benefit to cost ratios in 2050 would be 12:1 for the targeted program and 8:2 for the universal program.<sup>36</sup>

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<sup>33</sup> President's Council of Economic Advisers, 2014.

<sup>34</sup> Campbell, 2014.

<sup>35</sup> Lefebvre et al, 2008.

<sup>36</sup> Lynch, 2007.

## Economic Impact Studies of Early Care and Learning in Other States

As the literature review demonstrates, the early care and learning industry creates jobs and generates revenue. Some economic impacts are directly attributable to activity within the industry, while others derive from indirect and induced effects. This report finds that in 2014, the early care and learning sector in Alaska created 7,700 direct, indirect, and induced jobs and generated \$230 million in labor income and output of \$512 million.

A review of economic impact analyses from several other states found the number of jobs created directly by the early care and learning sector ranged from 9,529 in New Hampshire to 108,000 in California. Meanwhile, revenue generated directly from early care and learning activity in Washington and Oregon has recently been estimated at \$836 million and \$1.2 billion, respectively, with California leading this statistic at \$5.4 billion. Each of these studies varied in methodology and scope. Additional recent findings from selected states follow:

- **California.** In California, the child care industry directly accounts for 108,000 jobs, over \$2.7 million in employee compensation, and \$5.4 billion in output. These estimates increase to 146,205 jobs and \$11.3 billion when indirect and induced impacts are considered.<sup>37</sup>
- **New Hampshire.** The child care industry in New Hampshire creates 9,529 direct jobs and 10,700 direct, indirect, and induced jobs. The sector allows working parents to generate \$4.4 billion of the state's GDP and generates a total estimated contribution to personal income in the state of \$2.5 billion.<sup>38</sup>
- **New Mexico.** The early childhood education industry in New Mexico directly employs 11,936 workers and generates \$421 million in direct revenue. Indirect and induced impacts account for an additional \$416.7 million in output to the state's economy.<sup>39</sup>
- **Oregon.** Child care is Oregon's 17<sup>th</sup> largest industry by employment, accounting for 26,626 workers. The child care industry in Oregon generates an estimated \$367 million in income annually and \$1.2 billion in gross revenues. It allows 98,000 parents to continue their employment, which accounts for an additional \$4.3 billion in earnings.<sup>40</sup>
- **Washington State.** Washington's child care industry creates 30,600 jobs and annually generates \$836 million in gross revenue. Each year, these jobs account for \$566 million in wages.<sup>41</sup>

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<sup>37</sup> Center for Strategic Economic Research. 2013. Economic Impacts of the Child Care Industry.

<sup>38</sup> New Jersey Economic and Labor Market Information Bureau. 2009. Child Care in New Hampshire, an Economic Impact Report.

<sup>39</sup> Mangat, R., & Brown, B. 2011. The Economic Impact of Early Care and Education in New Mexico. Insight Center for Community Economic Development.

<sup>40</sup> Child Care Division, Oregon Employment Department Child Care Division. 2010. The Economic Impact of Oregon's Child Care Industry.

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