

Final Report

# Economic Impact of Child Care in Utah

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June 8, 2005

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Prepared for

State of Utah  
Department of Workforce Services  
Office of Child Care

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# EXECUTIVE SUMMARY

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# EXECUTIVE SUMMARY

During the summer of 2004, the Utah Department of Workforce Services, Office of Child Care (OCC) retained BBC Research & Consulting (BBC) to develop a comprehensive profile of the regulated child care industry in Utah and to examine the economic impacts of that industry.

In economic impact terms, child care is not a traditional “basic” industry, like mining, agriculture or tourism, which exports a product or service and imports money into the state from outside consumers. Instead, the child care industry has an impact on Utah’s economy because the industry enhances and expands the state’s labor force and makes it more productive. The critical economic impact questions regarding child care are: “If regulated, paid child care was not available, how many parents could not participate in the labor force, or would have to reduce their participation? How much would their family’s income be reduced? What would the economic implications of that reduction be?” This study seeks to answer these questions.

## Study Approach

This study rigorously applied the “but for” standard to evaluate the impacts of the regulated, formal child care sector in the State of Utah. In other words, economic impacts were only counted where they clearly resulted from the existence of the regulated child care industry.

To assess the implications for Utah’s economy if the regulated child care industry did not exist, information from a number of different sources was collected and analyzed, including:

- A telephone survey of more than 1,500 households across Utah with children under the age of 13.
- Information on the income, expenditures and utilization of child care providers across the state — obtained with the assistance of Utah’s Child Care Resource and Referral agencies and Utah Provider Associations.
- Data regarding Utah demographics, economic conditions and the child care industry — obtained from a variety of sources, including the Governor’s Office of Planning and Budget, the State of Utah Department of Community and Economic Development, the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the U.S. Department of Commerce, Utah Department of Health, and the Utah Department of Workforce Services, Office of Child Care.
- The IMPLAN regional economic input-output model — used to examine the secondary economic effects of additional household income made possible through child care arrangements with regulated providers, state income tax revenues resulting from that income and qualifying<sup>1</sup> expenditures of the child care industry.

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<sup>1</sup> Only federal funding for child care in Utah and child care expenditures paid by households that would have reduced earnings without access to that child care are included in this portion of the economic impact analysis.

These data were combined to estimate the economic impacts of the additional household earnings made possible through use of regulated child care, including the portion of those earnings spent for child care and to pay state income taxes. These information sources also provided the opportunity to gather additional insight into who uses paid child care in Utah and the factors that parents consider in making child care choices.

### Utah Parents' Child Care Choices

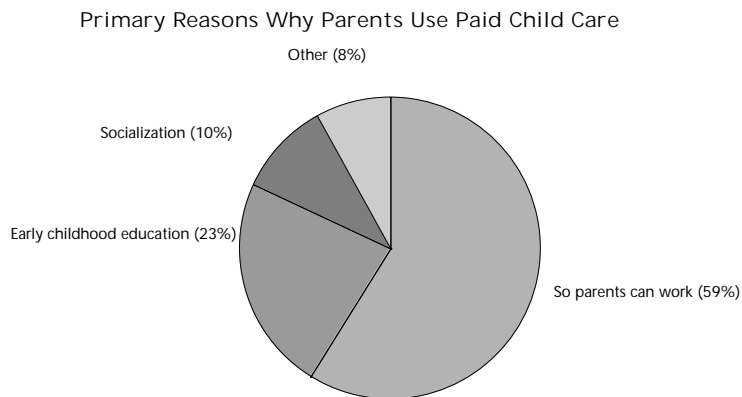
In 2004, there were approximately 276,000 Utah households with children under the age of 13. About 26 percent of these households use paid child care, including 20 percent using paid child care from regulated providers and 6 percent using paid child care from unregulated providers.

Most households using paid child care indicate the primary reason is to enable one or more parents to work, though desire to promote early childhood education is also an important factor. On average, these households have 1.3 children in child care for approximately 15 hours per week.

Exhibit ES-1 summarizes the child care choices of Utah households in 2004.

Exhibit ES-1.  
Child Care Choices  
Among Utah  
Households with  
Children Under 13

Source:  
BBC Research & Consulting.



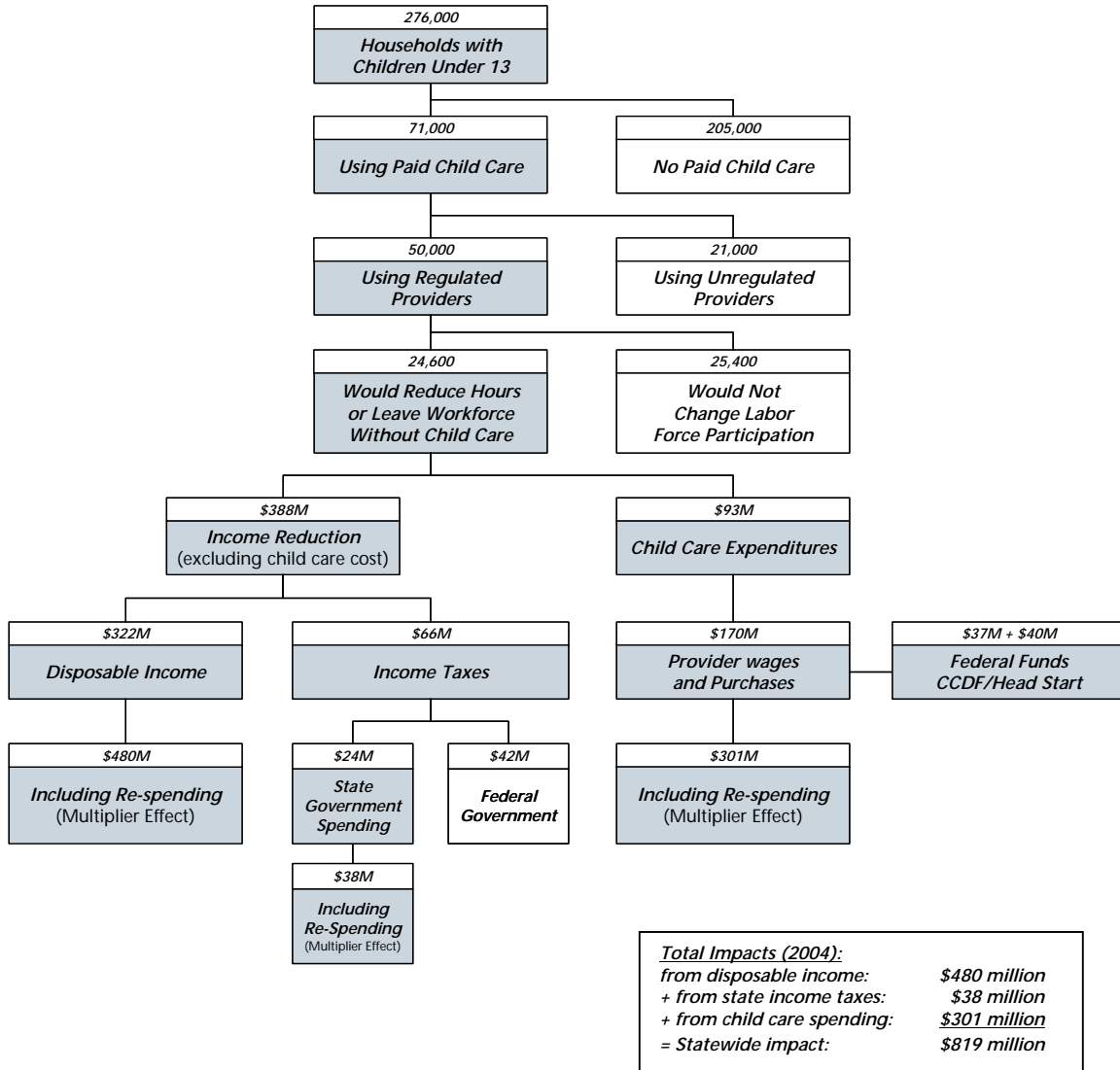
## Key Economic Findings

The following observations focus on the state as a whole. The body of the report separately examines impacts on the most urbanized portion of Utah (the Metropolitan Wasatch Front) and the more rural areas comprising the rest of the state.

1. The child care industry in Utah directly employs more than 8,000 workers. Annual gross receipts for the industry are about \$250 million. Wage levels are very low compared to most other Utah industries.
2. Nearly one-half of the households obtaining paid child care from regulated providers report that they would reduce their work hours or leave their jobs altogether if paid child care was not available.
3. Across the state, availability of regulated child care increases the gross earnings of Utah's labor force by about \$480 million per year. Of this \$480 million, about \$93 million is spent for child care.
4. This gross household income made possible by use of paid child care generates about \$24 million per year in state income taxes — more than four times the amount of state funding provided to the Office of Child Care. This income also leads to additional state sales tax revenues.
5. Remaining disposable income, after child care costs and income taxes, made possible by the use of paid child care is approximately \$322 million. As Utah households spend this money, and it recirculates within the state economy, the total statewide economic impact reaches approximately \$480 million.
6. The \$24 million in state income taxes resulting from household income made possible by regulated child care also recirculates as the state government purchases local goods and services and pays its employees. The total economic impact of this financial stream is approximately \$38 million.
7. The total economic impact of the \$93 million in child care expenditures by households that would suffer reduced income without regulated care, together with \$77 million in federal funds that ultimately flow to Utah child care providers, is about \$301 million (including recirculation or secondary effects).
8. If the State of Utah had taken full advantage of federal CCDF matching funds during FY2004, Utah child care providers would have received an additional \$12 million in federal funds. The added economic impact of these child care expenditures would have been approximately \$22 million.
9. When combined, the total economic impacts of qualifying child care provider expenditures, household spending of earnings that would not have occurred without regulated care, and state government spending of related income taxes, results in an annual economic impact of about \$820 million across the state.
10. This total annual economic impact translates into approximately 40,000 full and part-time jobs, including more than 24,000 jobs held by parents that would reduce their labor force participation without access to paid child care.
11. Quality, as well as availability, of child care is also important to Utah's economy. High quality child care helps reduce employee absenteeism and turnover and has been linked to more successful child development.

The following exhibit summarizes the use and economic impact of regulated child care across the state of Utah in 2004.

Exhibit ES-2.  
Use and Economic Impacts of Child Care in Utah, 2004  
(Unshaded boxes are excluded from impact analysis)



Source: BBC Research & Consulting.



SECTION I.  
Introduction

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## SECTION I.

# Introduction

During the summer of 2004, the Utah Department of Workforce Services, Office of Child Care (OCC) retained BBC Research & Consulting (BBC) to develop a comprehensive profile of the formal, regulated child care industry in Utah and examine the economic impacts of that industry. In particular, OCC asked BBC to characterize the industry, in terms of employment, earnings and other traditional economic variables and to examine the manner in which child care benefits Utah parents, employees, employers and the children themselves.

### How Does Child Care Impact Utah's Economy?

In economic impact terms, child care is not a traditional "basic" industry, like mining, agriculture or tourism, which exports a product or service and imports money into the state from outside consumers. Instead, the child care industry has an impact on Utah's economy because the industry enhances and expands the state's labor force and makes it more productive.

The critical economic impact questions regarding child care are: "if regulated, paid child care was not available, how many parents could not participate in the labor force, or would have to reduce their participation? How much would their family's income be reduced? What would the overall economic implications of that reduction be?" This study seeks to answer those questions.

The quality of child care is as important as the availability of child care. As this report discusses in later sections, reliable high quality child care can help limit absenteeism and turnover at Utah businesses and can contribute to the future productivity of Utah's children.

### Study Approach

This study rigorously applied the "but for" standard to evaluate the impacts of the regulated, formal child care sector in the state of Utah. To assess the implications for Utah's economy if the regulated, formal child care industry did not exist, BBC collected and analyzed information from a number of different sources. To ensure that the results accurately reflect Utah-specific circumstances, surveys of parents and child care facilities were conducted rather than relying on national averages or estimates.

BBC conducted a telephone survey of more than 1,500 households across Utah with children under the age of 13. The survey was used to obtain statistically reliable estimates of the number of households with children in paid child care and the implications of child care for the employment and earnings of Utah households. Further information regarding the telephone survey is provided in Section IV of this report.

With the assistance of the OCC, Utah's Child Care Resource and Referral agencies, and Utah Provider Associations, BBC obtained information on the income, expenditures and utilization of child care providers across the state. This information was used to examine how revenues flowing into child care centers are converted into employee earnings and purchases of goods and services from other Utah businesses.

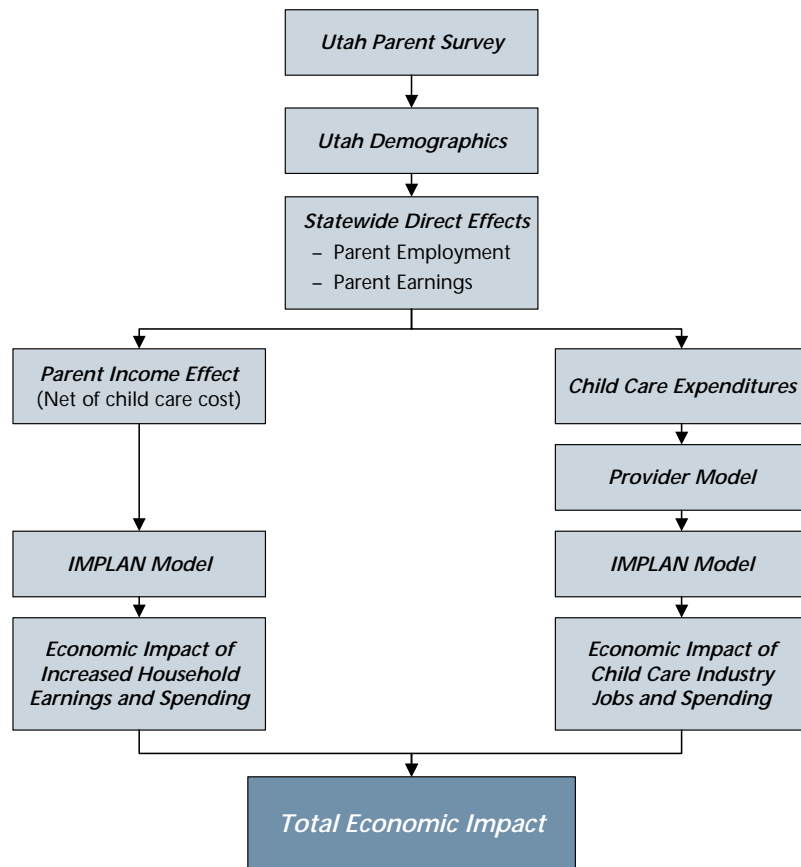
Data regarding Utah demographics and economic conditions were obtained from a variety of sources, including the Governor’s Office of Planning and Budget, the State of Utah Department of Community and Economic Development, the U.S. Census Bureau, the U.S. Bureau of Labor Statistics and the U.S. Department of Commerce. Additional information regarding the child care industry in Utah was obtained from the Utah Department of Health, Utah Department of Workforce Services and the Office of Child Care.

To examine the secondary economic effects of additional household income made possible through formal child care arrangements and the expenditures of the child care industry, BBC used the IMPLAN regional economic input-output model. IMPLAN, originally developed by the U.S. Forest Service, is widely used for such applications.

The following graphic provides a general overview of how data from these varied sources were combined to estimate the economic impacts of formal, regulated child care in Utah. Additional detail about the economic impact methodology is provided in Section V.

Exhibit I-1.  
Overview of  
Economic Impact  
Methodology

Source:  
BBC Research & Consulting.



Further insight into the effects of child care on Utah employers, and on the children themselves, was obtained through both examination of previous national studies and literature and interviews with Utah employers and business associations. This information is summarized in Section VI of this report.

## Acknowledgements

The following individuals and organizations provided essential assistance to BBC in conducting this study:

- Lynette Rasmussen, Patrice Schell, Teresa Whiting, Christi Christian and Sharrif Dajany from the Department of Workforce Services;
- Utah’s Child Care Resource and Referral Agencies and Utah Provider Associations;
- More than 1,500 Utah parents that participated in the telephone survey;
- Garner Insight; and
- Davis Research.

## Contents of This Report

This report is divided into six sections, including this introduction. Section II provides an overview of relevant demographic and economic data for the state of Utah, which describes the demand for child care services in Utah. Section III describes the Utah child care industry. Section IV provides a profile of the economic and demographic characteristics of Utah households that use child care and examines the choices those households make. Section V examines the economic impacts of the formal, regulated child care sector in Utah. Section VI discusses other benefits of quality child care. The report concludes with a list of references used in this study.

## Child Care Regulation in Utah

When choosing a child care provider, it is important to understand the different types of regulated care in Utah. The Bureau of Licensing regulates four different types of child care. They are:

- Residential Certificate Providers (in home care);
- Licensed Family Providers (in home care);
- Licensed Family Group Providers (in home care); and
- Licensed Center Child Care (out of home care).

The chart below highlights some of the difference in these types of regulation. The asterisk denotes the degree of state regulation required, with 1 being the least or minimal amount of regulation. For more information on child care regulation in Utah, contact the Bureau of Licensing toll free at 1-888-287-3704.

<i>* Residential Certificate</i>	<i>** Licensed Family</i>	<i>** Licensed Family Group</i>	<i>***Center Child Care</i>
Care for up to 8 children with one caregiver (not including the provider's own children)	Care for up to 8 children (including the provider's own children under age 5) with one caregiver. Only two of the children can be under the age of 2.	Care for up to 16 children (including the provider's own children under the age of 5) with 2 caregivers. Only four of the children can be under the age of 2.	Care for more than 12 children in a center setting. Ratios vary by age group, but there must be at least two providers present at all times.
Initial criminal background check	Yearly criminal background check	Yearly criminal background check on both caregivers	Yearly criminal background check on each caregiver
Initial five hours of training	20 hours of annual training required	20 hours of annual training required	20 hours of annual training required for each caregiver
Annual home visit by licensing with a 90 day notice	Annual announced visit by licensing and one unannounced follow-up visit	Annual announced visit by licensing and one unannounced follow-up visit	Annual announced visit by licensing and one unannounced follow-up visit
Initial fire inspection	Initial fire inspection	Initial fire inspection	Annual fire and health inspections
Health & safety standards not enforced	Meet all planning and zoning regulations for their area	Meet all planning and zoning regulations for their area	Planned and posted activities for children
No formal education required	Enforcement of health and safety standards	Enforcement of health and safety standards	Enforcement of health and safety standards
	No formal education required	No formal education required	Directors are required to have a CDA or degree in Early Childhood Development

### Number of Regulated Providers in Utah

The Utah Office of Child Care reports the number of regulated providers for 2004 as follows:

- Licensed child care centers: 273
- Licensed family and family group home providers: 1,040
- Residentially certified providers: 1,328
- Head Start programs: 204
- License exempt preschool only programs: Unknown

SECTION II.  
Influences on Demand for Child Care

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## SECTION II. Influences on Demand for Child Care

To understand the impact of child care in Utah's economy, it is important to understand the industry's role within the context of the state's demographic and economic environment. This section summarizes demographic characteristics of Utah's population, as well as data on the structure of the economy, both statewide and regionally.

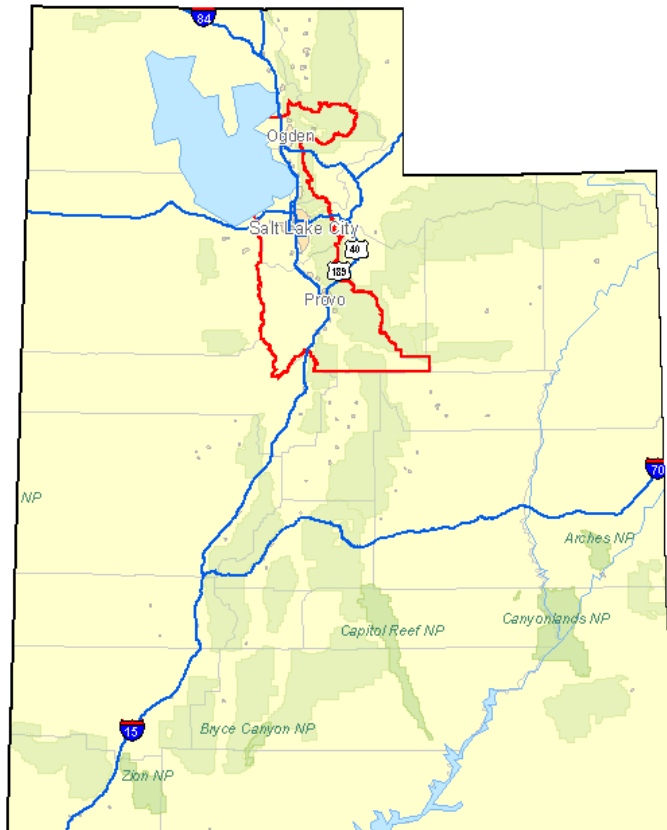
Metropolitan areas vs. remainder of state. Demographic and socioeconomic differences exist between the more populated counties in the state and the more rural areas. These differences include variation in family composition and income, labor force participation and employment by major industry.

For the purposes of this study, we divide the state of Utah into two regions: the Metropolitan Wasatch Front (MWF) and the remainder of the state (ROS). The MWF is comprised of Utah, Weber, Davis and Salt Lake counties. This designation follows the 2000 Census Metropolitan Statistical Area (MSA) definition for Utah, with one exception. In the 2000 Census, Kane County is included as a metropolitan county. As this study's metropolitan designation focuses on the Wasatch Front, Kane County is included in the ROS region.

Exhibit II-1.  
Map of Utah and  
Metropolitan  
Wasatch Front

Note: The MWF region is outlined in red.

Source:  
BBC Research & Consulting.



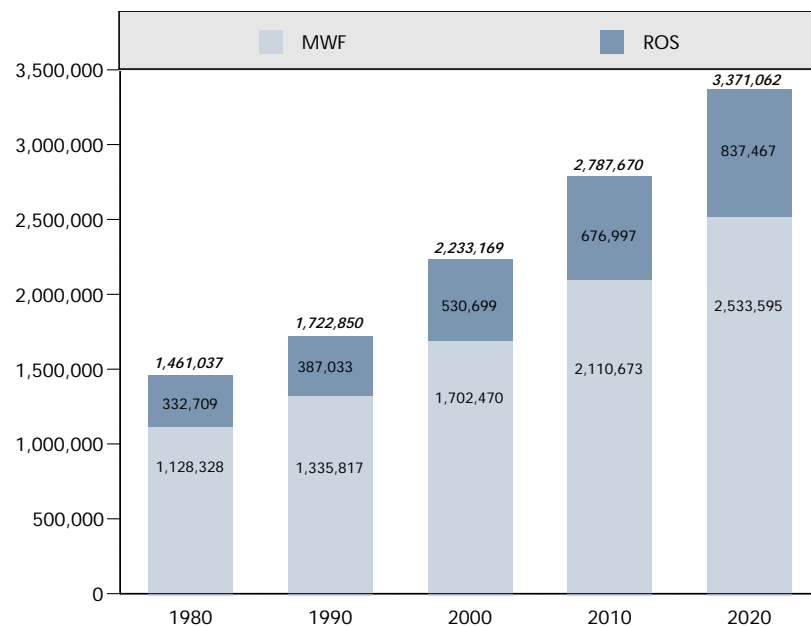
## Utah Demographic Profile

In 2000, Utah's population was approximately 2.23 million. The Census Bureau estimates that Utah's population had grown to approximately 2.35 million in 2003. Since the 2000 Census, Utah's population has grown at an average annual rate of 1.8 percent — faster than the U.S. population annual growth rate of 1.1 percent. The Census Bureau projects that Utah's population may reach nearly 2.8 million in the year 2010, and 3.4 million in 2020.

In 2000, just over 76 percent of Utah's population lived within the MWF. The percentage of Utah's population living in the rest of the state has been slowly growing over the past two decades, and it is expected to continue to slowly grow over the next 20 years. In 1980, 77 percent of Utah's population lived in the MWF. By 2020, that percentage will have declined to 75 percent. Exhibit II-2 displays Utah's population for the MWF and ROS since 1980 and projected through 2020.

Exhibit II-2.  
Utah Population  
Projection by  
Metropolitan Area

Source:  
State of Utah, Governor's Office of Planning  
& Budget, 2004 Economic Report to the  
Governor, Population Projections by County  
and District, UPED model system.

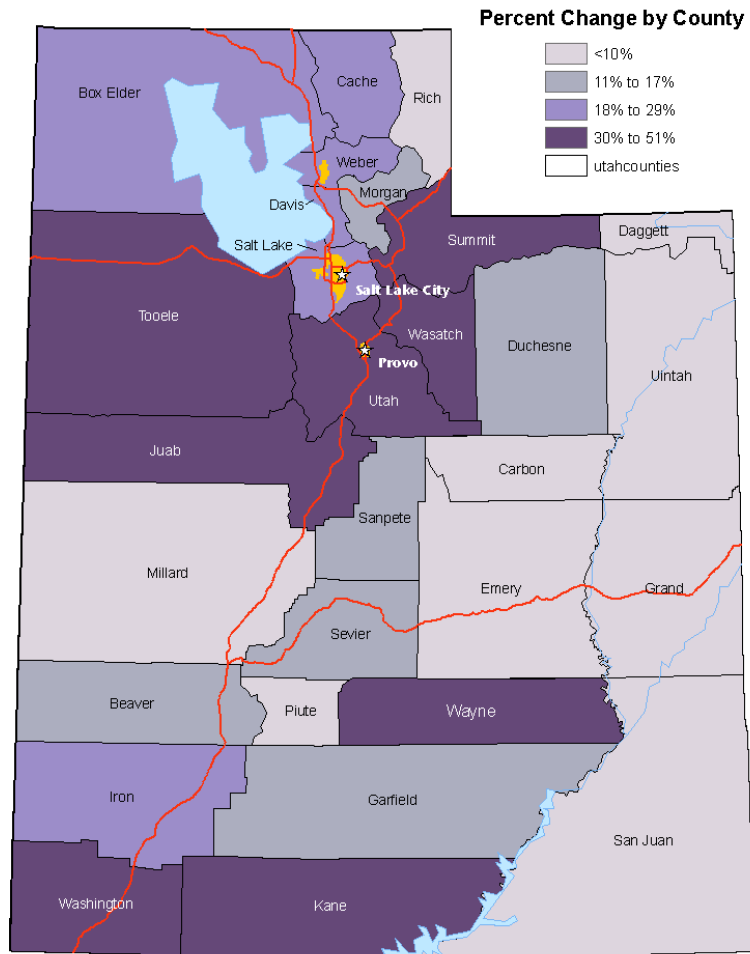




Population projections by county show dramatic differences in growth between 2000 and 2010 (see Exhibit II-3). Seven counties will experience less than 10 percent growth in population from 2000 to 2010, while others surrounding the MWF and those in the southwest corner of the state will see increases in population of 30 to 50 percent. Wasatch County is expected to see the greatest percentage increase, at just over 50 percent.

Exhibit II-3.  
 Percentage  
 Population Change by  
 County 2000-2010

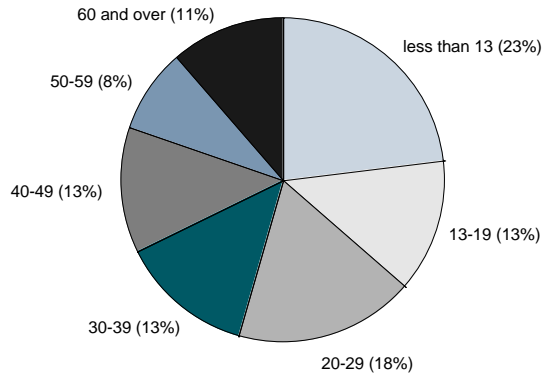
Source:  
 U.S. Census data  
 (2010 Census estimates).



Children in Utah. In 2000, Utah’s population had the greatest percentage of children of any state in the nation. Nearly one-third of the state’s population was under the age of 18. Almost one in four Utah residents were children under the age of 13. Exhibit II-4 displays Utah’s population by age cohort.

Exhibit II-4.  
Age Distribution of Utah Population

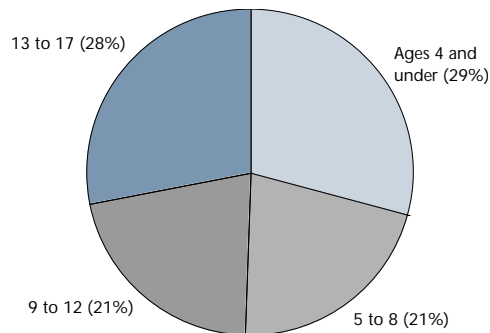
Source:  
2000 U.S. Census data



There were 718,698 Utahans under the age of 18 in 2000. Among these children, over 70 percent were under the age of 13. Nearly one-third of the 718,698 children living in Utah in 2000 were age 4 or younger — 10 percent of the state’s population. Exhibit II-5 presents the distribution of Utah’s children by age cohort.

Exhibit II-5.  
Age Distribution of Children in Utah, 2000

Source:  
2000 U.S. Census data

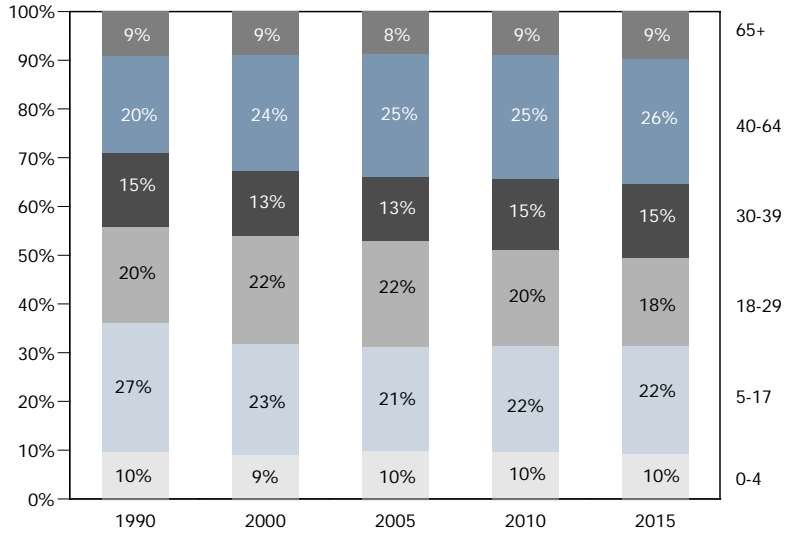


Population growth by age cohort. Children are expected to represent a significant portion of Utah’s population well into the future. In 2000, children under the age of 18 represented 32 percent of the population. Through 2015, this proportion is projected to remain steady at approximately 32 percent (Exhibit II-6).

**Exhibit II-6.  
Projection of Utah's  
Age Distribution**

Note:  
Percentages may total more than 100 due to rounding.

Source:  
State of Utah, Governor's Office of Planning and Budget, 2004 Economic Report to the Governor, Utah Population Projections by Selected Age Groups, UPED Model System.



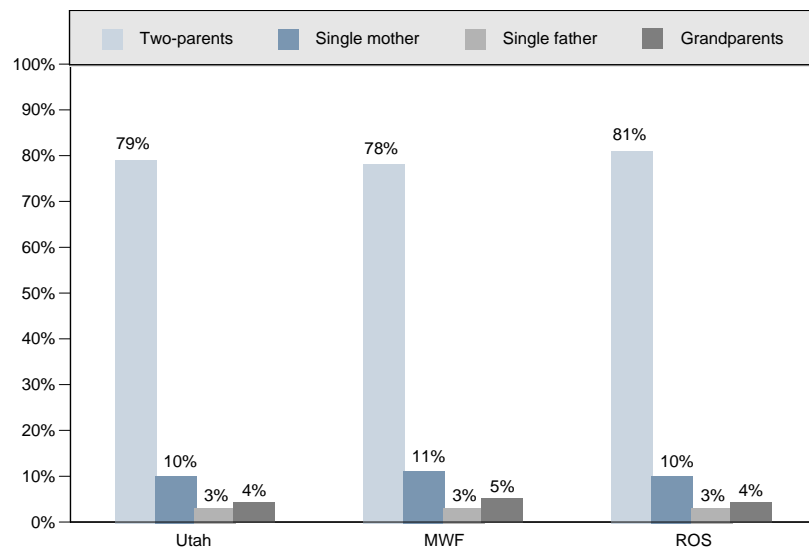
Family structure. In the year 2000, there were approximately 715,350 children under the age of 18 living in Utah households. An additional 3,350 children were living in group quarters. The majority of children in households live with two parents (79 percent live in married couple households) and about 13 percent of children live in a single parent household. Another 4 percent of children live with grandparents and about 3 percent live with other relatives or nonrelatives. Most often, children in a single parent household live with their mother (see Exhibit II-7).

Children are more likely to live in married couple households in more rural areas of the state (ROS). About 81 percent of children in households in the ROS live in a married couple household. In both the MWF and the ROS, single parent households are three times as likely to be headed by the mother rather than the father.

**Exhibit II-7.  
Percentage of Children  
Living in Household Type**

Note:  
Total do not sum to 100. About 3 percent of children live with other relatives or nonrelatives.

Source:  
2000 U.S. Census data



Household income. When compared to national averages, Utah has a relatively high household income. According to the Current Population Survey, Utah’s median annual household income (across households of all sizes and compositions in Utah) was just under \$48,000 in 2002 — the 12th highest median household income in the country.

Household income varies considerably by family composition (Exhibit II-8). In the MWF, 18 percent of single mothers (female householder with no husband present) with children under 18 have an annual family income of less than \$10,000. This is even more pronounced in the ROS, where 26 percent of the single mothers with children fall into this income bracket. A smaller proportion of single fathers have income of less than \$10,000; these households are also more likely to be in the lowest income bracket when they are located outside the MWF. Married couples with children report much higher household incomes in both the MWF and ROS counties. About 63 percent of married couple families in the MWF and 49 percent in the ROS counties report annual household incomes of more than \$50,000. Only 2 percent of the MWF married couple families and ROS married couple families report less than \$10,000 in annual household income.

Exhibit II-8.  
Income Distribution by Family Type

	<\$10k	\$10k up to \$20k	\$20k up to \$35k	\$35k up to \$50k	\$50k +
<b>MWF - with own children under 18</b>					
Married couple	2%	4%	13%	19%	63%
Male householder; no wife present	7%	15%	29%	21%	28%
Female householder; no husband present	18%	24%	29%	16%	14%
<b>ROS - with own children under 18</b>					
Married couple	2%	6%	19%	24%	49%
Male householder; no wife present	11%	23%	29%	19%	18%
Female householder; no husband present	26%	29%	29%	10%	8%

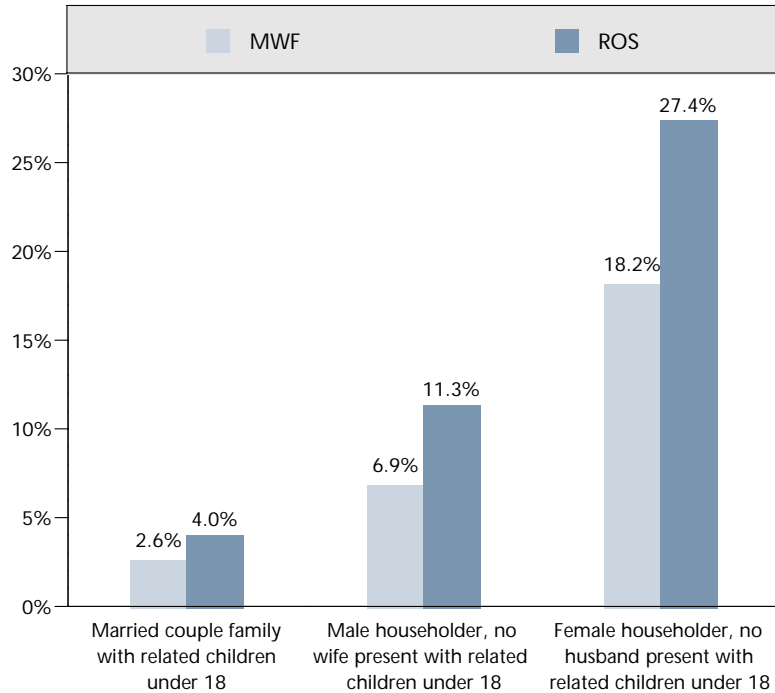
Note: May total more than 100 percent due to rounding.  
Source: 2000 U.S. Census data.

Poverty status. In 2000, 7 percent of Utah families were living below the poverty line. The income level designated as the poverty threshold varies according to family composition. For example, the poverty threshold for a married couple family with two children under 18 was \$16,895 in 2000 while the threshold for a married couple with one child under 18 was \$13,410.

The proportion of families living below the poverty line is significantly lower in the metropolitan counties. Overall, 6 percent of MWF families were living below the poverty line in 2000 compared to 9 percent of families in ROS counties. By family composition, married couples with children under 18 are considerably less likely to live in poverty than single parent families. Families headed by single mothers with children under 18 constitute the greatest proportion of families living below the poverty line. Over 18 percent of these families in MWF counties and 27 percent in ROS counties were living in poverty in 2000. Exhibit II-9 on the following page presents the proportion of Utah families living in poverty, by region and family type.

Exhibit II-9.  
Percentage of Utah  
Families Living Below  
the Poverty Line

Source:  
2000 U.S. Census data



### The Utah Economy

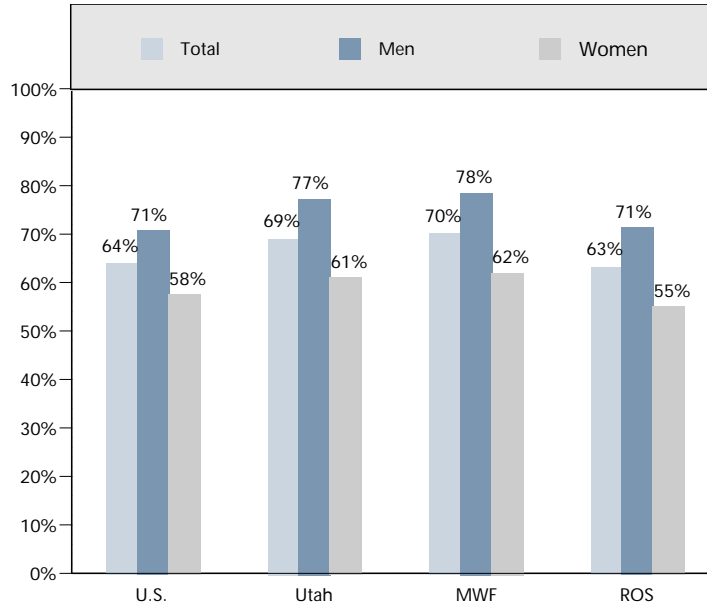
**Labor force.** Utah's labor force included approximately 1.1 million people in 2000, making the state home to the nation's 34th largest labor pool. (Utah's population of 2.3 million is also the 34th largest in the nation.) There were approximately 500,000 women in Utah's labor force in 2000, accounting for more than 45 percent of the available workers.

**Labor force participation.** Utah's labor force participation rate is slightly above the national average for both men and women. In 2000, the national labor force participation rate was 64 percent (58 percent for women), while Utah's labor force participation rate was 69 percent (61 percent for women).

A larger proportion of the metropolitan population participates in the labor force compared to the remainder of the state. Census data show that 70 percent of the population in MWF counties participated in the labor force in 2000, compared to only 63 percent in the more rural areas. This seven-point difference holds true for both men and women. In MWF counties, the labor force participation rate among men was 78 percent compared to 71 percent among men in ROS counties. For women, the labor force participation rate in the MWF counties was about 62 percent, compared to 55 percent in the ROS counties. Exhibit II-10 presents labor force participation rates graphically.

Exhibit II-10.  
Labor Force  
Participation  
Rates, 2000

Source:  
2000 U.S. Census data



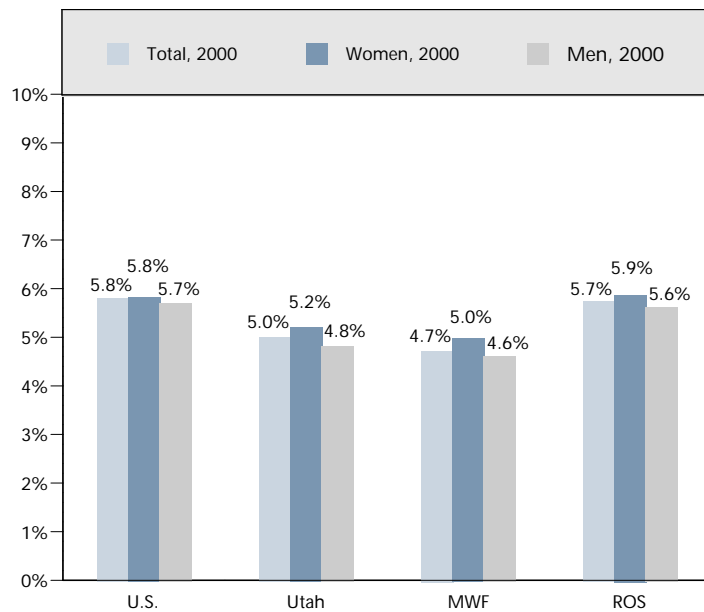
Labor force participation rates vary by family composition. About 55 percent of families with two parents and at least one child under the age of 18 report that both parents are in the labor force. The labor force participation rate of single parent families is much higher (82 percent). These participation rates are similar among the MWF and ROS counties.

Unemployment rates. The unemployment rate for the state of Utah as of August 2004 was 4.8 percent, significantly below the national rate of 5.4 percent, according to the Bureau of Labor Statistics.

In just over half of the counties, the unemployment rate for women is higher than the rate among men (see Exhibit II-11). The highest unemployment rate in Utah was found in San Juan County, where the unemployment rates for both men and women exceeded 10 percent in 2000 (18 and 12 percent respectively). See Exhibit II-11.

Exhibit II-11.  
Utah Unemployment  
Rates, 2000

Source:  
2000 U.S. Census data

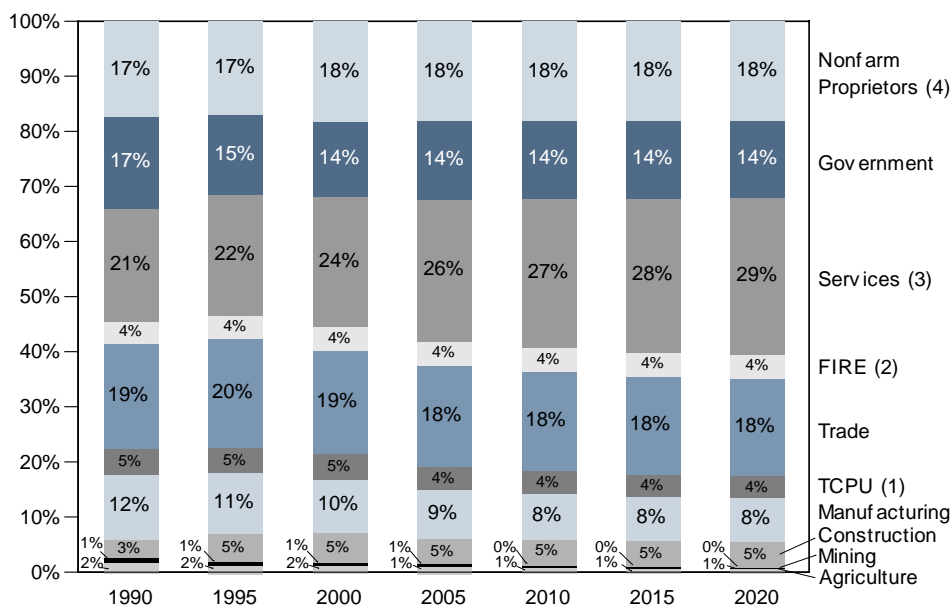


Single parents, particularly single mothers, are more likely to be unemployed and looking for work than the rest of the workforce. According to the Bureau of Labor Statistics, the national unemployment rate for unmarried mothers with children under the age of 18 was 10.2 percent in 2003. For unmarried mothers of children under the age of one, the unemployment rate was 20.5 percent in 2003.

Employment by sector. The nature of Utah’s economy is changing. The trend in Utah, as in the rest of the nation, is a shift toward a services-based economy. This change in the economy’s structure is expected to continue throughout the next three decades. In 2000, almost 4 out of every 5 jobs in Utah was “service-producing.”<sup>1</sup> Only one in four were “goods-producing.” By 2020, 83 percent of all Utah jobs will be “service-producing” in nature.

In 1990, agriculture and mining composed 3 percent of Utah’s jobs. In 2000 that percentage dropped to 2 percent, and it is expected that employment in agriculture and mining will slowly decline through 2020. The services sector, on the other hand, will continue to grow, accounting for almost 30 percent of Utah’s employment by 2020. See Exhibit II-12 for details.

Exhibit II-12.  
Utah Employment by Sector



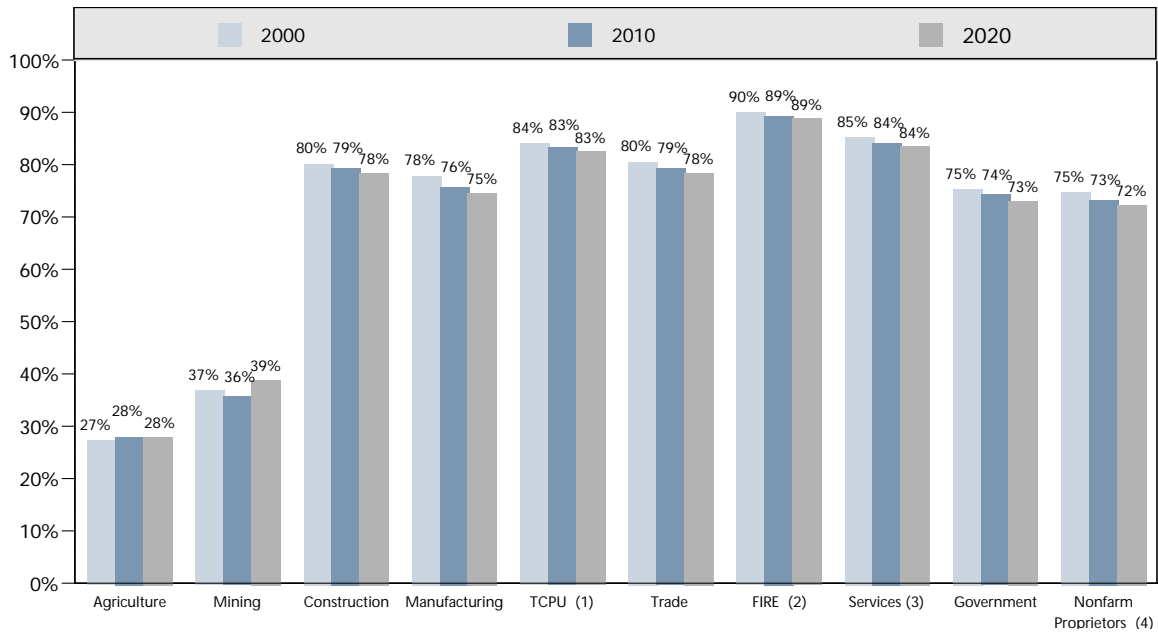
Note: Data are based on SIC codes:  
 (1) Transportation, Communications and Public Utilities.  
 (2) Finance, Insurance and Real Estate.  
 (3) Includes Private Household and Agricultural Services employment (SICs 88, 07, 08, and 09).  
 (4) U.S. Bureau of Economic Analysis definition.

Source: State of Utah, Governor’s Office of Planning and Budget – Demographic and Economic Analysis Section, UPED Model System.

<sup>1</sup> Service-producing industries include non-farm proprietors, government, services, trade, finance, insurance and real estate sectors.

Employment by region. Utah’s economy, like its population, is projected to grow outside the MWF. Exhibit II-13 presents the percentage of employment within each sector that occurs in the MWF. For only two sectors, agriculture and mining, does the MWF’s share of state employment increase between the years 2000 and 2020. (Despite the projected overall decrease in agriculture and mining employment over the same period.)

Exhibit II-13.  
Percentage of Utah Employment in the Metropolitan Wasatch Front



Note: Data are based on SIC codes:

- (1) Transportation, Communications and Public Utilities.
- (2) Finance, Insurance and Real Estate.
- (3) Includes Private Household and Agricultural Services employment (SICs 88, 07, 08, and 09).
- (4) U.S. Bureau of Economic Analysis definition.

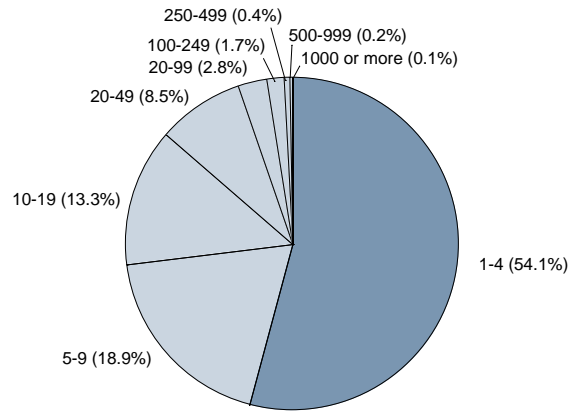
Source: Governor's Office of Planning and Budget – Demographic and Economic Analysis Section, UPED Model System.



Firm size. The majority of businesses in Utah are small. In 2001, over half of Utah's businesses had one to four employees. About 7 of every 8 Utah firms had fewer than 20 employees.

Exhibit II-14.  
Utah Establishments by  
Employment Size, 2001

Source:  
U.S. Census Bureau,  
County Business Patterns, 2001



The presence of very small businesses in Utah is increasing. In 1998, very small businesses (those employing fewer than five persons) comprised 52.5 percent of the businesses in Utah. By 2001, very small businesses accounted for more than 54 percent of all businesses (see Exhibit II-14), though these firms account for a minority of total employment in Utah.

Over 75 percent of all Utah businesses are located in the four metropolitan counties. The 20 largest employers in the state of Utah are shown in Exhibit II-15. In general, most of these employers represent governmental and educational institutions.

Exhibit II-15.  
Largest Firms by  
Employment

Source:  
State of Utah, Department of Community  
and Economic Development.  
<http://dced.utah.gov/national/largestemployers.html>

<i>Firm Name</i>	<i>Number of Employees</i>
State of Utah	22,502
Intermountain Health Care (IHC)	22,000
Brigham Young University	18,000
University of Utah (including Hospital)	18,000
Hill Air Force Base	11,500
Jordan School District	9,000
Wal-Mart Stores	9,000
Convergys	8,000
Granite School District	8,000
Davis County School District	6,500
Salt Lake County	6,000
Utah State University	6,000
Alpine School District	5,500
Novus (Discover Card)	5,500
Smith's Food King	5,500
U.S. Postal Service	5,500
Albertson's	5,000
Internal Revenue Service (IRS)	5,000
Autolive Asp (Morton Int'l)	4,500
Delta Airlines	4,500

## Implications

The demographic and economic data presented in this section provide a summary of the current and future environment in Utah. For the purposes of this study, the most significant findings are as follows:

- Utah is expected to continue to grow more rapidly than the U.S. as a whole;
- A larger share of Utah residents are children under 18 than in the rest of the country;
- While most Utah children live in two parent households, about one in six of the state's children live with just one parent;
- In slightly more than half of Utah's two parent households, both parents work. In the state's single parent households, the parents are almost always in the labor force; and
- Children in Utah's single parent households are more likely to grow up in low-income families, or below poverty level circumstances. Single parents are also more likely to be unemployed.

### SECTION III.

## Size and Nature of the Child Care Industry in Utah

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## SECTION III.

# Size and Nature of the Child Care Industry in Utah

This section profiles the child care industry in Utah, including a description of how the industry is structured, employment, average earnings and gross receipts of the industry. Total employment, average earnings and gross receipts are also compared to other Utah industries.

### Child Care Providers in Utah

As of October 2004, there were 2,678 regulated child care providers in Utah. This includes many different types of childcare providers, each with its own focus, policies, and practices. A regulated child care provider in the state of Utah is classified as one of the following: child care center, family child care, family group child care, residential certificate, or an hourly child care center. Exhibit III-1 provides characteristics of each classification of child care provider.

Exhibit III-1.  
Utah Child Care Providers

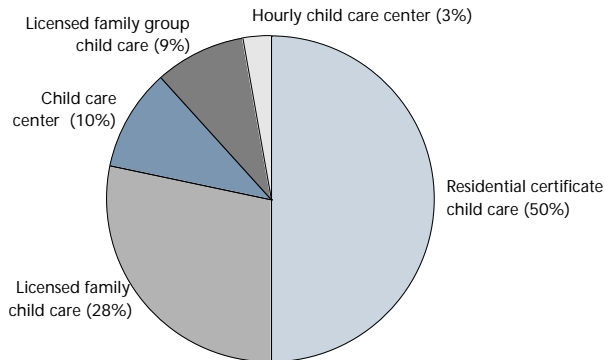
<i>Child care providers</i>	<i>Location</i>	<i>Number of children</i>	<i>Scheduling</i>	<i>Licensing</i>
Child care center	Not in personal residence	Five or more	Regularly scheduled	Must be licensed
Hourly child care center	Not in personal residence	Five or more	Not regularly scheduled	Must be licensed
Licensed family child care	In personal residence	Less than nine	Regularly scheduled	Must be licensed
Licensed family group child care	In personal residence	Nine to sixteen	Regularly scheduled	Must be licensed
Residential certificate child care	In personal residence	Five to eight	Regularly scheduled	May request a residential certificate

Source: Utah Department of Health, Office of Child Care Licensing, Licensing Rules.

The majority of child care providers in Utah are residential certificate holders, and nearly 90 percent of regulated child care providers operate their business from their place of residence.

Exhibit III-2.  
Utah Child Care Providers by Type

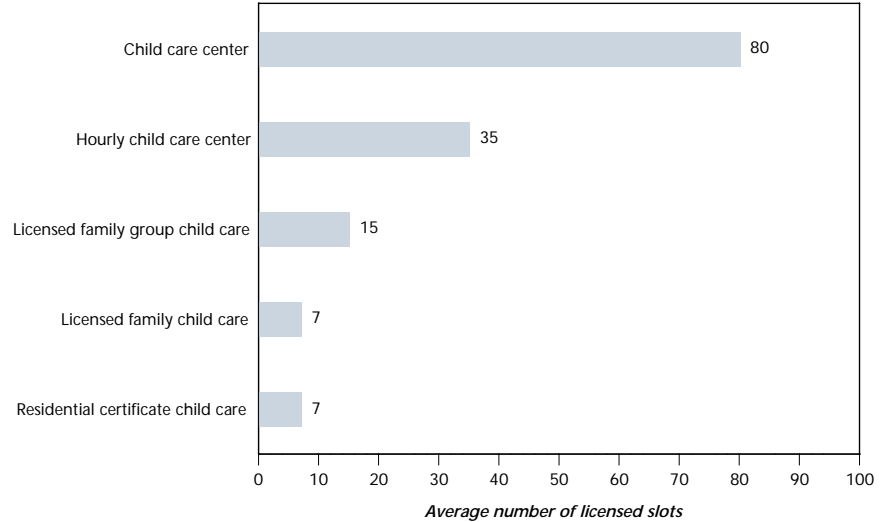
Source:  
Utah Department of Health. Updated  
October 18, 2004.



The various types of child care providers differ greatly in average size. In general, family child care providers and residential certificate holders are small and average less than ten slots each. Child care centers and hourly child care centers tend to care for a much larger number of children. Exhibit III-3 displays the average number of regulated child care slots by provider type.

**Exhibit III-3.  
Average Size of  
Regulated Providers**

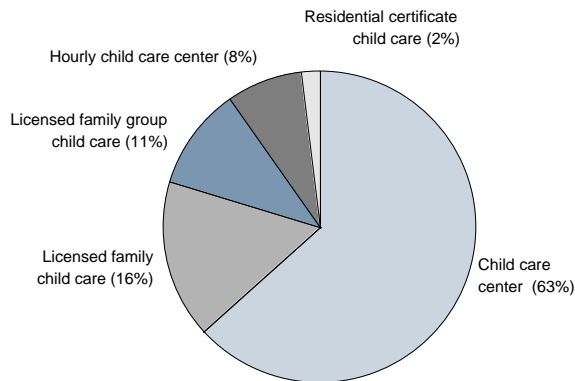
Source:  
Utah Department of Health.  
Updated October 18, 2004.



As of October 2004, there were 33,499 occupied full-time equivalent (FTE) slots for children within the 2,678 regulated providers in Utah. A FTE slot can be filled by one child visiting a child care provider full-time, or multiple children visiting part-time. While the majority of child care providers are residential certificate holders, they account for only 2 percent of the state’s regulated FTE slots. As Exhibit III-4 shows, the majority of FTE slots in Utah are located within child care centers.

**Exhibit III-4.  
Regulated FTE Child Care  
Slots by Provider Type**

Source:  
Utah Department of Health. Updated  
October 18, 2004.

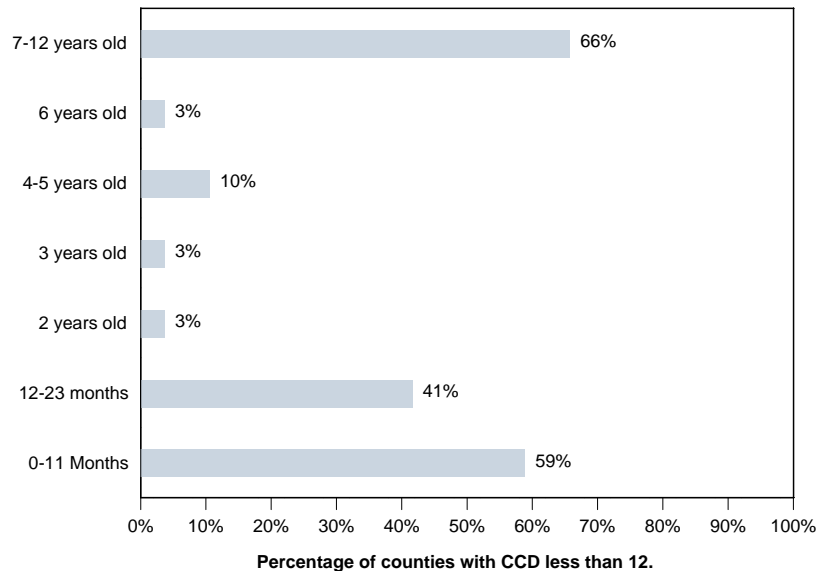


In 2003, the Utah Department of Workforce Services (DWS) calculated the Child Care Density Ratio (CCD) for every county in Utah by different child age groupings. The CCD is the ratio of regulated child care slots to the population of children. As a national rule of thumb, a community should have a CCD of about 0.25, or 25 spaces for every 100 children. However, in 2003 DWS concluded that a CCD of about 0.12, or 12 slots for every 100 children, is a more appropriate measure for Utah.

Exhibit III-5 on the following page displays the proportion of counties in Utah with a CCD of less than 0.12 for each of several age groupings. Almost 60 percent of counties in Utah had a CCD of less than 0.12 for infants under 12 months of age, and over 40 percent had a CCD less than 0.12 for infants between the age of 12 and 24 months. Care was least available for the oldest school-age children.

Exhibit III-5.  
Proportion of Utah  
Counties with Child Care  
Availability Concerns, by  
Child Age

Source:  
Utah Department of  
Workforce Services, 2004.



### Employment and Wages in Utah’s Child Care Industry

Determining exactly how many people are employed in the child care industry is challenging due to the prevalence of self-employed and part-time workers in this field. According to the U.S. Census Bureau’s County Business Patterns<sup>1</sup> (CBP), there were about 3,500 workers employed in child daycare services<sup>2</sup> in the state of Utah in 2002. However, CBP does not count self-employed persons or employees of households and thus does not reflect these child care workers who operate or work for a home-based business. At the other end of the spectrum, almost 16,000 Utah residents indicated they worked in the child care industry during the 2000 Census. Many of these respondents indicated they were self-employed. However, many others indicated they were wage employees — yet reported no wage income during the prior year. The latter individuals are likely better classified as either unemployed or out of the labor force.

The most reliable published estimate of employment in Utah’s child care industry is probably the estimates included in the IMPLAN model data files for 2001 (the most recent year available). IMPLAN employment estimates are based on the Bureau of Labor Statistics Covered Employment and Wage Program (formerly known as the ES202 program), but also include self-employed individuals based on the Bureau of Economic Analysis Regional Economic Information data set.<sup>3</sup> IMPLAN data indicates there were almost 7,900 child care workers in Utah in 2001. Based on subsequent population growth, and corresponding growth in the demand for child care, a comparable estimate for 2004 would be about 8,300 child care workers.

<sup>1</sup> County Business Patterns excludes data on self-employed individuals and employees of private households.

<sup>2</sup> The NAICS classification of child daycare services (6,244) includes preschool teachers, teacher assistants, early education administrators, kindergarten and elementary school teachers, child care workers and other related jobs. Nationally, child care workers, preschool teachers and teacher assistants account for three out of every four wage and salary jobs in this classification.

<sup>3</sup> Minnesota IMPLAN Group, Inc. website: <http://www.implan.com>.

Bureau of Labor Statistics (BLS) data indicate the average wage of a child care worker in Utah was \$7.24 per hour in 2003, or \$15,000 annually for full-time workers. The average wage for child care administrators was \$22.15 per hour, or about \$46,000 annually for those who work full-time. IMPLAN data, which include both full- and part-time workers, indicate that in 2001 the average worker in the child care industry earned about \$7,600 (equivalent to about \$8,200 in 2004).

As shown in Exhibit III-6, the BLS data indicate that 2003 wages in Utah for child care were slightly below the national average, while those for child care administrators were slightly above the national average. These earnings estimates are inflated, however, by the inclusion of Head Start administrators and workers that earn much higher wages than other child care personnel in Utah.

Exhibit III-6.  
Wages of Workers  
in the Child Care  
Industry

Source:  
Bureau of Labor Statistics,  
May 2003.

	<i>Mean hourly wage</i>	<i>Mean annual wage</i>
<b>Utah</b>		
Preschool and child care center administrators	\$22.15	\$46,080
Child care workers	\$7.24	\$15,060
<b>National</b>		
Preschool and child care center administrators	\$19.37	\$40,290
Child care workers	\$8.37	\$17,400

### Comparison to Similar Industries

It is useful to understand how the child care industry in Utah compares to other industries. Relying on the employment estimates from the IMPLAN data files — considered the best available published estimates of total jobs in child care — the industry is generally comparable in total employment to other industries such as cattle ranching, legal services, insurance agencies, performing arts promoters, accounting services, travel agencies, air transportation and the U.S. Postal Service. Out of 435 sectors in Utah (based on the BEA 1997 sector scheme), child care ranks 46<sup>th</sup> in total employment. Exhibit III-7 shows comparable industries to child care in terms of employment.

Exhibit III-7.  
Utah Employment  
by Industry

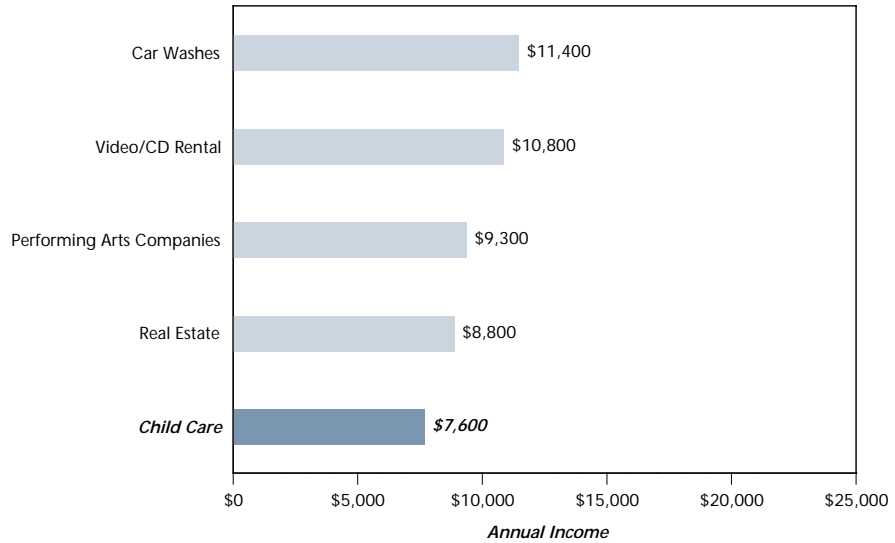
Source:  
2001 IMPLAN data file.

<i>Employment comparison by industry</i>	<i>Employment</i>
Cattle Ranching	10,000
Legal Services	9,800
Insurance Agencies	8,600
Arts and Sports Promotion	8,000
<b>Child Care</b>	<b>7,900</b>
Accounting and Bookkeeping	7,800
Travel Agencies	7,700
Air Transportation	7,100
Postal Service	6,800

While the child care industry is a relatively large employer, wage levels in the industry are very low. BLS data indicate that as of May 2003, the average annual wage across all industries in Utah was just over \$33,000. Full-time child care workers earned just over \$15,000 per year in 2003. IMPLAN data, which reflects the mix of full- and part-time employment in child care, indicate that the average annual earnings of all child care industry workers in 2001 were about \$7,600. This average earnings level places child care 433<sup>rd</sup> out of 435 sectors in Utah in terms of average earnings. Other industries with similar average earnings levels include fitness centers, car washes, real estate and video/CD rental. Exhibit III-8 shows the average annual earnings in the child care industry, and other industries with generally comparable earnings levels in 2001.

Exhibit III-8.  
Comparative  
Earnings by Industry

Source:  
2001 IMPLAN data file.



Based on a combination of data from the survey of Utah parents, data provided by the Office of Child Care and other sources, the study team estimates that the total 2004 gross receipts of Utah's regulated child care providers were approximately \$250 million. The IMPLAN data files for 2001 indicate gross receipts of \$201 million in that year (equivalent to about \$230 million in 2004 after accounting for inflation and child care demand growth).

Based on the IMPLAN 2001 data, child care ranked 126<sup>th</sup> out of 435 sectors in Utah in terms of annual gross receipts. Other sectors that were generally similar in terms of gross receipts included advertising, management consulting, social care, machine shops and drycleaning. Exhibit III-9 compares gross receipts among these industries.

Exhibit III-9.  
Comparative  
Gross Receipts  
by Industry

Source:  
2001 IMPLAN data file.

<i>Gross receipts comparison by industry</i>	<i>Gross Receipts (\$ Millions)</i>
Advertising	\$326
Management Consulting	\$302
Social Assistance	\$246
<b>Child Care</b>	<b>\$201</b>
Machine Shops	\$184
Drycleaning	\$149



SECTION IV.  
Utah Parents' Child Care Choices

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## SECTION IV.

# Utah Parents' Child Care Choices

As part of developing the economic impact analysis, BBC surveyed Utah parents about their child care choices. In addition to detailing the survey methodology, this section provides insight into the types of child care parents choose and profiles the households that use child care.

### Survey Methodology

In cooperation with OCC and subcontractor Garner Insight, BBC designed the telephone survey instrument. Survey questions that had been validated in previous studies were used whenever appropriate. The survey team developed the sampling scheme to achieve a survey sample that is representative of Utah's population. By combining a listed probability sample of households with children ages 0 to 13 with random digit dialing, Utah's households were represented, while minimizing the research cost.

Davis Research conducted the survey fieldwork. The survey was fielded in September 2004. A total of 400 surveys were completed with Utah parents who use some type of paid or subsidized child care. These surveys were divided evenly between the Metropolitan Wasatch Front (MWF) and the rest of the state (ROS). An additional 1,158 parents completed a brief survey for families who do not use paid or subsidized child care.

Sampling Error. The sampling error for the percentages presented in this section are as follows:

When the sample size is 400, the estimated sampling error is:

- +/- 3.9% for percentages at or near 90% or 10%
- +/- 3.9% for percentages at or near 80% or 20%
- +/- 4.5% for percentages at or near 70% or 30%
- +/- 4.8% for percentages at or near 60% or 40%
- +/- 4.9% for percentages at or near 50%

As with all survey research endeavors, there are additional sources of possible error that cannot be quantified. These include non-response, errors resulting from question wording, question order and interviewer bias. The study team used existing best practices, including the use of validated survey questions, to attempt to minimize the error that may result from these factors.

## Child Care Choices

About 26 percent of Utah's households (in both the MWF and ROS) with children under age 13 use some form of paid or subsidized child care. About 4 percent of households with children under age 13 report that they have a child in unpaid care.

Why some households do not use outside child care. Parents who do not choose to use outside child care were asked to name the primary reason why they do not have someone else regularly care for their child. As shown in Exhibit IV-2, most parents choose to stay home with their children. Few regional differences were apparent. A very small share of parents (about 2 percent of MWF respondents and 1.5 percent of ROS respondents) do not regularly use outside child care because they have encountered barriers to care.

Exhibit IV-1.  
Primary reason for not using outside child care

<i>Response</i>	<i>Percent Responding by Region</i>	
	<i>MWF</i>	<i>ROS</i>
Wife stays at home/I am stay at home mom/dad	48.0 %	43.9 %
I do not work	18.1	17.8
It's important for me to be with my kids	9.7	10.2
It's my job	6.8	5.6
We work different shifts, so don't need it	6.4	9.9
Kids are at school	2.4	4.5
Parents/in-laws/other family member	2.4	1.9
I'm the best teacher for my kids	1.6	1.7
My kids are too young for child care	0.9	1.1
I can't afford it	0.7	0.6
I can't find/get into quality care	0.7	0.6
Kids need me	0.7	0.7
Old enough/takes care of self	0.5	1.1
I used to have care but it closed	0.4	0.4
Quality care is too far away	0.2	--
They'll never be young again	0.2	0.2

Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

Types of outside child care used. Parents use multiple forms of outside child care for their children. Exhibit IV-2 presents the types of child care used by parents. The numbers add to greater than 100 percent due to multiple responses. Kith and kin care comprise a significant proportion of unpaid care. More than three in five MWF households with children in care use a child care center or private preschool, a slightly greater proportion than similar households in the ROS. Households in the ROS are more likely to use a family home provider and kith and kin care than households in the ROS. Slightly more than one in ten ROS households using care have an older sibling (under age 18) regularly watch the younger children in the household.

Exhibit IV-2.  
Types of Child Care Used

<i>Type</i>	<i>Percent Responding by Region</i>	
	<i>MWF</i>	<i>ROS</i>
Child care center or private preschool	61.6 %	56.0 %
Family home provider	19.0	24.5
Adult relative	18.1	21.2
Close family friend	23.3	29.0
Nanny	4.7	5.0
After school program	8.2	6.6
Older sibling under age 18	7.3	11.6
Head Start	6.5	0.5
In school/public school/kindergarten	0.9	1.2
Other/refused	2.2	1.2

Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

Primary reason for selecting the provider. Parents were asked why they chose a particular type of paid child care. Exhibit IV-3 details these reasons. The percentages add to greater than 100 percent due to multiple responses. Convenience, the provider's reputation and an emphasis on early childhood education were the top three reasons for selecting providers.

Exhibit IV-3.

What is the primary reason you chose this provider instead of another type of care?

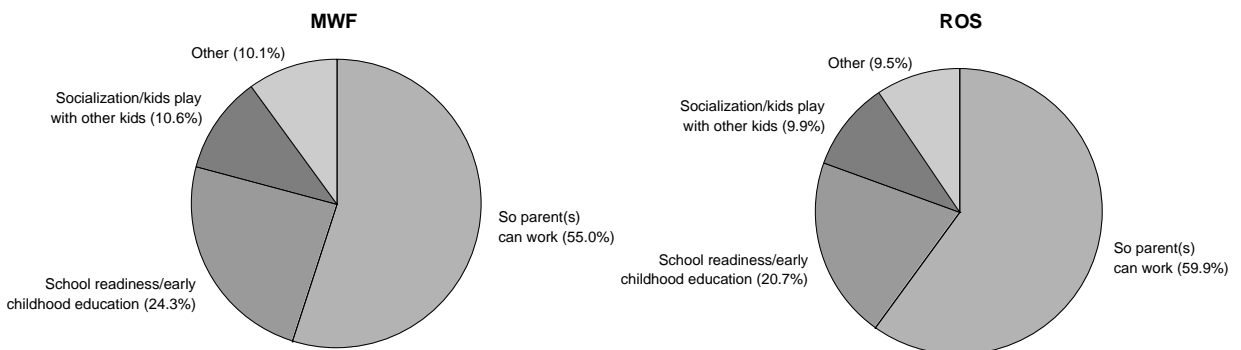
<i>Response</i>	<i>Percent Responding by Region</i>	
	<i>MWF</i>	<i>ROS</i>
Reputation/referrals	28.5 %	29.0 %
Convenience/close to home/close to work	27.5	30.5
Wanted an emphasis on child development/education	26.5	23.0
Wanted a family/home environment	20.5	24.5
Wanted child to socialize with other children	12.0	9.0
Cost/what I could afford	7.0	13.5
Already at the school/continuity with the school	7.0	7.5
Refused	6.5	6.0
Wanted one-on-one care for the child	4.5	8.0
Wanted supervision of providers/more than one adult with child	3.5	2.0
Only type available/nothing else available	3.5	6.0
Other	3.5	1.0
Bad experience/don't trust	0.1	1.0
Child likes it/enjoys	0.0	1.0

Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

Reason for using paid child care. Parents provided numerous reasons for why their child is in some type of paid child care during a typical week. Among all of the reasons mentioned, “so parent(s) can work” was the most frequent response, followed by “school readiness” and “socialization.”

Exhibit IV-4.

What is the primary reason that your child is in child care?



Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

## Profile of Parents Who Use Paid Child Care

This section explores how child care choices vary by parent demographics.

Demographic and socioeconomic characteristics. The following exhibits explore the demographic and socioeconomic characteristics of Utah parents who use paid child care.

**Age.** Half of the parents with children in paid child care were between the ages of 25 and 34. Respondents from the ROS with children in child care tended to be slightly younger than their MWF counterparts.

### Exhibit IV-5. Age of Respondent

Source:  
BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

Age	Region	
	Metro	Non-metro
21 to 24	1.5 %	7.1 %
25 to 34	53.0	50.5
35 to 44	39.9	29.3
45 to 54	5.1	13.1
55 or older	0.5	--

**Marital status.** Most of the respondents who use paid child care were married.

### Exhibit IV-6. Marital Status

Source:  
BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

Age	Region	
	MWF	ROS
Married	92.5 %	93.5 %
Single	3.5	1.5
Divorced	2.0	2.5
Widowed	1.0	--
Separated	--	2.0
Other	--	0.5
Refused	0.1	--

**Race and ethnicity.** About 5 percent of the respondents from the MWF who use paid child care were Hispanic/Latino.

Exhibit IV-7.  
Race and Ethnicity

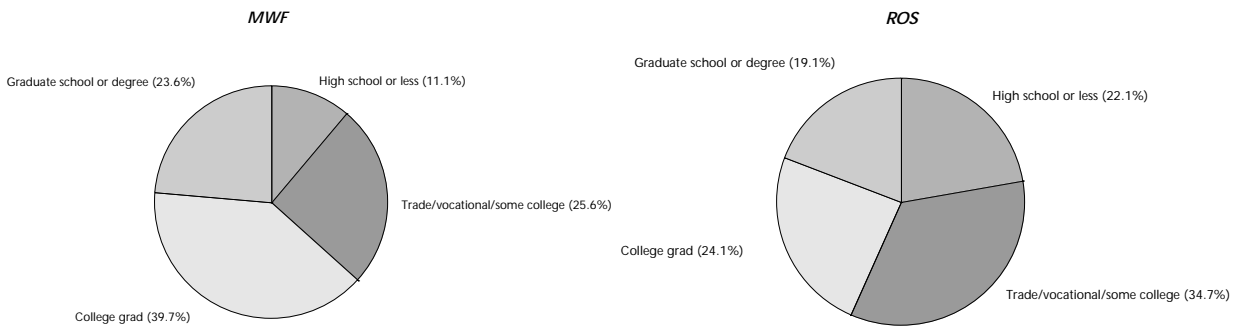
Note:  
Percentage within market.

Source:  
BBC Research & Consulting, Utah Parent  
Child Care Survey, 2004.

	<i>Region</i>	
	<i>MWF</i>	<i>ROS</i>
<b><i>Are of Hispanic or Latino decent?</i></b>		
<b><i>Response</i></b>		
Yes	5.0 %	2.5 %
No	94.5	97.5
Refused	0.5	--
<b><i>Race/Ethnicity</i></b>		
White/Caucasian	92.5 %	96.5 %
Black/African American	0.1	--
American Indian/Alaska Native	--	2.0
Asian	3.0	--
Latino/Hispanic	2.5	0.5
Other	--	0.5
Refused	1.5	0.5

**Educational attainment.** More than 50 percent of respondents in the MWF region, and over 40 percent of respondents in the ROS, who use child care had at least a bachelor's degree.

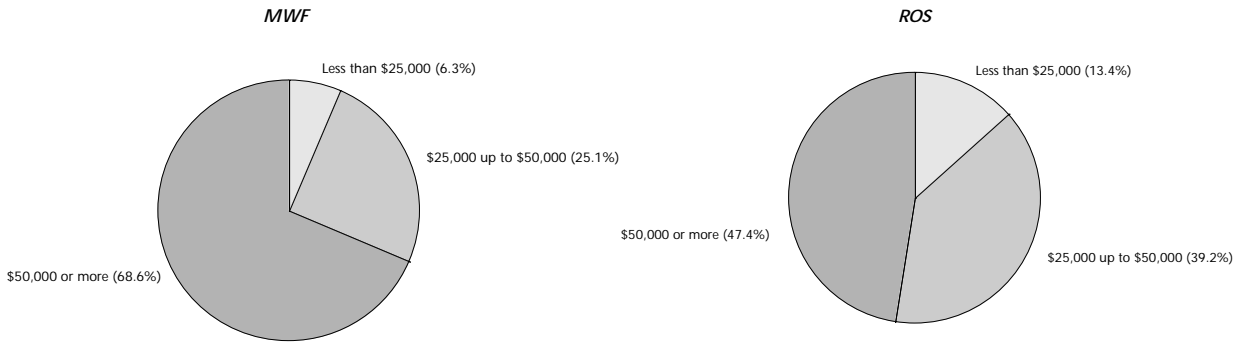
Exhibit IV-8.  
Educational Attainment



Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

**Household income.** More than two-thirds of households using paid child care in the MWF region had incomes over \$50,000. A larger proportion of child care-using households in the ROS have incomes less than \$25,000.

Exhibit IV-9.  
Household Income



Note: Sample Size n=191.  
Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

Socioeconomics and child care choices. The following exhibits explore whether or not child care choices vary by household income or the parent’s educational attainment.

**Household income and type of care.** Across all household incomes, child care centers or preschools represent the greatest proportion of types of child care used.

Exhibit IV-10.  
Type of Child Care Selected, by Income

Type	Household Income		
	Less than \$25,000	\$25,000 to \$50,000	\$50,000 or more
Child care center or preschool	37 %	43 %	41 %
Family home provider	13	14	17
Relative	8	10	9
Close family friend	20	17	18
Nanny	3	3	3
After school program	2	3	6
Head Start	13	7	2
In school/public school	3	3	5

Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.



**Education and type of care.** Exhibit IV-11 presents the types of child care choices made by respondents with varied educational attainment. More educated parents are somewhat less likely to have relatives watching their children.

Exhibit IV-11.  
Type of Child Care Selected, by Respondent Education

<i>Type</i>	<i>High School</i>	<i>Trade/ Vocational School</i>	<i>College Grad</i>	<i>Grad School</i>
Child care center or preschool	38 %	40 %	46 %	39 %
Family home provider	18	14	17	14
Relative	10	12	6	7
Close family friend	21	17	14	23
Nanny	0	4	5	2
After school program	5	4	4	5
Head Start	6	5	4	3
In school/public school	2	4	4	8

Source: BBC Research & Consulting, Utah Parent Child Care Survey, 2004.

SECTION V.  
Economic Impact of Regulated Child Care in  
Utah

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## SECTION V.

# Economic Impact of Regulated Child Care in Utah

One of the primary purposes of this study was to quantify the economic impact of the regulated child care industry in Utah. As noted in the introduction, child care expands Utah's economy primarily by increasing the state's labor force, rather than by exporting products or services and importing dollars into the state. The first portion of this section describes the methodology for the economic impact analysis. The remainder of this section assesses the extent to which regulated child care expands the state economy.

### Methodology

Assessing the economic impact of an individual industry is simplest when the industry is a base or primary industry. These industries, by the nature of their work, bring new dollars into a regional economy. A typical example of a base or primary industry is mining. Minerals are extracted, processed and sold. Sales to buyers outside the region draw new dollars to the local economy that stimulate and support the local economy. Employees spend their wages in the local economy and the firm spends its dollars on services and supplies from within the local economy. These dollars in turn support employment and generate additional spending (though at a lower rate than the initial infusion of dollars).

In economic impact terms, child care is not a traditional primary industry, like mining, agriculture or tourism, which exports a product or service and imports money into the state from outside consumers. Instead, the child care industry has an impact on Utah's economy because the industry enhances and expands the state's labor force and makes it more productive.

The critical economic impact questions regarding child care are: "If regulated, paid child care was not available, how many parents could not participate in the labor force, or would have to reduce their participation? How much would their families' incomes be reduced? What would the overall economic implications of that reduction be?"

To answer these questions, BBC needed to determine the number of Utah households using regulated child care that would change their participation in the labor force, and consequently their income, if such care was not available. We also had to determine the extent to which those household incomes would be reduced. Only these income reductions (including the portion of the income spent on child care services and the remaining income spent on other household goods and services and taxes) — along with federal funds supporting child care in Utah — were counted in the economic impact analysis.

Could Utah employers replace these working parents? For simplicity, this economic impact analysis assumes that the employment and earnings of these nearly 25,000 working parents could not be readily replaced by other Utah residents that are not currently employed. Certainly, some labor substitution for some of these parents would be possible. However, replacing all or most of these 24,800 individuals from the state's existing labor force would not be possible on a sustainable basis.

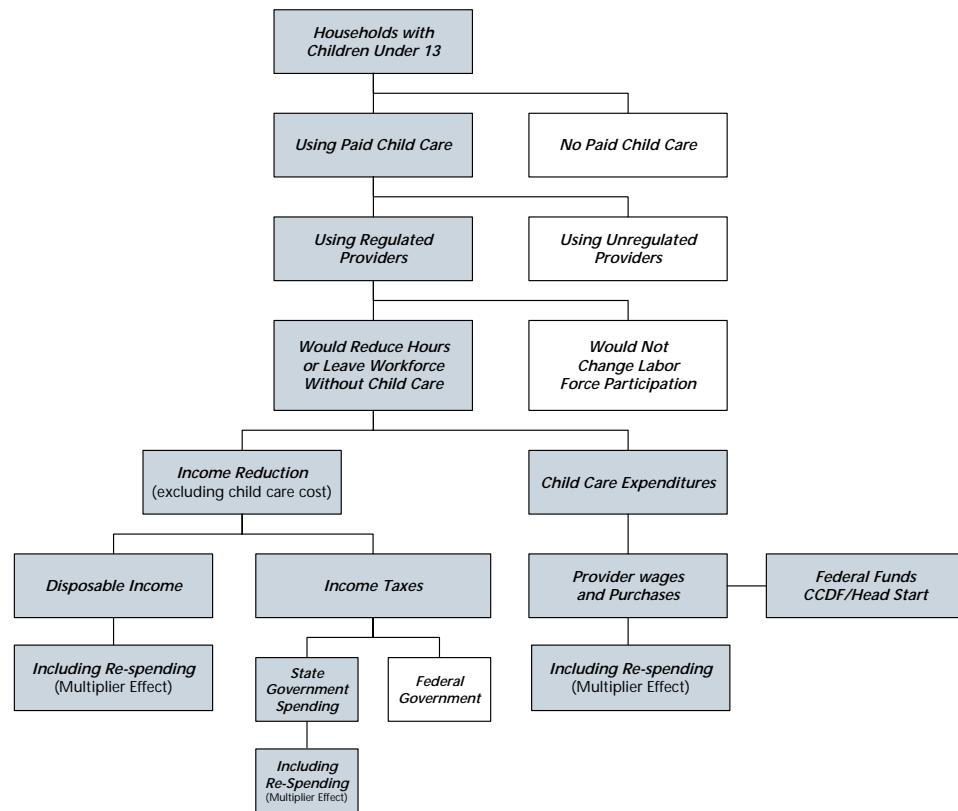
As described in Section II of this report, Utah’s current unemployment rate is around 5 percent, already at or below the level that many economists would consider the “natural rate of unemployment” required for job mobility and economic growth in the U.S. economy. Replacing parents who would drop out of the workforce would reduce Utah’s unemployment rate to between 2 and 3 percent, a level that is almost certainly not sustainable. A reduced labor supply would also, of course, tend to drive up wages and salaries for Utah employers and potentially affect the state’s competitiveness with businesses located in other states. Finally, since these working parents are employed in a generally free market economy, they are presumably either better qualified or available at lower cost than potential substitutes from the ranks of the unemployed.

Once the direct income effect of child care was determined, we used the IMPLAN regional economic input-output model to estimate the secondary, or “multiplier” effects that occur as this income recirculates within Utah’s economy.

Exhibit V-1 provides a graphic depiction of the economic impact analysis.

Exhibit V-1.  
Economic  
Impact  
Analysis

Source:  
BBC Research  
& Consulting.



The data for the economic impact analysis included the analysis of Utah demographics, described in Section II, a survey of more than 1,500 Utah households with children under the age of 13 as well as information gathered from more than 30 regulated child care providers across the state. The latter two data sources are described in more detail later in this section.

Parent survey. During September and October 2004, the study team conducted a telephone survey of Utah households with children under the age of 13. The survey was designed to gather information critical to the economic impact analysis as well as other information regarding Utah parents' child care choices. For purposes of the economic impact analysis, the survey was used to identify:

- The proportion of Utah households with children under 13 that use regulated, paid child care.
- The share of those households that would have to change their participation in the labor force (reduce their hours or leave their jobs altogether) without access to paid child care.
- The effect that these labor force participation changes would have on household income.
- The amount that these households currently spend for child care.

The previous section (Section IV) provided additional information about the survey methodology and statistical reliability.

Information collected from Utah child care providers. With the assistance of Utah's Child Care Resource and Referral Agencies and Utah Provider Associations, the study team gathered detailed information on income, expenditures and utilization for 34 Utah providers. This information was used to gain greater insight into how funds paid to child care providers are spent by those providers, which is useful for assessing subsequent economic impacts.

The IMPLAN regional economic input-output model. The direct economic effects of child care in Utah lead to subsequent, or secondary, economic impacts as dollars recirculate through the state's economy. Often termed the "multiplier," secondary economic effects occur because dollars paid to child care providers (or other household spending by households whose earnings are partly dependent on being able to access paid child care) end up in the hands of local businesses and employees who, in turn, re-spend those dollars.

To quantify these secondary economic effects, the study team used the IMPLAN regional economic modeling system. Based on the national economic accounts developed by the U.S. Bureau of Economic Analysis, IMPLAN customizes these relationships to better represent local economic conditions. This process uses extensive county-level data from a variety of state and federal sources. The IMPLAN model is probably the most widely used and respected tool for this type of analysis. It was originally developed by the U.S. Forest Service.

## Economic Impacts of Child Care in Utah

The balance of this section describes the economic impact of child care in Utah in 2004. In other words, the extent to which the availability of regulated child care expands the state's economy. For purposes of clarity, most of the following discussion is sequential — beginning with an analysis of the number of Utah households that use regulated care and ultimately concluding with estimates of the total economic impact arising from additional household income made possible through regulated child care availability and from federal funds that flow to regulated Utah child care providers. To further keep the narrative as straightforward as possible, most of the following discussion focuses on statewide effects.

Some readers may find the impact analysis easiest to follow by looking to Exhibits V-2 through V-4 at the end of this section, which use flow charts to summarize the impact analysis. Separate charts are included to summarize statewide economic impacts, economic impacts in the MWF and economic impacts in the ROS.

Use of regulated child care in Utah. As of 2004, there were approximately 276,000 households in Utah with children under the age of 13. About 210,000 of these households are located in the MWF and about 66,000 of these households reside in the ROS.<sup>1</sup>

In the MWF, about 54,000 households used some form of paid child care and 40,000 of these households obtained that child care from a regulated provider. In the ROS, about 17,000 households used paid child care, including 10,000 households that received care from regulated providers. Statewide, there were approximately 50,000 Utah households that used regulated child care providers in 2004.

Labor force and income effects of regulated child care. Among the 40,000 MWF households using regulated care in 2004, nearly one-half (19,400) would have to reduce their working hours, or leave their jobs altogether, without access to paid child care. A slightly higher proportion of the 10,000 households in the ROS using regulated care (5,200) would change their participation in the labor force without access to paid child care. Statewide, about 24,600 households would earn less income if they could not use paid child care.

Among the remaining households, many would have to change shifts or make other adjustments to their work or lifestyle if they could not use paid child care. Although these households would, at a minimum, be inconvenienced by the loss of paid child care opportunities, their incomes would not be affected and they were not included in the economic impact estimates.

The average annual income loss among households dependent on paid child care for some or all of one or more parent's ability to participate in the labor force was approximately \$20,000. Put another way, the availability of paid child care increased the annual gross earnings of nearly 25,000 Utah households by a total of \$481 million in 2004. These are gross earnings, before state and federal income taxes and prior to accounting for these households expenditures for child care.

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<sup>1</sup> For purposes of this study, the Metropolitan Wasatch Front was defined to include Davis, Salt Lake, Utah and Weber counties.

Direct and secondary economic effects. The earnings of Utah households that are made possible by access to paid child care impact Utah's economy in several ways.

A portion of these earnings are used to pay state and federal income taxes. While federal income tax payments provide no direct benefit to Utah's economy, state income tax payments are ultimately resented by the Utah state government on salaries and wages for state government employees and on procurement of goods and services from Utah businesses (as well as from suppliers outside the state).

A larger proportion of child care-related earnings are spent for child care itself. These dollars go to Utah child care providers who, in turn, pay employees and other Utah businesses. Utah child care providers also directly and indirectly receive federal funds from Head Start and the Child Care and Development Fund.

***State income tax revenues and spending.*** The median annual earnings of Utah households using paid child care in 2004 were over \$50,000. At this income level, the marginal state income tax rate is 7 percent, and the marginal federal income tax rate is 15 percent. Statewide, however, the average effective state and federal income tax rates (after accounting for deductions and lower tax rates on the initial portions of household earnings) are much lower at 3 percent and 7 percent, respectively.

To the extent that child care supported earnings reflect the jobs of the second wage earner in the household and likely have little impact on household tax deductions, the marginal income tax rate would apply. However, to provide a conservative estimate of the effect of child care supported earnings on state and federal tax revenues, the study team used the midpoint between the marginal tax rates and the average effective tax rates to calculate tax impacts.

On this basis, we estimate that the gross household earnings made possible by access to paid child care directly lead to about \$24 million per year in state income tax revenue and about \$42 million per year in federal income tax revenue. The latter figure also reflects the child care tax credit that these households receive against their federal tax liability.

The \$24 million paid to Utah's state treasury as a result of the child care supported earnings of Utah households recirculates through the state's economy as the state government purchases goods and services and state employees spend their paychecks. Including these secondary economic effects, the total impact of the state income tax revenues generated by child care supported earnings was approximately \$38 million in 2004. Nearly 900 Utah jobs were directly or indirectly dependent on this state income tax revenue stream.

***Spending on child care.*** Of the \$415 million dollars in after tax, household earnings made possible by use of paid child care, about \$93 million was spent for child care. Regulated Utah child care providers also directly or indirectly received about \$77 million in funds from federal sources, including Head Start and CCDF. In combination, this \$170 million represents about two-thirds of the gross receipts of the regulated child care industry in Utah. The remaining one-third of the industry's gross receipts reflects child care expenditures of Utah households that would not have reduced earnings without child care. This portion of the industry's gross receipts is considered to reflect household discretionary expenditures and is not counted in the economic impact analysis.

The \$170 million in revenues to Utah child care providers that qualifies for inclusion in the economic impact analysis leads to a total economic impact of about \$301 million after including secondary economic effects. This revenue stream directly and indirectly supports over 9,000 jobs across the state.

***Household disposable income and spending in Utah.*** The largest component of the economic impact of child care in Utah arises from the remaining earnings of Utah households that occur due to the availability of paid child care. After income taxes and child care expenditures, Utah households retain approximately \$322 million that they could not have earned without access to paid child care. This disposable income is, in turn, spent on the typical range of household expenditures, from mortgage payments to food, clothing and entertainment.

Once again incorporating this \$322 million in disposable household income into the IMPLAN economic model, the study team estimates that the total impact of this disposable household revenue stream is approximately \$480 million. These household expenditures support approximately 6,300 jobs across Utah.

***Total economic impact.*** Combining the economic impacts that result from state tax revenues, qualifying child care provider revenues and disposable household income tied to the availability of regulated child care, the statewide economic impact of child care in 2004 was about \$819 million. Statewide, availability of regulated child care supported nearly 40,000 jobs, including more than 24,000 jobs held by parents that would have to quit or reduce their hours without access to child care.

Of the statewide \$819 million impact, approximately \$634 million occurred within the MWF and about \$165 million occurred throughout the ROS. Including parents whose labor force participation is partly or completely dependent on access to regulated child care, use of regulated child care supported more than 32,000 jobs in the MWF and nearly 8,400 jobs in the ROS.

Potential opportunities. During the fiscal year 2004, regulated child care in the state of Utah received approximately \$77 million in funds from federal sources. About \$3.8 million of these funds were received from CCDF as “matching funds”. To receive these funds, the State of Utah contributed about \$1.5 million in state funds. However, the maximum amount the state could have received through this program was about \$14.7 million. In order to receive the full amount, the State of Utah would have needed to contribute, or “match”, about \$5.7 (an additional \$4.6 million). Only four states contributed less to the CCDF matching funds program than the State of Utah.

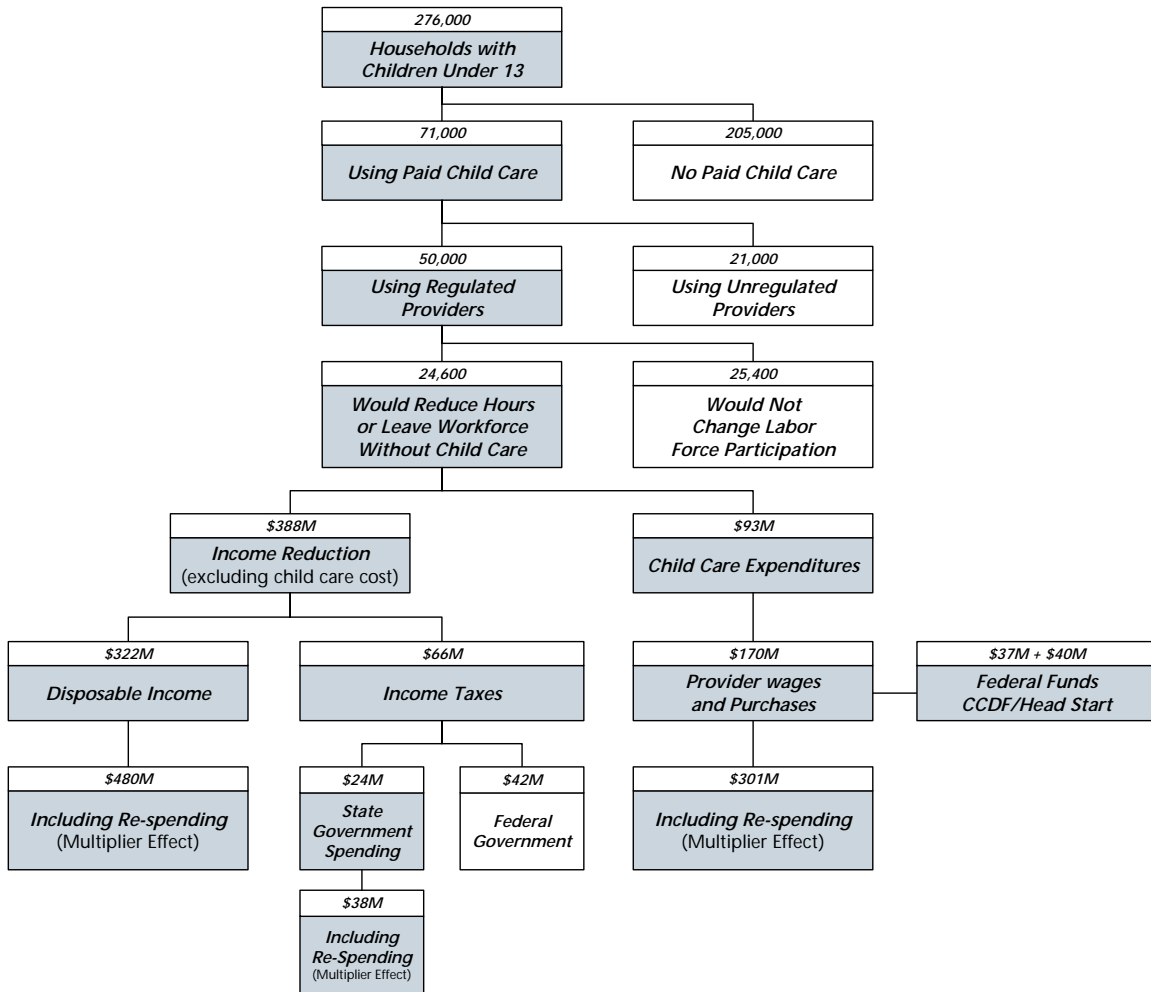
If the State of Utah had contributed \$5.7 million, in order to take advantage of the full \$14.7 million in available federal “matching” funds, the total amount received from federal sources would have increased from \$77 million to about \$89 million. This additional federal revenue would have contributed an additional \$22 million in total economic impact, including secondary economic effects. This lost revenue stream would support more than 500 jobs across the state.



## Economic Impact Summary Charts

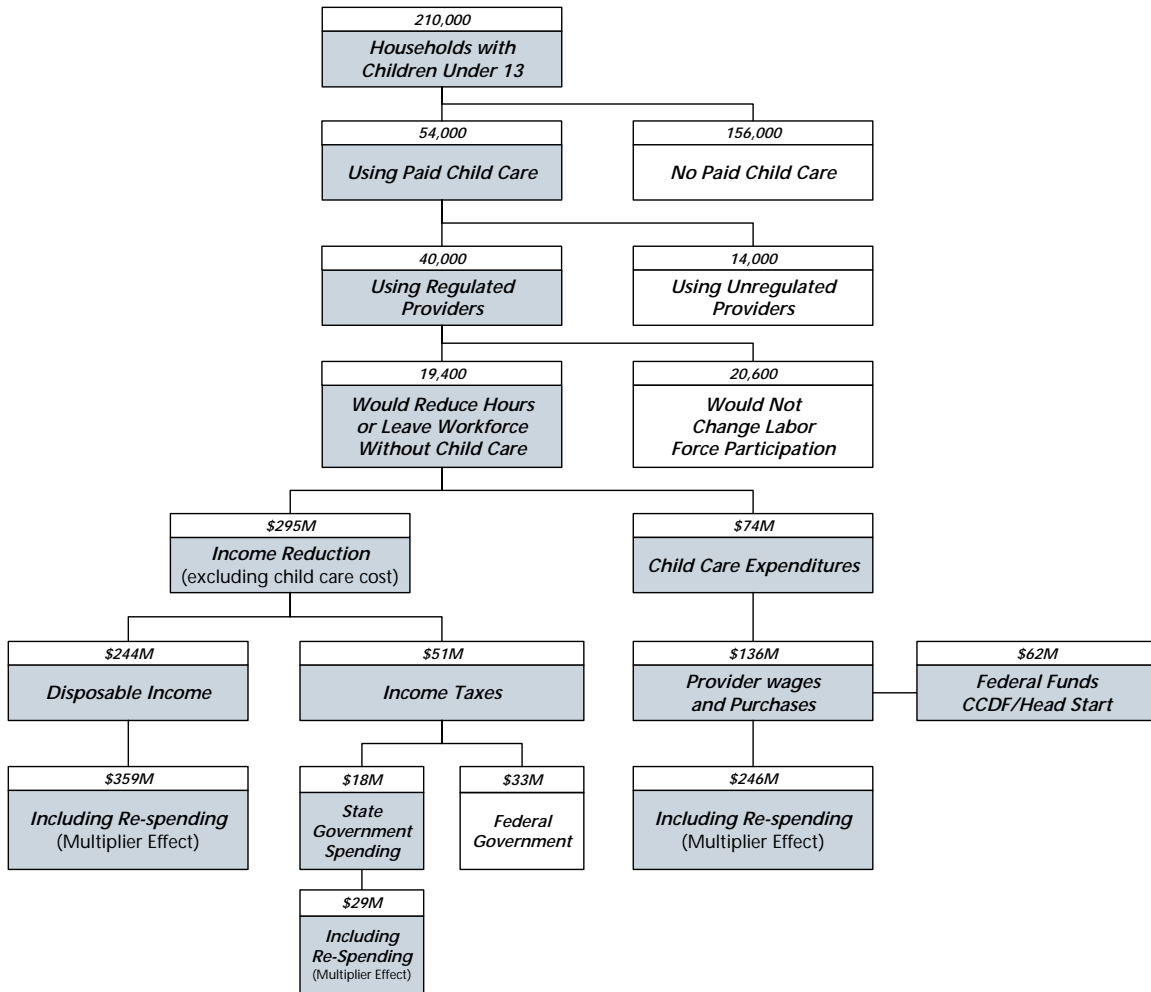
The following flow charts summarize the economic impact methodology and results for the state of Utah as a whole, the Metropolitan Wasatch Front and the Remainder of the State.

Exhibit V-2.  
2004 Statewide Economic Impacts of Child Care



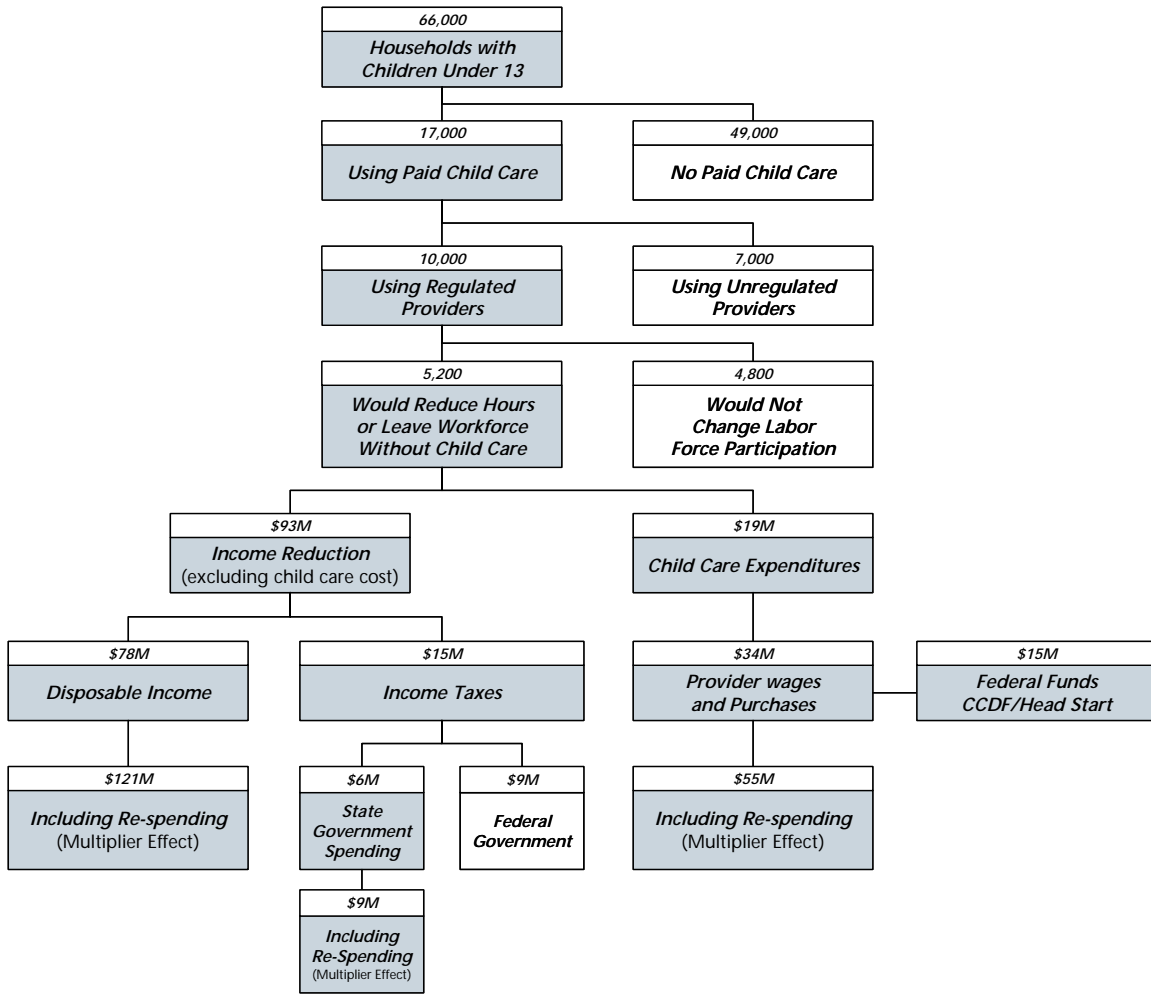
Source: BBC Research & Consulting.

Exhibit V-3.  
2004 Metropolitan Wasatch Front Economic Impacts of Child Care



Source: BBC Research & Consulting.

Exhibit V-4.  
2004 Remainder of the State Economic Impacts of Child Care



Source: BBC Research & Consulting.

SECTION VI.  
Other Impacts of Child Care

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## SECTION VI.

### Other Impacts of Child Care

Estimates of the increase in the labor force, household earnings and employment resulting from regulated child care tell only part of the story. A review of existing studies and interviews with executives of Utah businesses indicate that quality of child care, as well as quantity, is also important to businesses and the development of the children themselves. This section summarizes these less quantifiable impacts.

#### Benefits to Businesses

Utah businesses benefit from the expanded labor force made available through paid child care. Quality child care is important to Utah businesses because of the relationship between child care reliability and worker productivity and attendance.

Parents with children under 18 represent a significant proportion of Utah's workforce. As detailed in Section II, families with children age 18 or younger constitute a significant proportion of Utah's population. In 55 percent of Utah's two-parent families, both parents work. More than four in five single mothers work.

Labor force composition has changed considerably over the past three decades. Thirty years ago, there were approximately 48 million married-couple families in the U.S., of which 47 percent were families consisting of both the husband and wife working. By 2001, the number of married-couple families had increased to almost 57 million and the percentage of families with both the husband and wife working had increased to 60 percent. In addition, wives' contributions to family earnings have steadily risen during this period. In 1975, wives' earnings contributed 26 percent to the total family income. In 2001, they contributed 34 percent (BLS 2004).

Benefits to businesses of reliable child care. Quality of child care is just as important as quantity. Prior studies, along with interviews with Utah business executives, suggest that the availability of reliable, quality child care benefits businesses by both creating a more stable and satisfied workforce now and by ensuring an increasingly educated, stable and satisfied workforce in the future. Unreliable or problematic child care arrangements can contribute to absenteeism and reduce worker productivity.

Increased workforce participation. Quality child care allows qualified women to participate in the workforce. Much of the female labor force is highly educated. As of 2003, 30 percent of female employed civilians held a minimum of a bachelor's degree. Another 11 percent held an associate's degree and 21 percent had attended some college (Census Bureau 2003).

Decreased absenteeism. Dependable child care contributes to reduced absenteeism for both working mothers and fathers. Working parents miss work for a variety of quality child care-related issues including researching and interviewing potential child care facilities. They also miss work when child care becomes unavailable or while their child is transitioning from one provider to another. One study estimates the cost of absenteeism to employers ranges from about \$500 to \$2,000 per parent employee each year, depending on the employee's salary (CVWF 2004).

When a parent within a dual-earner couple is needed to care for a child, over 80 percent of mothers say they are more likely than their spouse to take time off. About 20 percent of fathers make this claim (Bond, et al., 1997). Furthermore, in a recent online survey open to employees of more than 1,000 companies, almost two-thirds of parent employees said they miss about 2 hours each month due to family and personal issues, including childcare (LifeCare 2004).

The direct and indirect costs of employee absenteeism are large and may include hiring temporary staff, overtime and reduced productivity (Softworks 2004). Data from the Current Population Survey show women over age 16 miss, on average, about 50 hours of work each year due to unplanned absences (not including vacation, personal days, holidays or other reasons). Men over the age of 16 miss about 26 hours for unplanned absences (BLS 2003).

A recent survey of companies shows that while the absentee rate declined slightly in 2002 to 2.1 percent from 2.2 percent in 2001, the average per-employee cost of absenteeism rose to \$789 from \$775 (CCH 2002). Survey results show the most common reason given for unplanned absences was "personal illness" (33 percent), followed by "family issues" (24 percent) and "personal needs" (21 percent). Over 80 percent of companies surveyed indicated they believe unscheduled absences will continue to increase in the future.

During interviews with Utah executives, the study team was informed that "the most common reasons for missing work are personal sickness and child care problems" and "about 60 percent of our employee absences are due to child care difficulties" (Utah executive interviews, January 2005).

Increased workforce productivity. Employees with unsatisfactory child care arrangements are likely to be less productive. Difficulties with child care arrangements often lead to increased tardiness and an inability to concentrate throughout the workday.

Only one-third of workers rate family life satisfaction very high and about 75 percent of workers with families report high levels of interference between their jobs and their family lives (FWI 1997). When employees are worried about their child care arrangements, they report difficulty in concentrating on work and other tasks (Galinsky and Bond 1998).

Productivity losses and training costs can rise significantly when child care issues lead parents to leave their job and the workforce entirely. A study in 1992 found that almost one-third of all workers knew someone who left employment due to inadequate child care arrangements (Brown 2002). Further, a recent online poll of parents found 46 percent of working parents said they would like to reduce the number of hours they are currently working due to child care reasons. About 20 percent reported a desire to quit working altogether for child care reasons (LifeCare 2004). A number of the Utah executives interviewed by the study team reported cases of losing good employees due to difficulties in obtaining reliable child care (Utah executive interviews, January 2005).

Benefits of after school care to businesses. School-age children only spend 20 percent of their time in school and about 40 percent of working parents do not have before or after-school care for their children (LifeCare 2004). This leaves a significant portion of the day for parents to worry about their child's unsupervised activity. Specifically, 87 percent of working mothers report an increased level of concern for their children's safety during after school hours (Afterschool Alliance, 2003).

Results from a survey of 250 working parents with school-age children show parents with high levels of stress regarding their child's after-school activities are three times as likely to report job disruptions and more than four times as likely to report low psychological well-being. Further, these parents missed an average of five extra days of work annually compared to parents with low levels of stress and were more likely to turn down requests to work extra hours (BCFWP 2004). These productivity losses due to absenteeism and other factors translate into significant indirect costs to businesses. Utah executives noted during interviews that child care difficulties can not only disrupt the parent, but also the entire work team (Utah executive interviews, January 2005).

Further confirmation from the business community comes from the managers themselves. In a survey of corporate human resource representatives, 100 percent reported an increase of unscheduled absences during the summer months, when children are out of school (LifeCare 2004).

## Social Benefits

As the demand for child care has increased, so too has research on child care's impact on the children served and their communities. Three important studies include North Carolina's Abecedarian Study, Chicago's Child-Parent Study, and the High/Scope Perry Preschool Study, conducted in Ypsilanti, Michigan.

Overview of research. These three studies share a similar methodological approach. First, participants in the studies came from neighborhoods that put them at a greatest risk of dropping out of school or becoming burdensome to society. Secondly, each of the studies followed participants throughout childhood to adolescence and adulthood, observing them at periodic intervals and documenting their progress. Details of these studies are presented below. Overall, each study found that early childhood programs were beneficial not only to the children involved in the programs, but also to society as a whole. Investments in early childhood programs led to significant, positive returns to taxpayers.

By positively influencing today's children, quality child care and early childhood education leads to a more educated labor supply (resulting in higher wages and improved economic status), and reduces participation in other government programs (such as welfare or the criminal justice system) reducing the economic burden on society.

Child care and the future workforce. Early childhood development can substantially affect an individual's future in the workplace. Individuals who attended quality child care are more productive than those who have not. Research also shows that involvement in a quality child care program improves educational attainment.

- Participants in the Perry Preschool Program in Ypsilanti, Michigan were significantly more likely to have graduated high school than were their counterparts who had not taken part in the program (71 percent versus 54 percent). This result was particularly true among female participants in the study (84 percent versus 35 percent) (Schweinhart, 2003).
- Participants in the Abecedarian Project — an early childhood program held in North Carolina — exhibited significantly higher mental test scores throughout adolescence, including tests of both math skills and reading comprehension. Participants in the Abecedarian Project were also much more likely to have attended a four-year college when compared to the study's control group (35 percent versus 14 percent) (Campbell et al., 2001).
- The Child-Parent Center (CPC) program in Chicago is a unique early child care program. Children are involved in the program for six years, not just one or two, and the focus of the program is on literacy. Participants in the Child-Parent Centers program in Chicago's South Side showed improved educational attainment. By the age of 20, a greater percentage of CPC participants had graduated high school than those in the study's control group (Stanfield, 2002).

Social responsibility. Studies have also shown that participants in early childhood programs are more socially responsible, translating into real savings for taxpayers, as program participants are less likely to need special attention in school, as well as less likely to be involved in government programs such as welfare or the criminal justice system.

- Participants in the Perry Preschool Program were less likely to have been arrested. By the age of 27, only 7 percent of the program's participants had been arrested 5 or more times (compared to 35 percent of those children not involved in the program). Perry program participants were also 25 percent less likely to later be involved in a welfare program. Participants in the preschool program were also more likely to have been married for a significant amount of time, and less likely to have a child of their own out of wedlock (Schweinhart, 2003).
- While the Abecedarian Project focused on the affects of childhood care on cognitive abilities, the study did find that employment rates were significantly higher for those involved in the preschool program than those who were not (Campbell, et al., 2001).
- Fewer participants in Chicago's CPC program had dropped out of school, or had been placed in special education than their non-program counterparts. The study also found that leaving a child out of the CPC program increased the risk that the child would be arrested for a violent crime in their teens by 70 percent (Stanfield, 2002).



Cost-benefit analyses. Cost-benefit analyses of these programs have shown that money invested in early childhood care programs has a huge, positive return for taxpayers.

- A cost-benefit analysis of the Perry Program (Barnett, 1996) determined that every dollar invested in the preschool program yielded \$7.16 in economic benefits. Benefits to taxpayers included: savings to the state's criminal court program, increased money brought into the tax system because of increased wage rates for program participants, reduced costs to school systems as participants required less special education services (this despite the increased college costs for program participants), and reduced welfare costs.
- A cost-benefit analysis of Chicago's CPC program (Reynolds, et al., 2002) concluded that every dollar spent on the program yielded \$7.14 in future savings to taxpayers. Benefits to taxpayers included: increased tax payments from program participants, reduced costs to the criminal justice system, savings to potential crime victims for crimes not committed by program participants, and reduced costs to the school system as program participants required less special education or remedial schooling.

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