

# **The Economic Impact of Child Care in La Plata County**

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# **Economic Impact Highlights**

## **The Child Care Industry in La Plata County**

### **Child Care Providers Contribute to the Local Economy**

There are approximately 56 child care providers in La Plata County. There were 16 child care providers that completed the survey in order to conduct the economic analysis of child care providers in La Plata County. The child care industry contributes \$6,965,297.63 of personal income to the local economy. This translates into approximately .5 percent of the personal income in La Plata County in 2003. According to the Bureau of Economic Analysis the La Plata County income for 2003 was \$1,376,000,000 (the latest number available).

### **Child Care Providers Create Job Opportunities**

The Child Care Service employs directly 114 people in La Plata County. Therefore, the Child Care Service creates several job opportunities in the local community. Child care industry employees spend approximately \$998,669.90 inside La Plata County.

Because the industry contributes to personal income in the community, it also creates jobs outside the industry. Total jobs attributed to the child care providers that responded to the survey were calculated to be 251 jobs. This means that 753 jobs are created by the child care industry in La Plata County.

### **Child Care Providers Create Benefits for the Community**

With 56 child care centers in La Plata County the overall economic efficiency improves. Although child care centers earn revenue themselves, in the long run parents who use child care and others in La Plata County benefit from the additional productivity. By having 56 child care centers in the area, parents can place their children where they want in terms of location and price, allowing them to enter the workforce and contribute to the local economy. Most of the child care centers operate on a twelve-month basis.

### **Child Care Providers Contribute to Early Childhood Learning**

Child care providers not only benefit the parents but also the children that attend the centers. Children learn social skills with the interaction that takes place through other children. Other benefits include having the child outside of their everyday routine. Child care centers also create group learning, which makes learning more interesting for the child.

Robert Lynch of the Economic Policy Institute claims that early childhood development is a vital necessity for the maturity of a child's life and will benefit the community in the long run. "We estimate that providing poor three- and four-year-old children, 20% of all children in this age range, initially would cost about \$19 billion a year. Such a program would ultimately reduce costs for remedial and special education, criminal justice, and welfare benefits, and it would increase income earned and taxes paid. Within about 17 years, the net effect on the budget would turn positive (for all levels of government combined)" (Lynch).

## **Taxpayer Investment in Child Care Providers Create High Returns**

Taxpayers can claim a portion of the benefits of a more educated workforce as well. It is believed that a significant percentage of a child's brain develops before reaching kindergarten. Head start and pre-school programs are costing taxpayer's money, however this money is an investment in the workforce of the future. The children who are enrolled in child care programs at an early age have been known to be successful in obtaining knowledge and skills through high school and on to higher education. Not only do the children gain the benefits of learning, but also develop social skills that will only help them in the long run.

## **How We Measure Impact**

Child Care Providers impact on the local economy is calculated as the total economic activity created by their child care services. In order to calculate the impact the direct expenditures and employment created by operating child care services and the indirect economic activity that is created by the providers as well must be identified. Therefore, the total activity created can be estimated.

Child Care Providers have many significant impacts on La Plata County's economy. These can be classified as either demand-side or supply-side effects. The demand-side effects of child care providers come from the fact that the providers and their employees spend income generated from the productivity of the industry.

The supply-side effects are the effects that the providers have on the local economy based on resources it offers to the area. **For example, the existence of child care providers allows the county to be more productive because parents are able to work more and their children are benefiting as well.** Furthermore, this allows for children and families to develop a stronger community because friendships are shared among the children, providers, and parents.

There are several additional economic and social benefits provided by child care providers that are very difficult, if not impossible, to measure. For example, the level of friendship and the social skills children acquire at the childcare providers can't be measured, but are certainly important.

## **Demand-Side Effects**

### **EXPENDITURES**

Expenditures made from child care providers and their employees become income for other businesses in the economy. Taking care of children requires a variety of products and services. Some examples of products include educational supplies such as paper and pencils, children's reading books, computer games, and other various learning activities. Other examples of products and services include transportation, food, and other business services.

Since approximately 1/3 of the child care providers in the county responded to this study by supplying their expenditures for this study, if we extrapolate the estimates from these providers and multiply by 3, we can get an estimate for the entire industry.

## Demand-Side Effects Measured by Expenditures

	<b>Estimated Expenditures in La Plata County</b>
<b>Provider Expenditures of those that responded (not including wages and salaries) i.</b>	\$367,878.59
<b>Employee Expenditures in La Plata County (50% of employee expenditures of those that responded) ii.</b>	\$998,669.90
<b>Child Care Provider Related Expenditures - Total</b>	\$1,366,548.49
<b>Multiplier Effect</b>	1.6990
<b>Total Estimated Economic Impact of those that responded</b>	2,321,765.88
<b>Total Economic Impact of the Child Care Industry in La Plata County (Estimate multiplied by 3) v.</b>	6,965,297.63

The numbers in the table above show that the economic impact of child care is important to the economy of La Plata County. The numbers above were measured by the total obtained from the surveys received to complete this study. The provider expenditures were obtained by adding the total overhead and facility expenditures made in La Plata County. The employee expenditures were measured by dividing the total payroll amount by 2 because it is assumed that employees spend 50% of their income in La Plata County. Again the total economic impact of the child care industry was calculated by multiplying the total estimated economic impact by 3.

### Direct and Indirect / Induced Economic Impacts

Direct economic impacts are expenditures made directly from child care services. This includes purchases by the child care providers which create income for other businesses in La Plata County. Indirect economic impacts are indirect effects on output and employment. These include income and additional jobs created from the child care industry's employees purchasing products inside La Plata County and from the additional purchases made by those that have increased income because they sell directly to child care providers. Including the multiplier effect, the industry's total estimated economic impact was \$6,965,297.63.

## EMPLOYMENT

Additional jobs created are another substantial economic effect of the child care industry. Additional jobs are created by the industry itself. Furthermore, the added jobs created because of the child care industry's spending on local goods and services must be included also. For example, additional jobs that serve the child care industry are transportation, bookkeeping, and agriculture. The figures for the industry's employment impact are shown in the table below.

### Employment Impact (in numbers of jobs) FY 2004

<b>Direct Employment - total existing positions of providers that responded</b>	114
<b>Multiplier Effect</b>	1.1976
<b>Jobs Attributable to Additional Expenditures by the child care centers <a href="#">iv.</a></b>	137
<b>Total Job Opportunities Created by the child care providers that responded</b>	251
<b>Total Jobs Created by the child care providers in La Plata County (job opportunities x 3)</b>	753

The impact of the Child Care Industry on county employment is very noteworthy. While child care positions number 342, additional jobs attributable to the industry and its expenditures number 411. These 753 jobs represent approximately 2.6 percent of the total employment in La Plata County during 2004. [\(vi\)](#).

## Wage Effects

The La Plata County average wage per job in 2003 was \$28,693. Based upon the surveys that responded to the study, the average wage per job for child care providers in La Plata County was calculated as \$16,321. This wage represents approximately 57% percent of the average wage in La Plata County.

## Supply-Side Effects

Child care providers are an important part of La Plata County's economic base. Although, it is difficult to compute the supply-side effects attributable to the child care industry, the local economy positively benefits from having child care providers in the county. The traditional home has changed over the last several years because parents are able to work full-time with the option of a variety of child care providers. This also enables single parents to provide for the family and contributes to the local economy. As a result, there are a higher number of taxable incomes for the county as well. The providers give parents more flexibility of employment and an early childhood learning

experience for children. Children can get a different view of the world by being exposed to other children of the same age and obtaining an early education. Because of the variety of providers in La Plata County, the overall economy is stronger because men and women are allowed to provide services to the county through their own employment opportunities. Without the option of child care providers this would not be a reasonable alternative.

## **Comparison With The Economic Impact of Child Care in Colorado**

This study parallels with an earlier study that determined child care services impact on Colorado’s economy (see Light). It is interesting to see the effects that child care services have had on the state economy, as well as on the local economy.

### **Comparison of Economic Impacts of Child Care in Colorado and La Plata County**

<b>Comparison Category</b>	<b>Colorado</b>	<b>La Plata County</b>
<b>Total Economic Impact (Income Generated)</b>	\$1.062 billion (which is approximately .67% of the 2003 personal income in Colorado)	\$6,965,297.63 (which is approximately .5% of the 2003 personal income in La Plata County)
<b>Total Jobs Attributed to the Child Care Industry</b>	18,919 (which is approximately .87% of the 2004 employment in Colorado)	753 (which is approximately 2.6% of 2004 employment in La Plata County)

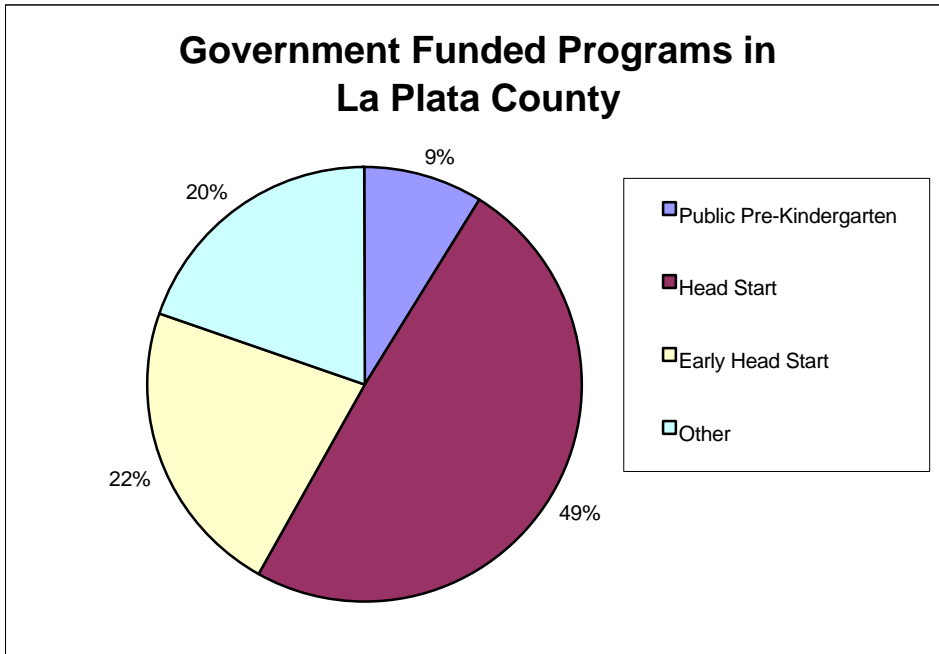
The total economic impact of the child care industry was \$1.062 billion for Colorado (approximately .67% of the Colorado economy), while the total economic impact was \$6,965,297.63 for La Plata County (approximately .5% of the La Plata County economy). Direct spending totaled \$570 million, while indirect spending totaled \$492 million, for Colorado. The child care industry creates 6,472 jobs in Colorado. These include jobs created in such industries as bookkeeping, food service, and transportation. There are 12,447 jobs in Colorado in the child care industry itself (Light). There are approximately 743 jobs generated from the child care industry in La Plata County. As we can see from the display of numbers above, the child care industry serves as an important industry not only in La Plata County but also throughout Colorado.

## **Government Funded Programs**

Without the support of government aid the child care industry would not be as significant as it is today. Government aid helps low income families pay for child care. According to the study of the Economic Impact of Child Care in Colorado, “the two greatest sources for child care subsidies are Head Start and the Child Care and Development Fund (CCDF). These are also two child care related tax exemptions, one from the state and another from the federal government.” The Colorado Preschool Program plays an important role in the child care industry in Colorado and La Plata

County. According to the study of the Economic Impact of Child Care in Colorado, “It is a state-wide, publicly-funded program that provides preschool services to at-risk children. In 2003, 9,050 children were enrolled in CPP” (Light). The La Plata County district received \$370,199.05 from the state, and there were 130 preschool slots available in the CPP program for 2004.

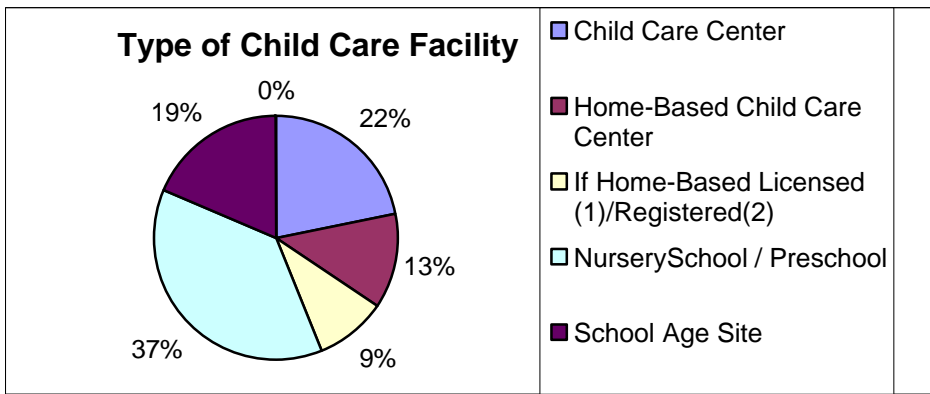
The pie chart below displays the percentages of government aid provided to the different types of child care providers in La Plata County.



Source: All information was obtained by surveys completed from child care providers in La Plata County.

## Types of Child Care Facilities in La Plata County

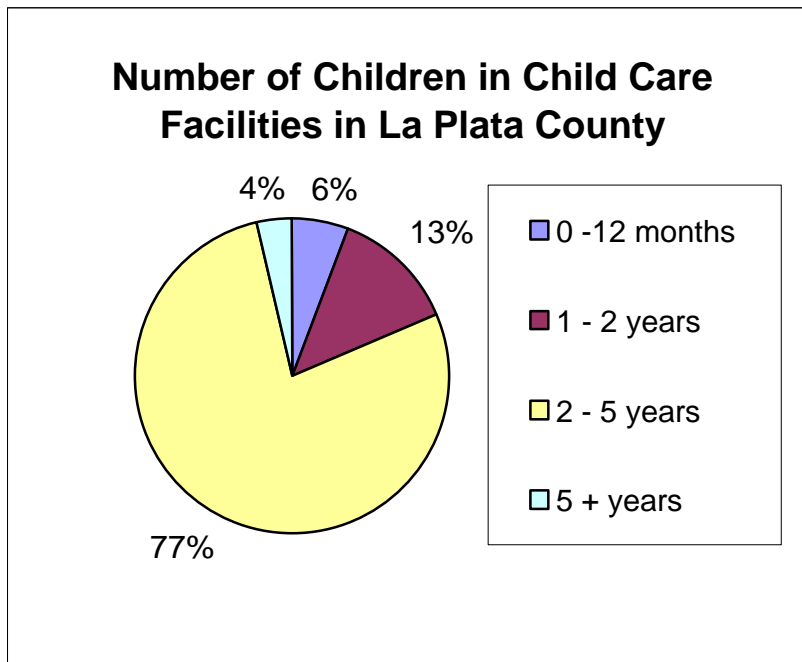
In La Plata County there are many types of child care facilities. La Plata County’s main child care facilities are nurseries and preschools. As shown below nurseries and preschools make up 37%. Also, roughly 22% of the child care facilities in La Plata County are home based. The 13% and 9% of home based child care centers are divided because some are licensed and some are registered.



Source: All information was obtained by surveys completed from child care providers in La Plata County.

## Number of Children in Child Care Facilities In La Plata County Based on Age Groups

Child care providers in La Plata County have a variety of children that are different ages. The age groups are 0-12 months, 1-2 years, 2-5 years, and 5+ years. The table below displays the age groups and what percentage they represent for the day care providers in La Plata County.



Source: All information was obtained by surveys completed from child care providers in La Plata County.

## Definitions of Economic Terms

### Demand Side Effects

The effects that the child care industry has on the local economy based on what goods and services it and its employees purchase locally.

### Supply-Side Effects

The effects that the child care industry has on the local economy based on the resources the industry offers to the local economy, such as allowing parents to offer their labor to employers.

### Direct Impacts

Direct economic impacts result from income generated by the child care industry, leading to job creation and employee income generation in the industry itself.

### **Indirect and Induced Impacts**

Indirect impacts include the additional jobs and income created when child care providers purchase goods and services from the wide variety of businesses. The indirect impacts include both an increase in income and/or jobs for these supporting businesses and the additional income and jobs created when employees and owners of the support businesses spend their additional income throughout the local economy.

Induced impacts include the additional income and jobs created throughout the economy when child care industry employees spend their personal incomes on consumer goods, other property, services, and taxes.

### **Economic Multipliers**

Multipliers are typically used to estimate indirect impacts that represent the “ripple effects” of money in the economy as it is traded and traded again, generating wealth and income. For example, a multiplier of 1.5 would mean that for every dollar of payroll that an industry pays to its own employees, an estimated \$0.50 in additional economic value or income is generated in other industries. It is important to remember that multipliers are *estimates* of the ripple effect. Economists do not always agree on what the multiplier for a specific industry or type of business should be.

The Bureau of Economic Analysis (BEA), using a Regional Input-Output Modeling System (RIMS), has determined industry multipliers for specific regions in the country. Each industry is assigned a different multiplier based on several factors, including workforce residency, average wages paid, and economic sector maturity. For example, a mature support sector (typical of large cities) will stimulate more spending locally with less leakage of dollars outside the region. Conversely, an underdeveloped (immature) support sector (typical of smaller communities) will hold dollars locally for a shorter period as residents make many of their purchases outside of the community.

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# Appendix

## County-Wide Data for La Plata County Child Care Providers

1. Child Care Provider Expenditures in La Plata County <a href="#">i.</a>	\$ 367,878.59
Employee expenditures in La Plata County (50%) <a href="#">ii.</a>	\$998,669.90
Total Expenditures	\$1,366,548.49
Multiplier	1.6990
Total estimated economic impact of those that responded	2,321,765.88
Total economic impact of the child care industry in La Plata County (Estimate multiplied by 3) <a href="#">v.</a>	6,965,297.63
Number of child care employees	114
Employment Multiplier	1.1976
=Additional jobs created	137
Total job opportunities created by the child care providers that responded <a href="#">iii.</a>	251
Total jobs created by the child care providers in La Plata County (job opportunities x 3)	753

## End Notes

- i. Child Care Provider expenditures in La Plata County include total overhead expenses inside La Plata County and facility expenses inside La Plata County.
- ii. We are assuming that child care provider employees in La Plata County spend 50% of their income in La Plata County.
- iii. Total jobs attributed to the child care industry were calculated by adding child care jobs to additional jobs created.
- iv. Jobs attributed to the child care industry were calculated by multiplying total number of employees of the industry by the employee multiplier (1.1976).
- v. Total economic impact of the child care industry in La Plata County was calculated by multiplying the estimated economic impact by 3 because approximately 1/3 of the child care providers in La Plata County responded to this study by providing their expenditures for this study.
- vi. The 753 jobs represent 2.6 % of the total employment in La Plata County was calculated based on 28,909 that are employed in La Plata County in 2004.

## References

All the numbers and information in this particular study was based on the 16 surveys completed by child care providers in La Plata County.

Bureau of Economic Analysis, [www.bea.gov](http://www.bea.gov).

Bureau of Labor Statistics, [www.bls.gov](http://www.bls.gov)

Multipliers for the Child Care Services Industry, RIMS II Multipliers for the Southwest Colorado Region, United States Department of Commerce, Bureau of Economic Analysis, May 2004.

Light, Miles K., Leeds School of Business, Research Facility at the Business Research Division, and University of Colorado. "The Economic Impact of Child Care in Colorado." Colorado Children's Campaign. August 2004. [www.coloradokids.org](http://www.coloradokids.org)

Lynch, Robert. "Exceptional Returns: Economic, Fiscal, and Social Benefits of Investment in Early Childhood Development." Economic Policy Institute. Issue 1104. 21 October 2004. <http://www.childcareexchange.com>