

The Economic Impact of the Child Day Care Services Sector on Wyoming's Economy

Utilizing Regional Economic Models, Inc. (REMI) Policy Insight, the economic impact of the child day care services sector on Wyoming's overall economy can be estimated. REMI is a regional economic forecasting and policy analysis model that includes cause and effect relationships. For this analysis, a 169 sector, single region REMI model for Wyoming was exercised and an employment change in the child day care services sector was initiated in order to determine how it would affect the rest of Wyoming's economy. The methodology used to determine the economic importance of the child day care services sector was to completely remove that sector's employment from the State's economy. REMI maintains a baseline forecast and when a shock is introduced into the economy, such as an employment change, it is able to estimate the changes that occur in that forecast for each year that shock is inputted. For the purpose of this analysis, some basic economic impacts are reported for just one year, 2005. By removing child day care services employment from Wyoming's economy, the following impacts occur:

1. Wyoming's total employment decreases by approximately 3,270. This reduction in overall employment also indicates that for every job in the child day care services sector it creates 0.2 jobs in the rest of the economy.
2. Gross State Product (GSP) is a measure of the total value of goods and services produced in a state. GSP is equivalent to sales less intermediate inputs. According to the Bureau of Economic Analysis (BEA), GSP is considered one of the most comprehensive measures of economic activity in a state. The reduction in child day care employment causes a \$68.8 million decrease in Wyoming GSP.
3. Personal income is defined as the income received by all persons from all sources. This sum includes net earnings, rental income, personal dividend income, personal interest income, and transfer payments. According to the REMI results, personal income will decline by \$56.6 million.
4. Per capita disposable personal income is viewed as the amount a person has available to spend after tax obligations have been met. The change in the child day care services sector causes per capita disposable personal income to decrease by \$55.10.
5. The REMI results also show that total output (sales) in Wyoming's economy will diminish by \$109.7 million.
6. The employment shock introduced to Wyoming's economy by removing child day care services employment also changes the demographic composition of the State. Results from the REMI model indicate Wyoming's population would decrease by 731 persons.

Table 1 – Impacts to Wyoming's economy from an employment reduction in child day care services

Variable	2005 \$
Gross State Product (GSP)	-68.8 Million
Personal Income	-56.6 Million
Per Capita Disposable Personal Income	-55.10
Output (Sales)	-109.7 Million

Other sectors of Wyoming's economy are also affected by the reduction in child day care services employment. Table 2 on page 2 provides a look at other economic industries that are affected by the changes in the child day care services sector. The construction as well as retail trade sectors experienced some of the biggest declines in employment, output, and GSP. Obviously, the healthcare and social assistance sector was most severely impacted due to the loss of employment in child day care services. The state and local government sector also experience employment changes, a decrease of 78 jobs.

Table 2 – Employment and output impacts to Wyoming’s economic sectors

Variable	Employment	Output (sales) 2005 \$	GSP 2005 \$
Agricultural Services, Forestry, Fishing, Other	0	-9,162	-4,820
Mining	0	-31,000	-12,368
Utilities	-2	-1,361,250	-780,875
Construction	-86	-7,415,000	-3,351,250
Manufacturing	-3	-786,500	-252,375
Wholesale Trade	-10	-1,718,750	0
Retail Trade	-129	-7,701,250	-4,432,500
Transportation, Warehousing	-2	-249,125	-124,125
Information	-6	-684,125	-369,375
Finance, Insurance	-12	-2,042,500	-1,371,250
Real Estate, Rental, Leasing	-27	-3,560,000	-2,682,500
Professional, Scientific, Technical Services	-21	-1,167,375	-815,375
Management of Companies, Enterprises	-1	-274,250	-194,625
Administrative, Support, Waste Services	-38	-1,412,500	-999,500
Educational Services	-1	-68,612	-38,900
Health Care, Social Assistance	-2,717	-75,750,000	-43,762,500
Arts, Entertainment, Recreation	-16	-420,125	-252,625
Accommodation, Food Services	-84	-3,213,750	-1,628,750
Other services (excluding government)	-39	-1,815,000	-1,072,375
State and Local Government	-78	N.A.	N.A.

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