La Plata County is a primarily rural county that is economically dependent on its natural resource base.

Extractive industries (e.g., coal) were traditionally and remain important.

Extant environmental quality has become increasingly important (tourism, second home development).

Clean industry (e.g., education, health care) presents a clear regional development strategy.

1. Introduction
This report is intended to outline the economic conditions in La Plata County, Colorado in a manner that will be useful for economic development planning. Data from a variety of governmental and nongovernmental records, gathered primarily via the Internet, were used to create this report. The report is intended to be broad in scope and focuses on a wide range of topics in La Plata County that include land use, population, employment, personal income, and three important industries that shape La Plata County: tourism, mining, and agriculture. The report aims not only to present data, but also to show how the economic sectors of La Plata County are interconnected. Figures, charts, and time series are provided to present data in a visual and accessible manner.

It should be noted that the numbers and figures provided in this report tell only part of the story about economic conditions in La Plata County. Policy cannot be prescribed directly from the facts provided in this report; data must be synthesized with local knowledge to reach policy objectives that will help lead to the long term economic and social objectives of the residents of La Plata County.

2. Location
La Plata County is located in the mountainous south-western corner of Colorado and is bordered by Montezuma, Dolores, San Juan, Archuleta and Hinsdale Counties and the state of New Mexico. All of the counties listed above, with the exception of Hinsdale County, make up Colorado’s Region 9 Economic Development District, to which La Plata County belongs (Figure 1).

3. Infrastructure and Natural Assets
La Plata County has a considerable amount of infrastructure and assets for a rural area. Having both a commercial and general aviation airport facilitates air

---

1 Research Assistant and Associate Professor. Contact Seidl @ B309 Clark, Building, Department of Agricultural and Resource Economics, Colorado State University, Fort Collins CO 80523-1172. andrew.seidl@colostate.edu, (T) 970-491-7071.

Extension programs are available to all without discrimination.
transportation to and from La Plata County. La Plata County is the home of Region 9’s only four-year university, Fort Lewis College. La Plata County has the largest workforce in Region 9 and also boasts the businesses with the most employees. Recreational infrastructure such as the Sky Ute Casino, Tammarron Resort and Durango Mountain Ski Resort boost the tourism industry, as does the San Juan National Forest and the proximity of Mesa Verde National Park, in Montezuma County (Table 1).

4. Land
4.1. Size and Cities
La Plata County covers 1,692 square miles, or 1,081,616 acres, making it the 27th largest of the 64 Colorado counties. Durango, with a population of 13,922, is both the largest city and the County Seat of La Plata County. It is located at the intersection of highways 160 and 550, two major Colorado transportation corridors, and along the Animas River. Bayfield and Ignacio are the two other incorporated cities in La Plata County.

4.2. Land Ownership
Of the 1,692 square miles of land in La Plata County in 1999, 43% were private lands, 37% were federal lands, 2% were state lands and 16% were tribal lands,

<table>
<thead>
<tr>
<th>Table 1. La Plata County Infrastructure and Natural Assets</th>
<th>La Plata</th>
<th>Archuleta</th>
<th>Dolores</th>
<th>Montezuma</th>
<th>San Juan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Airport</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Aviation Airport</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliever Airport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interstate Highway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Prison</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-year University</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four-year University</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;25% of Population has Bachelors Degree</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;10,000 Employees</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companies with &gt;500 Employees</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing Shipments (1997)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ski Resorts</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Casinos</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Parks/Monuments</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Forest</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Oil/Gas Production</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal Production</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind Energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomass Energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Colorado Office of Economic Development and International Trade
principally of the Southern Ute with a small amount under control of the Ute Mountain Ute. Of the federal lands, 95% were part of the San Juan National Forest and the Bureau of Land Management manages the remaining 5% (Figures 2 and 3).

4.3. Land Characteristics
La Plata County is located in a rugged area of Colorado known for its natural beauty. Tourists come for attractions such as the Silverton Narrow Gauge Railroad, Durango Mountain Ski Resort, the San Juan National Forest and Mesa Verde National Park in neighboring Montezuma County. The San Juan National Forest covers 1,869,931 acres, 21% of which are in La Plata County. The forest features alpine lakes and meadows, unusual geological formations, canyons, waterfalls, cataracts and many variations in altitude and climate. The forest also contains numerous picnic areas and camp sites and offers many recreational opportunities for visitors.

5. Population
5.1. Population and Population Density
La Plata County is home to 47,467 residents, making it the 14th most populated county in Colorado. La Plata County has a population density of 28.1 inhabitants per square mile. Colorado has a population density of 43.3 inhabitants per square mile. La Plata County is much more densely populated than its Region 9 neighbors Montezuma (11.9 inhabitants per square mile), Archuleta (8.1 inhabitants per square mile), Dolores (1.7 inhabitants per square mile) and San Juan (1.4 inhabitants per square mile) Counties. According to the Colorado Department of Local Affairs (DOLA), 62% of La Plata County Residents lived in a rural, non-farm environment in 2000, 35% lived in an urban environment (Durango, Ignacio or Bayfield) and 3% lived on farms (Figure 4).

5.2. Population Growth
Although there have been yearly ups and downs in the growth rate of La Plata County, the population has been growing consistently over the time period from 1970 to 2003. According to the Colorado Department of Local Affairs Demography Section, the population of La Plata County grew at around 1.46% in between 2001 and 2002, just under the state growth rate of 1.81% and the Region 9 rate of 1.55%. La Plata County is experiencing faster growth than Montezuma County (0.90%) and San Juan County (0.54%) and slower growth than Archuleta County (3.45%) and Dolores County (1.73%). According to the Department of Local Affairs, population growth is expected to rise to nearly 3% and then slow to less than 2% by the year 2030 (Figure 5) when the population is projected to be 80,588 (Figure 6).

5.3. Population by Sex and Ethnicity
Females make up 49.1% of the population of La Plata County, compared to 49.6% statewide and 50.9% nationwide. The most represented ethnic group in La Plata is Whites, comprising 87.3% of the population (Figure 7). The two largest groups of ethnic minorities are Hispanics or Latinos, who account for 10.4% and American Indians or Alaskan Natives, who make up 5.8% of the population. Asians account for 0.4%, African Americans 0.3%, and Hawaiians or Pacific Islanders total 0.1% of the population. People who do not fit any one of these categories account for 3.9% of the population and people descendent of multiple races represent 2.3% (Figure 8).

5.4. Population by Age
According to the 2000 U.S. Census, the mean age in La Plata County was 35.8 years old. This is slightly higher than the mean age of all Coloradoans, 35.0 years old, and slightly lower than the national mean age, 36.2 years old. According to DOLA estimates for 2003, 5.2% of the population of La Plata County is under 5 years old and 22.0% of the population is under 18 years
Figure 3. Colorado Land Use

Source: Southwest Colorado Access Network

Figure 4. Urban and Rural Population in La Plata County (2000)

Source: Department of Local Affairs
Figure 5: Population Growth in La Plata County (Projected After 2003)

Note: Population change after 2003 is projected.
Source: Colorado Department of Local Affairs Demography Section

Figure 6. Population of La Plata County (1965-2030)

Note: Population change after 2002 is projected.
Source: Colorado Department of Local Affairs Demography Section

Figure 7. Ethnic Composition of La Plata County (2000)

Source: U.S. Census Bureau
old. This younger part of the population is slightly smaller than that of Region 9 as a whole, wherein 5.7% of the population is under 5 years old and 23.4% of the population is under 18. La Plata County’s young population is also smaller than Colorado’s, where 7.2% of the population is under 5 years old and 25.4% is under 18 (Figure 9). The working age population, ages 18 to 64, is 67.8%, which is more than in both Region 9 and Colorado where the percentage of working age residents is 64.5%.

5.5 Education
According to the 2000 U.S. Census, La Plata County had 27,973 residents age 25 or older. Of these, 23.1% cited a high school diploma as their highest level of education achieved, 31.9% had some college or an associate’s degree and 24.3% had completed a bachelor’s degree. Some 12.1% had obtained a master’s, doctorate or professional degree. La Plata county residents are more educated than Colorado residents on average, who are more educated than Americans on average (Figure 10).

La Plata County is home to Region 9’s only four-year institution of higher education, Fort Lewis College. The college does not offer advanced degrees, but does add an intellectual component to the county, in addition to providing jobs and attracting students to the region.

5.6. Households and Homes
According the U.S. Census, La Plata County had 17,342 households in 2000. The mean number of persons per household was 2.43, which is less than the state average of 2.53. The home ownership rate in La Plata County was 68.4%. Some 14.4% of the housing units were in multi-unit structures. The median value of owner-occupied housing in La Plata County was $183,900 while the Colorado median value was $166,600. For rented housing units, the median rent was $587, slightly less than the state median of $611 per month.

The 2000 U.S. Census cites the majority of La Plata households as being two- person households, which accounted for over one-third of all households. Single resident households accounted for almost one-quarter of households, three person households made up 16.5% and four person households composed 12.8% of all households. Households with five or more members were less common, accounting for only 7.2% of all La Plata County households (Figure 11).

6. Employment
6.1. Employment Trends
According to the Department of Local Affairs, La Plata County had stable employment during the 1990s and into the early 2000s. Jobs have been growing at near the same rate as the population (Figure 12) and unemployment has remained low and been in decline. During the 1990s the La Plata County unemployment rate was consistently higher than Colorado’s, but since 2001, when both the state and county unemployment rates were at 3.7%, the Colorado unemployment rate has surpassed the county’s. Since 2000 both the Colorado and
Figure 9. Population by Age in La Plata County, Region 9 and Colorado (2000)

% of Population

Source: Colorado Department of Local Affairs Demography Section

Figure 10. Highest Educational Obtainment of La Plata County, Colorado and U.S. Residents (2000)

% of population age 25 and older

Source: U.S. Census Bureau

Figure 11. Members per Household in La Plata County (2000)

Source: U.S. Census Bureau
Region 9 unemployment rates have seen a considerable rise while the unemployment rate of La Plata County has remained fairly constant and low (Figure 13).

6.2. Unemployment Cycle
According to the Colorado Department of Labor and Employment, the unemployment rate in La Plata County does not show significant variation during the year, and monthly unemployment trends closely follow those of Colorado. In 2002 unemployment was at a high in January at 5.1% and at a low in May at 3.7% (Figure 14).

6.3. Employment by Sector
According to DOLA, the service sector employed the greatest amount of La Plata County workers, accounting for 10,653 jobs (37% of all employment) in 2000. The service sector is also the most diverse sector. It includes lodging, repair services, health services, legal services, engineering services, social services (including daycare), private education, recreation services, business services and personal services. Because the service sector is so vast, it employs a wide variety of people.

The wholesale and retail trade sector, which includes eating and drinking places, followed, providing 6,834 jobs (23% of all employment) in 2000. The next two major sectors in terms of employment were the government, which provided 3,915 (13%) jobs and construction, which accounted for 3,186 jobs (11% of all employment). The finance, insurance and real estate sector accounted for 1,591 jobs (5% of all employment); agriculture for 1,311 jobs (4% of all employment); manufacturing for 1,023 jobs (3% of all employment);
transportation, communications and utilities for 969 jobs (3% of all employment); and mining and other extractive industries, which includes oil and natural gas extraction, accounted for 300 jobs (1% of all employment) (Figure 15).

6.4. Employment Growth by Sector
From 1991 to 2000 the fastest growing sector in terms of employment was the construction industry, which grew by 121% over that period. Increases of over 50% were also seen in the service sector (61%), manufacturing sector (59%) and the trade sector (55%). The finance, insurance and real estate sector grew by 44%. Large increases in construction; trade and finance, insurance and real estate are signs of amenity migration, as these sectors are in high demand by newcomers to La Plata County that are attracted by its natural amenities. Employment in the transportation, communications and utilities sector grew by 36%, in the agricultural sector by 26% and in the government by 18%. The one sector to experience a loss in jobs was the extractive industries sector, where employment has decreased by 24% (Figure 16). Change has been steady across sectors, although the extractive industries and finance, insurance and real estate sectors experienced a slight bulge in employment in the mid-1990s (Figure 17).

6.5. Service Sector Employment
A decomposition of the service sector shows that in 2000 the majority of service sector employment was in
health services, with 2,048 jobs (18% of service sector employment, 6.4% of all employment). The next largest service sub-sector was amusement and recreation services, including casino employment, which provided 1,638 jobs (15% of service sector employment, 5.2% of all employment). Lodging places employed 1,530 La Plata County residents (14% of service sector employment, 4.2% of total employment) (Figure 18). Both amusement and recreation services and lodging are heavily tied to tourism.

**6.6. Service Sector Employment Growth**

According to DOLA, the greatest employment growth within the service sector between 1991 and 2000 occurred in membership organizations, where employment grew 258%. The next greatest employment increases in sub-sectors of the service sector were in business services, which grew 163%; amusement and recreation services, which grew 128%; and repair services, which grew 105%. Also showing considerable employment growth were private education services.
(80% since data was recorded in 1995), engineering and management services (77%), health services (60%) and social services (59%). A sub-sector where employment grew considerably less was private household services (8% since data was recorded in 1994). There was no employment growth in the legal services sector and employment decreased slightly in lodging services and personal services, both by 4% (Figures 19 and 20).

6.7. Entrepreneurship Growth
La Plata County has experienced a consistent increase in jobs since 1980. Both wage and salary jobs and self-employed jobs have been on the rise (Figure 21). According to the Department of Local Affairs, self-employment, which is an indication of entrepreneurship and a quality workforce, is on the rise in La Plata County. In 2002, 16.4% of La Plata County workers were self-employed, up from 15.4% in 1990 and 13.5% in 1980. In comparison, entrepreneurship in Colorado has been very steady over this time period, hovering around 10% (Figure 22).

6.8. Top La Plata County Employers
According to the Colorado Department of Labor and Employment the top ten employers in La Plata County in 1999 were the Southern Ute Tribe (including the Sky Ute Casino), with 900 employees; Mercy Medical Center, with 830 employees; Fort Lewis College, with 641 employees; 9-R School District, with 614 employees; Wal-Mart, with 400 employees; the U.S. Government, with an estimated 371 employees; Tammarron Resort, with 350 employees (on average over the course of the year); La Plata County, with 324 employees; City of Durango, with 242 employees and Durango Mountain Ski Resort, with 220 employees (Figure 23).

7. Income
7.1. Median Household Income and Per Capita Income
According to the U.S. Census Bureau the median household income in La Plata County in 1999 was $40,159, well below the state median of $47,203. According to the Center for Business and Economic Forecasting the 2002 per-capita income of La Plata County was $27,858, higher than the Region 9 per-capita income of $24,863 and lower than the Colorado per-capita income of $33,680. The percentage of La Plata County residents living below the poverty line was 11.7% in 1999, while the state average was 9.3%. DOLA projects per-capita income in La Plata County to increase at a slightly faster rate than Colorado and at a much faster rate than Region 9 as a whole (Figure 24).

7.2. Household Income Distribution
According to the U.S. Census Bureau the largest percentage of households in La Plata County in 2002 were in the income bracket from $50,000 to $75,000. Some 59% of households were in the middle four income groups, which span from $25,000 to $100,000. The percentage of households that fell below this range, 30.2%, is nearly three times greater than the percentage of households that fall above it, 10.9% (Figure 25).
Figure 19. Components of Service Industry Growth in La Plata County (1991-2000)

*Indicates data unavailable in initial years of study.
Source: Department of Local Affairs Demography Section

Figure 20. Service Industry Job Growth by Sub-Sector in La Plata County (1991-2000)

*Indicates data unavailable in initial years of study.
Source: Department of Local Affairs Demography Section

Figure 21. Self-Employed versus Wage and Salaried Workers in La Plata County (1980-2002)

Source: Department of Local Affairs
Figure 22. Percent of Workers that are Self-Employed in La Plata County and Colorado (1980-2002)

Source: Department of Local Affairs Demography Section

Figure 23. Top Ten Employers in La Plata County (1998)

Source: Colorado Department of Labor and Employment

Figure 24. Per-capita Income in La Plata County, Region 9 and Colorado (1990-2025)

Note: Data is forecasted after 2001
Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Forecasting
7.3. Personal Earned Income by Sector

Personal earned income is a measure of how much income goes to workers in a given area or sector of the economy. According to federal labor (ES 202) data the largest percent of personal earned income is earned in the service sector, 33%. This means that service jobs are relatively low paying since 37% of all La Plata County jobs are in this sector. The second greatest supplier of personal earned income in La Plata County is the wholesale and retail trade sector, which accounts for 17% of all personal income but 23% of all employment. Government jobs provide 17% of all personal earned income and 13% of all employment; construction accounts for 14% of all personal earned income in La Plata County and 11% of all employment; the finance, insurance and real estate sector accounts for 7% of personal earned income and 5% of all employment and the transportation, communications and utilities sector accounts for 5% of all personal earned income and 3% of all employment. Since these sectors account for a higher percent of personal earned income than employment they pay relatively well. The manufacturing sector accounts for 3% of both earned income and jobs. The mining industry, which accounts for 3% of personal earned income, only accounts for 1% of employment. The agricultural sector, in contrast, accounts for 1% of personal earned income and 4% of employment, and thus pays relatively poorly (Figure 26).

7.4. Wage by Sector

Mining and other extractive industries (including oil and natural gas) is the highest paying sector in La Plata County. The average annual wage in this sector is $52,351. The lowest paying sectors are retail trade, which has been separated from wholesale trade to a large discrepancy in annual wage, with an average annual wage of $15,061 and agriculture, with an average annual wage of $18,867 (Figure 27).

7.5. Service Sector Wages

As previously stated, the service sector is the leading source of employment among La Plata County residents, and is a very broad sector that employs many different types of workers. Because of this, wages within the sector vary greatly. The highest paying sub-sector is legal services, with an annual average wage of $39,288. The next highest paying sub-sectors are engineering and management services ($38,489), private education ($35,134) and health services ($33,015). The lowest paying sub-sectors within the service sector are personal services ($13,356), lodging ($13,654) and social services ($14,234), which includes daycare. The amusement and recreation sub-sector, a large part of the tourism industry in La Plata County, also had a relatively low average annual wage of $16,428 (Figure 28).
Figure 26. Percent of Total Personal Earned Income in La Plata County by Sector (2000)

Construction 14%
Services 33%
Manufacturing 3%
Wholesale and Retail Trade 17%
Finance, Insurance and Real Estate 7%
Mining and Extractive Industries 3%
Government 17%
Agriculture 1%
Transportation, Communication and Utilities 5%

Source: ES202

Figure 27. Average Annual Income by Sector in La Plata County (2002)

Retail Trade $15,061
Agriculture $18,887
Manufacturing $24,208
Services $25,493
Construction $29,879
Government $32,929
Wholesale Trade $33,835
Finance, Insurance and Real Estate $37,275
Transportation, Communications and Utilities $52,351
Mining and Extractive Industries $52,351

*Retail and wholesale trade are separated due to a large wage discrepancy.
Note: Data for retail and wholesale trade are from 2000.
Source: ES202
7.6. Total Personal Income
Total personal income is the sum income of all residents from wages, proprietors’ income, government and business transfer payments, rents from land, and interest and dividends from financial assets, all less contributions to social security. Total personal income does not indicate the financial well being of La Plata County residents as well as per-capita income does. However, measuring total personal income is useful to examine overall income trends in a community and, perhaps more importantly, to examine the sources of personal income in a community and how they change over time.

7.7. Total Personal Income Growth
According to the Bureau of Economic Analysis, total personal income in La Plata County increased steadily from 1970, when it was at $264,742,000 inflation adjusted dollars, until 2001, when it was at $1,256,927,000 (Figure 29). The change in total personal income has been consistently positive over the years, never having been negative over the period from 1970-2001. The periods of 1971-1973, 1976-1978 and 1992-1994 saw the greatest percent growth in total personal income. The periods of the lowest growth of total personal income were 1980-1982 and 1985-1989. Overall, growth of total personal income was considerably greater in the 1970s and 1990s than in the 1980s (Figure 30).

7.8. Components of Total Personal Income
According to the Bureau of Economic Analysis, earned income made up 73% of total personal income in La Plata County in 2001. All of this was non-farm income, as farm income was negative. The biggest source of unearned personal income was property income (interest, dividends and rent), which accounted for 19% of total personal income. Transfer payments accounted for 7% of total personal income and adjustments for residence (the net inflow of the net labor earnings of inter area commuters) accounted for the remaining 1% (Figure 31).

From 1970 to 2001 the composition of total income personal income remained fairly stable. The percentage of total income composed of property income increased by 5% and the percentage of total income accounted for by transfer payments increased by 3%. The percent of total income from farm income has decreased from 2% to zero (Figure 32).

8. Tourism
8.1. Development of the Tourism Industry in La Plata County
The La Plata County economy, like much of Colorado’s, developed through traditional industries like agriculture, mining and timber. In the wake of declining traditional industries, La Plata County has been in an
Note: Data taken after deducting social security payments.
Source: Bureau of Economic Analysis
economic transition since the 1970s. Now tourism is the number industry in the county. The natural beauty of La Plata County has become one of its most important resources, attracting economic activity in the form of tourism and second homeowners. Tourism data does not go back very far in time since the study of tourism as an economic force is relatively new. However, good recent data and local observation show that tourism is an important and growing industry in La Plata County and throughout the state of Colorado.

8.2. Tourism Spending
According to Dean Runyan and Associates, tourists spent $171.9 million dollars in La Plata County in 2000, the 13th most of any Colorado county. Most tourism spending, however, takes place in the Denver Metro counties (Adams, Arapahoe, Boulder, Denver, Douglas and Jefferson) because Denver is a transportation hub, not a tourist destination. If we exclude the Denver Metro counties, La Plata County is 8th amongst Colorado counties in terms of where tourists spend money (Figure 33). La Plata County received more tourism spending than the four other Region 9 counties combined; Montezuma County received $70.8 million in 2000, Archuleta County received $33.4 million, San Juan County received $10.4 million and Dolores County received $2.3 million.

Tourism spending has been slowly on the rise in La Plata County in recent years before falling in 2000. Some $164.0 million was spent on tourism in 1996, which grew to $167.7 million in 1997, $172.4 million in 1998 and $178.3 million in 1999. In 2000 La Plata County saw tourism spending fall to $171.9. In comparison to other Region 9 counties, the percentage change in tourism spending has not been as volatile, although much of the volatility seen in Archuleta and San Juan Counties is due to their having a relatively small amount of tourism spending (Figure 34).

8.3. Tourism Spending Retention
Not all money spent by tourists in a community stays there. A more important observation to make is how much counties earn from tourism. La Plata County retained only 34.2% of the $171.9 million tourism dollars spent there in 2000. This rate of tourism spending retention is typical in Colorado, which retains 32.5% of tourism spending, as well as throughout the United States, and ranks La Plata County as the 9th best in terms of retaining tourism income (Figure 35).

8.4. Taxation and Tourism
A portion of every dollar a tourist spends goes directly to the state and local governments in the form of tax dollars. Taxes are collected at the state, county and municipal level and place part of La Plata County residents’ tax burden on visitors. According to Dean Runyan and Associates, La Plata County collected $9,758,000 in taxes from the tourism industry in 2000. Of this, $5,029,000 was in county and municipal taxes (Figure 36).

Some counties and municipalities levy a room tax, also called a bed tax, to increase government revenue from tourism. According to the Colorado Department of Revenue, La Plata County has a room tax of 1.9%,
Top Ten Counties for Tourism Spending (2000)

Source: Dean Runyan and Associates

Figure 34. Tourism Spending Growth in Recent Years (1997-2000)

Source: Dean Runyan and Associates

Figure 35. Top Ten Counties for Tourism Spending Retained (2000)

Source: Dean Runyan and Associates
except in Durango. Other Region 9 Counties also levy a room tax. Montezuma (except Cortez) and Archuleta Counties also both have a 1.9% room tax and San Juan County has a 2.0% room tax. Dolores County has no room tax.

8.5. Tourism Industry Employment
The tourism industry is very labor intensive. According to the Center for Business and Economic Forecasting, 27% of La Plata County residents were employed in the tourism industry in 1999. The tourism industry had an even greater relative importance in Archuleta County, where tourism makes up 30% of all employment and in San Juan County where tourism accounts for 42%. In Montezuma County the tourism industry is responsible for 16% of employment (Figure 37). This does not indicate that the tourism industry in Archuleta and San Juan Counties is greater than those of La Plata and Montezuma Counties, but that their economies are less diversified.

The tourism industry can be divided into public lands tourism and private tourism. Public lands tourism provides the majority of tourism jobs in La Plata County (57%) and neighboring Montezuma County (68%), as La Plata County features the San Juan National Forest and Montezuma County features Mesa Verde National Park. Public lands and private tourism each provide half of the tourism jobs in San Juan County and in Archuleta County the majority of tourism jobs (66%) are in private tourism (Figure 38).

8.6. Categories of Tourism Employment
Of the 7,955 La Plata County tourism jobs that existed in 1999, 1,372 fell into the ski category, 1,335 were in the resort recreation category, 1,804 were in the outdoor recreation category, 916 were in the parks and monuments category, 706 were in the visiting friends and relatives category, 584 were in the touring category, 559 were in the business trip category, 346 were in the casino category, 182 were in the special events category, and 151 jobs were in other categories of the tourism industry (Figure 39).

Each of these employment categories spans many sectors of the economy. For example, a bartender could be employed by the ski industry if she works at the après-ski bar. The deciding factor for which category a job falls into is not the job itself, but the industry primarily responsible for employment (Tables 2 and 3).

The composition of tourism employment in La Plata County is very different than in neighboring Montezuma County. Durango Mountain Ski Resort is in La Plata County and accounts for the large amount of ski employment. Mesa Verde National Park, in Montezuma County, creates a greater number of park jobs than there are in La Plata County. Although the Sky Ute Casino in La Plata County and the Ute Mountain Casino in Montezuma County employ nearly the same number of people, the Ute Mountain Casino employs a far greater percentage of people with tourism jobs in Montezuma County because of the county’s smaller total employment (Figure 40).

8.7. Tourism Employment Growth
According to the Southwest Colorado Access Network and Dean Runyan and Associates, La Plata County showed little tourism industry job growth from 1997-2000. Colorado experienced negative job growth in
*Figure 37. Tourism Employment in Region 9 Counties (1999)*

*La Plata Montezuma Archuleta San Juan*

*% of employment*

*Non-Tourism, Public Lands Tourism, Private Tourism*

*Dolores County was omitted because of lack of data*

_Source: Southwest Colorado Access Network_

*Figure 38. Public Lands and Private Tourism Employment in Region 9 Counties (1999)*

*La Plata Montezuma Archuleta San Juan*

*% of tourism jobs*

*Public lands Tourism, Private Tourism*

*Dolores County was omitted because of lack of data*

_Source: Southwest Colorado Access Network_

*Figure 39. Number of Tourism Jobs in La Plata County by Category (1999)*

*Number of Jobs*

*Skiing, Resorts, Outdoor, Parks, Special event, City, Business, Casinos, Touring, VFR, Other*

*Source: Center for Business and Economic Forecasting*
Table 2. Tourism categories related to activity on public lands

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skiing</td>
<td>Downhill and Nordic skiing with paid lift ticket or access ticket.</td>
</tr>
<tr>
<td>Parks and Monuments</td>
<td>Activities in national, state and city parks and monuments.</td>
</tr>
<tr>
<td>Other Outdoor Recreation</td>
<td>Hiking, biking, fishing, hunting, rafting and snowmobiling.</td>
</tr>
<tr>
<td>Touring</td>
<td>Car or train trips through areas of scenic beauty or cultural or general interest.</td>
</tr>
</tbody>
</table>

Table 3: Tourism industry categories related to activity on private lands

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resort Recreation/Attractions</td>
<td>Activities such as golf, tennis, swimming or commercial attractions, e.g. Silverton train, and shopping in non-meter or mountain areas. Hunting and fishing on private lands.</td>
</tr>
<tr>
<td>Special Events</td>
<td>Privately and publicly sponsored events, e.g. rodeos, film festivals, music festivals, sporting events, horse races, auto races and fairs.</td>
</tr>
<tr>
<td>City Trips</td>
<td>Visits to a city to shop, attend plays, museums concerts or other entertainment, dine or stroll.</td>
</tr>
<tr>
<td>Business Trips</td>
<td>Trips paid for by non-local businesses, e.g. conventions, sales trips.</td>
</tr>
<tr>
<td>Casino Trips</td>
<td>Gambling visits at a casino, casino resort or Indian reservation.</td>
</tr>
<tr>
<td>Visiting Friends and Relatives (VFR)</td>
<td>Visits to family and friends, including those in prison, hospitals or nursing homes. This refers to the purpose of the visit and not where the visitor stays.</td>
</tr>
<tr>
<td>Other Leisure</td>
<td>Home renovation, agricultural tourism, volunteer work, reading and relaxing or any other activity.</td>
</tr>
</tbody>
</table>

Source: Center for Business and Economic Forecasting

Figure 40. Composition of Tourism Jobs by Category in La Plata and Montezuma Counties (1999)

Source: Center for Business and Economic Forecasting
tourism over the same time period. Neighboring Montezuma County, however, experienced 12.3% tourism industry job growth from 1997-1999 but growth halted in 2000 when Montezuma County tourism employment decreased slightly (Figure 41).

8.8. Tourism Employment by Sector
It is also possible to look at the distribution of tourism jobs across sectors of the economy. In this section of the report, economic sectors are organized slightly differently to cater specifically to the tourism industry:

wholesale and retail trade are separate, communications and utilities are not included and real estate is placed with construction. In La Plata County, service sector jobs accounted for 36% of all tourism jobs in 2000. This number was much higher in Montezuma County, where the service sector accounted for 52% of all tourism jobs. Retail trade employment made up 43% of all tourism jobs in La Plata County. The retail trade sector made up an even larger portion of tourism employment, 52%, in San Juan County (Figure 42).

Figure 41. Recent Percent Changes in Tourism Employment in La Plata County, Montezuma County and Colorado (1997-2000)

Figure 42. Tourism Jobs by Sector in Region 9 Counties (2000)

*Dolores County was omitted because of lack of data

Source: Southwest Colorado Access Network
8.9. Second Homes
Second homeownership is considered an aspect of the tourism industry. A trend among affluent tourists is to purchase seasonal homes in amenity rich regions so they can take longer and/or more frequent vacations. Second homeowners must pay property taxes, regardless of how often they are in La Plata County, and they pay sales taxes on everything they buy when staying there. Second homes create many business opportunities, particularly in the real estate and construction sector. According to the 2000 U.S. Census, there were 2,444 seasonal homes in La Plata County, or 12% of all homes. This is down from 13.7% in 1990, but is a much greater percentage of second homes than in neighboring Montezuma County, where the percentage of seasonal homes has stayed at around 5% from 1990-2000.

9. Oil and Natural Gas
9.1. The San Juan Basin
Mining played an integral role in the development of Colorado, but in recent years its economic importance has dwindled. In La Plata County, however, mining remains an important and vital industry. The northern edge of the San Juan Basin lies in the southern part of La Plata County (Figure 43), making the area very rich in oil and natural gas, particularly coal bed methane. In 2002 La Plata County produced $841 million dollars in natural gas, making it the number one producer of natural gas in the state and the sixth leading natural gas-producing county in the nation.

9.2. Mining Employment
Employment in all extractive industries in La Plata County has gone down from 414 jobs in 1991 to 315 jobs in 2000. This is a 24% loss, which is considerably smaller than the 32% statewide employment loss. In terms of employment specific to oil and natural gas extraction, La Plata County went from 353 jobs in 1991 to 232 jobs in 2000, a 34% loss in jobs (Figure 44). Over the same period, employment in the oil and natural gas industry of Colorado dropped by 40% (Figure 45).

9.3. Mining Wages and Personal Income
Although the mining industry may not employ a great number of people in La Plata County, it is, on average, the highest paying sector. In 2002, mining accounted for 4% of La Plata County total personal income but only accounted for only 1% of all jobs. The average annual wage in the extractive industries was $52,351 in 2002. The oil and gas industry created $17 million in personal income in 2000 and other mining created an additional $4.6 million. Personal income from the oil and gas industry in La Plata County has increased 361% over the period from 1970 to 2000, including adjustment for inflation. In Colorado, the increase has been by 240% over the same time period. The highest level of personal income from extractive industries for La Plata County was in 2000, and there appears to be a strong upward trend (Figure 46). In Colorado, however, the high in total personal income of $2.2 billion

---

Figure 43. The San Juan Basin

Source: La Plata Energy Council
Figure 44. Mining and Extractive Industry Jobs in La Plata County (1991-2000)

Source: Department of Local Affairs Demography Section

Figure 45. Mining and Extractive Industry Jobs in Colorado (1991-2000)

Source: Department of Local Affairs Demography Section

Figure 46. Personal Income from Mining in La Plata County (1970-2000)

Source: Colorado Department of Local Affairs Demography Section
occurred in 1982 and since then there has been a drop in income of 45%. The oil and gas industry in Colorado appears to have had leveled out in the early 1990s and remained rather level since (Figure 47).

9.4. Oil and Gas Tax Revenue
The oil and gas industry is very important to La Plata County in terms of tax revenue. Of all property tax revenue in La Plata County in 2002, 45% of all property tax was from oil and gas, compared to 22% for residential property and 16% for commercial property. Agricultural property tax accounted for only 1% of 2002 property tax revenue (Figure 48).

10. Agriculture
10.1. Agricultural Production
According to the 1997 Census of Agriculture, La Plata County produced $15,797,000 worth of agricultural products. About $10,849,000 of this was from livestock and poultry and $4,948 was from crops, including nursery crops (Figure 49).

In 1997 La Plata County ranked 39th of the then 63 Colorado counties for agricultural production. The top five agricultural products in terms of sales in 1997 were cattle and calves; hay, silage, field seeds and grass seeds; dairy products; sheep, lambs and wools; and nursery and greenhouse crops (Figure 50).

![Figure 47. Personal Income from Mining in Colorado](image1)

Source: Department of Local Affairs Demography Section

![Figure 48. Property Tax Revenue in La Plata](image2)

Source: La Plata County 2000 Condensed Budget
10.2. Land in Agriculture

According to the Colorado Agricultural Statistics Service, the percent of farmland has been going down slightly while the number of farms has gone up. Of the 1,081,616 acres of land in La Plata County, 613,827 acres of farmland (53.6% of all land) were farmland in 1987. In 1997 there were 580,135 acres of farmland (56.7% of all land). This is a higher percentage of farmland than the statewide average (49.2%), but is considerably lower than neighboring Montezuma County (70.1%). In Colorado the percent of farmland has decreased slightly, from 51.3% in 1987 to 49.2% in 1997 (Figure 51).

10.3. Number and Size of Farms

The number of farms in La Plata County in 1987 was 682, and in 1997 it was 781 (Figure 52). The average La Plata County farm is getting smaller. In 1987 the mean size of a farm was 900 acres, and in 1997 it was 743 acres (Figure 53). The trend of more, smaller farms seen in La Plata County is not observed in Colorado overall. This could be due to a high number of hobby farms and ranches in La Plata County created through amenity migration.

10.4. Who Runs Farms?

In 1997 there were 688 individual or family run farms in La Plata County. There were also 81 corporate or partnership managed farms and 12 farms with some other organizational structure. Of the 781 farm operators in La Plata County in 1997, 339 cited farming as their principal occupation, down from 355 in 1992. Operators that cited another activity as their primary occupation totaled 442 in 1997, up from 354 in 1992 (Figure 54).
Figure 51. Percent of Land in Farms in Colorado, La Plata County and Montezuma County

Source: Colorado Agricultural Statistics Service

Figure 52. Percent Change in Number of Farms in Colorado, La Plata County and Montezuma County

Source: Colorado Agricultural Statistics Service

Figure 53. Size of Average Farm in Colorado, La Plata County and Montezuma County

Source: Colorado Agricultural Statistics Service
10.5. Agriculture Employment
Revisiting the employment section of this report, agriculture jobs have increased in La Plata County, from 1,038 jobs in 1991 to 1,311 jobs in 2000. However, within the agricultural sector there has been a considerable increase in employment in the agricultural services category, from 194 in 1991 jobs to 482 jobs in 2000. Agricultural services employment encompasses many off-farm jobs that are related to agriculture, such as machine repair, bookkeeping and administration, science and research, transportation and other agriculture related work. Over the same time period the crops and livestock (on farm) category only lost 15 jobs, going from 844 to 829. There was, however, a sharp increase from 1992 to 1993 followed by a slow decline (Figure 55).

10.6. Big Farms versus Small Farms
In 1997 there were 487 farms that produced under $10,000 in total market value and 271 that produced greater than $10,000 in La Plata County. From 1992 to 1997 the number of small producers increased by 11% and the number of large producers that increased by 8%. The number of small producers (422) and large producers (296) is in Montezuma County was similar, but the number of large producers in Montezuma County grew at a faster rate (10%) than in La Plata County and the number of small producers grew at a slower rate (8%) than in La Plata County from 1992-1997. In Colorado there were more large producers (14,871) than small producers (13,397), but the number of small producers increased by 12% while the number of large producers decreased by 2%. Large producers had considerably higher sales than small producers, however, as the average market value of products sold per farm in 1997 was $20,277 in La Plata County, $30,465 in Montezuma County and $160,401 in Colorado (Figure 56).

Although the majority of farms in La Plata County had less than $10,000 market value in production in 1997, there were some considerably larger farms. Two farms produced more than $500,000 worth of agricultural goods, four produced between $250,000 and $500,000 and 22 produced between $100,000 and $250,000 worth of goods (Figure 57). In all, 94 La Plata County farms produced more than $40,000 in agricultural products in 1997.

11. Export Base Analysis
11.1. What is Export Base Analysis?
Export base analysis divides the La Plata County economy into three bases: direct base industries, local resident services and indirect base industries. Direct base industries are also called basic industries, while the latter two bases are collectively called non-basic.

11.2. Direct Base Industries
Direct base industries bring in dollars from outside of a region, in this case La Plata County. Direct base industries include agriculture, mining, manufacturing, government and tourism. Direct base industries are of particular importance because they bring in new money than can be re-circulated by non-basic industries.

11.3. Local Resident Services
Local resident services are activities that provide services to local residents, in this case La Plata County residents, and re-circulate money within the county’s economy. These services include health services, education and grocery stores.
Figure 55. Agriculture Jobs in La Plata County (1997-2000)

Source: Department of Local Affairs Demography Section

Figure 56. Percentage of Farms with Under $10,000 Production in La Plata County, Montezuma County and Colorado (1997)

Source: U.S. Census of Agriculture

Figure 57. Composition of La Plata County Farms by Total Market Value of Production (1997)

Source: Mann Library U.S. Census of Agriculture Website
11.4. Indirect Base Industries
Indirect base industries provide supplies and services to basic industries and re-circulate dollars within the La Plata County economy. Indirect base industries include fertilizer and fuel suppliers to local farmers and commercial wholesale retailers that service the local area.

11.5. Division of Employment by Base
Of the 29,912 jobs in La Plata County in 1999, 39% were direct base, 43% were in local resident services and 18% were indirect base (Figure 58). Of the direct base jobs, 60% were in tourism and 10% were directly connected to amenity migration. Some 7% of direct base jobs were in the service sector and another 7% were in manufacturing. Some 5% of direct base employment was in agriculture; 3% was in mining; 3% was in government; 2% was in construction; 2% was in trade; 1% was in transportation, communications and utilities and 0.4% was in finance, insurance and real estate (Figure 59).

Figure 58. Economic Base of La Plata County
Employment (1999)

Direct Base
39%
Indirect Base
18%
Resident Services
43%

Source: Southwest Colorado Action Network

Figure 59. Direct Base Employment in La Plata County (1999)

Tourism 60%
Amenity Migration 10%
Services 7%
Trade 2%
Government 3%
Agriculture 5%
Construction 2%
Manufacturing 7%
Mining 3%
Transportation, Communication and Utilities 1%

Source: Southwest Colorado Action Network
11.6. Division of Personal Income by Base

In 1999, La Plata County workers earned $750,127,000. 34% of these earnings were in direct base industries, 45% were in local resident services and 21% were in indirect base industries (Figure 60). Some 50% of all direct base industry personal income was in tourism and 6% was in amenity migration. About 10% of direct base industry personal income was in services; 8% was in manufacturing; 7% was in government; 7% was in mining; 5% was in construction; 3% was in trade; 2% was in transportation, communications and utilities; 1% was in agriculture and 1% was in finance, insurance and real estate (Figure 61).

12. Location Quotients

12.1. What is a Location Quotient?

A location quotient is a number that indicates how much an area, in this case La Plata County, specializes in a given sector of the economy compared to the rest of the nation. The employment location quotient tells us how much employment is dedicated to a sector in La Plata County compared to the rest of the nation and the income location quotient tells us what proportion of personal income is earned in a sector compared to the rest of the nation.

12.2. What Does the Location Quotient Mean?

A location quotient of one means that the amount of employment or personal income from a certain sector of the economy in La Plata County is exactly in line with the rest of the nation. A location quotient of less than one means that La Plata has less employment or personal income coming from a given sector than the rest of the nation. A location quotient of greater than one means that La Plata County has more employment or personal income coming from a given sector of the economy than the rest of the nation. When this is the case, La Plata County has a relative specialization in that sector.

---

Figure 60. Base of Employment Income in La Plata County (1999)

Resident Services 45%
Direct Base 34%
Indirect Base 21%
Source: Southwest Colorado Action Network

Figure 61. Direct Base Employment Income in La Plata County (1999)

Tourism 50%
Amenity Migration 6%
Transport, Communication and Utilities 2%
Services 10%
Trade 3%
Government 7%
Agriculture 1%
Finance, Insurance and Real Estate 1%
Manufacturing 8%
Construction 5%
Mining 7%
Source: Southwest Colorado Action Network
12.3. Location Quotients as an Indicator of Export Employment
Location quotients are also useful in estimating export employment. Export employment arises when a community dedicates more employment to a certain sector than the nationwide average, and therefore is likely to be a net exporter of goods made by the labor force. If a sector has an employment location quotient of one that means that the sector is self-sufficient in La Plata County, and neither over produces nor under produces. If the location quotient is less than one then La Plata County under produces in that sector and will be a net importer. If the location quotient is greater than one then La Plata County over produces in that sector and will be a net exporter.

12.4. La Plata County Location Quotients
La Plata County has the highest location quotients for both employment and personal income in the mining industry. Because of its location on the San Juan Basin, La Plata County is a major producer and exporter of natural gas, which accounts for the high location quotient. La Plata County also has high location quotients for construction, which is a sign of amenity migration, and services and trade, which is a sign of tourism activity (Table 4).

In most cases the employment location quotient and the personal income location quotients will be similar, since employment and personal income in a sector are typically highly correlated. In some cases in La Plata County, however, there is a discrepancy. In the agricultural sector the employment location quotient is relatively high (1.54) while the personal income location quotient is relatively low (0.79). This indicates that La Plata County dedicates more employment to agriculture than the rest of the nation, but that income from the agricultural sector is less than in the rest of the nation. Therefore, agriculture in La Plata County pays relatively poorly compared to the rest of the nation, which may have to do with non-profit ranches and hobby farms. Although there are some small discrepancies between location quotients in other sectors, there are none where one location quotient is greater than one and the other is less than one (Figure 62).

13. Shift-Share Analysis
13.1. What is Shift-Share Analysis?
Shift-share analysis is a technique used to break down growth in a sector into three components: a national growth component, an industry mix component and a regional shift component. The national growth component is growth due to the overall growth of the nation’s economy and is constant across sectors. The industry mix component is growth due to national growth in the economic sector in question. The regional shift is growth that is specific to the economic sector in question in the region in question, La Plata County in this case.

Shift-share analysis allows us to analyze if the growth of an economic sector in La Plata County is unique to La Plata County or if it is because of nationwide overall economic growth or nationwide growth in that particular sector. This provides a means of identifying lagging and leading industries in La Plata County. Knowing which sectors are thriving locally and which are struggling can help inform policy decisions.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment Location Quotient</th>
<th>Personal Income Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>2.01</td>
<td>1.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1.54</td>
<td>0.79</td>
</tr>
<tr>
<td>Construction</td>
<td>1.22</td>
<td>1.51</td>
</tr>
<tr>
<td>Services</td>
<td>1.11</td>
<td>1.15</td>
</tr>
<tr>
<td>Trade</td>
<td>1.07</td>
<td>1.09</td>
</tr>
<tr>
<td>Government</td>
<td>1.04</td>
<td>1.171</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate</td>
<td>0.67</td>
<td>0.74</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.42</td>
<td>0.33</td>
</tr>
<tr>
<td>Transportation, Communication, Utilities</td>
<td>0.56</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Source: Colorado Department of Local Affairs
13.2. Shift-Share Analysis of La Plata County
In the shift-share analysis in this report, economic growth will be measured in terms of employment growth. The amount of jobs gained and lost in each sector of the economy will be broken down into a national growth component, an industry mix component and a regional shift component. Shift-share analysis was done on job growth in La Plata County across various sectors from 1980-2000. The sectors that experienced the greatest employment growth due to regional shifts were mining (232%), construction (150%) and manufacturing (111%). The sectors than experienced the least employment growth due to regional shifts were transportation, communication and utilities (22%); agriculture (26%) and government (40%). No sector in La Plata County experienced negative job growth due to regional shifts over the period from 1980-2000, which means that any loss in jobs was due to either national or industry shifts (Table 5).

14. Input/Output Model
14.1. What is an Input/Output Model?
An input/output model shows direct, indirect and induced effects within an economy. IMPLAN is a commonly used modeling system for creating input/output models. Direct impacts are determined from employment, payroll and industry output data. Indirect and induced effects are determined through analysis of the regional absorption coefficients. Indirect and induced effects can apply to both employment and production, and here both cases will be examined.

14.2. Indirect Effects
Indirect effects come from interactions between industries in an economy. Industries are constantly acquiring goods and services from each other, and these exchanges mean that the impact of one sector may be felt across many others. An example of this is a resort that purchases local agricultural products to serve to its customers and decorates its room with locally produced artwork. Another example is a farmer that purchases his tractor from a local vendor. In the first case, the resort creates a market for the farmer and the artist and in the second case the farmer creates a market for the tractor vendor. These are indirect effects.

14.3. Induced Effects
Induced effects come from including households into the economic model. Households are consumers of goods and services, and at the same times are suppliers of labor. Industries produce induced effects by paying their employees, who in turn use their wages to consume goods and services from other sectors of the economy.
Table 5. Shift-Share Analysis for La Plata County (1980-2000)

<table>
<thead>
<tr>
<th>Sector</th>
<th>1980 Jobs</th>
<th>2000 Jobs</th>
<th>% Change</th>
<th>Change in number of jobs</th>
<th>Nat’l comp %</th>
<th>Industry comp %</th>
<th>Industry comp of change in jobs</th>
<th>Regional shift comp %</th>
<th>Regional comp of change in jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1,01</td>
<td>1,407</td>
<td>38.1%</td>
<td>388</td>
<td>475</td>
<td>-34.6%</td>
<td>-353</td>
<td>26.1%</td>
<td>266</td>
</tr>
<tr>
<td>Construction</td>
<td>9</td>
<td>3,186</td>
<td>219.9%</td>
<td>2,190</td>
<td>464</td>
<td>23.3%</td>
<td>232</td>
<td>150%</td>
<td>1,494</td>
</tr>
<tr>
<td>Finance, Insurance &amp; Real Estate</td>
<td>1,33</td>
<td>2,914</td>
<td>118.3%</td>
<td>1,579</td>
<td>622</td>
<td>7.5%</td>
<td>101</td>
<td>64.2%</td>
<td>856</td>
</tr>
<tr>
<td>Government</td>
<td>8</td>
<td>3,915</td>
<td>61.2%</td>
<td>1,487</td>
<td>1,131</td>
<td>-25.4%</td>
<td>-616</td>
<td>40%</td>
<td>971</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>543</td>
<td>1,104</td>
<td>103.3%</td>
<td>561</td>
<td>253</td>
<td>-54.6%</td>
<td>-297</td>
<td>111.4%</td>
<td>605</td>
</tr>
<tr>
<td>Mining</td>
<td>119</td>
<td>350</td>
<td>194.1%</td>
<td>231</td>
<td>55</td>
<td>-84.3%</td>
<td>-100</td>
<td>231.9%</td>
<td>276</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>6</td>
<td>6,062</td>
<td>110%</td>
<td>3,176</td>
<td>1,344</td>
<td>6.3%</td>
<td>182</td>
<td>57.2%</td>
<td>1,649</td>
</tr>
<tr>
<td>Services</td>
<td>4,16</td>
<td>11,03</td>
<td>164.9%</td>
<td>6,869</td>
<td>1,941</td>
<td>66.5%</td>
<td>2,771</td>
<td>51.8%</td>
<td>2,157</td>
</tr>
<tr>
<td>Transport &amp; Utilities</td>
<td>577</td>
<td>969</td>
<td>67.9%</td>
<td>392</td>
<td>269</td>
<td>-1.2%</td>
<td>-7</td>
<td>22.5%</td>
<td>130</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>363</td>
<td>815</td>
<td>124.5%</td>
<td>452</td>
<td>169</td>
<td>-14.5%</td>
<td>-53</td>
<td>92.4%</td>
<td>335</td>
</tr>
</tbody>
</table>
14.4. IMPLAN Results for La Plata County Employment

It has already been addressed that the service industry directly employs more people in La Plata County than any other sector, providing 10,280 jobs in 2000. The total effect of the service sector, however, is 15,130 jobs. Compared to other industries in the county the Type II Multiplier of the service sector, 1.47, is low. The mining sector has the highest multiplier, 2.18. For every job created directly in the mining sector more than two jobs are created in other sectors because of the presence of the mining industry. The lowest multiplier is in the government sector, 1.30 (Table 6). When considering the importance of an industry on employment in La Plata County the multiplier must be considered, as well as direct effects on employment.

14.5. IMPLAN Results for La Plata County Output

Total value added is a measure of how much a given industry adds to the total productivity of La Plata County’s economy. The service sector has the greatest output of any sector in the La Plata County economy. In addition to $607 million dollars in production, the service industry has a total value added of $362 million. The sector with the greatest total value added is the finance, insurance and real estate sector. Although relatively few people are employed in this sector, property income and indirect business taxes are high, which circulates large amounts of money through the county economy and creates a total value added of $371 million (Table 7).

15. Summary

La Plata County is considerably economically developed compared to its Region 9 neighbors. La Plata County has enjoyed low and stable unemployment over the years, boasts an abundance of natural gas and is the region’s only producer of coal. La Plata County has the Region’s only four-year university, Ft. Lewis College, and has a more educated population than the state of Colorado and the nation as a whole. It is the only county in the region to have over 10,000 workers and that hosts companies with over 500 employees. La Plata County is a transportation hub of the region with a commercial airport, a general aviation airport and its county seat, Durango, located at the intersection of highways 160 and 550.

La Plata County is a primarily rural county that is economically dependent on its natural resource base. Mining has traditionally been the cornerstone of the county’s economy, and continues to be a top industry today, largely because of the enormous supply of natural gas that lies beneath the surface of the county. La Plata County is the leading producer of natural gas in Colorado and is the sixth greatest natural gas producing county nationwide.

Table 6. Input/Output Model for Employment Multiplier (2000)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Direct Effects*</th>
<th>Indirect Effects*</th>
<th>Induced Effects*</th>
<th>Total Effect*</th>
<th>Type II Multiplier**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>1028.24</td>
<td>197.68</td>
<td>286.97</td>
<td>1512.89</td>
<td>1.47</td>
</tr>
<tr>
<td>Agriculture</td>
<td>784.04</td>
<td>42.93</td>
<td>114.53</td>
<td>941.50</td>
<td>1.20</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>588.23</td>
<td>136.56</td>
<td>185.32</td>
<td>910.11</td>
<td>1.55</td>
</tr>
<tr>
<td>Trade</td>
<td>214.61</td>
<td>17.63</td>
<td>48.17</td>
<td>280.41</td>
<td>1.31</td>
</tr>
<tr>
<td>Transportation, Communication, Utilities</td>
<td>125.95</td>
<td>44.59</td>
<td>57.29</td>
<td>227.83</td>
<td>1.81</td>
</tr>
<tr>
<td>Construction</td>
<td>94.39</td>
<td>30.46</td>
<td>43.62</td>
<td>168.47</td>
<td>1.78</td>
</tr>
<tr>
<td>Government</td>
<td>107.28</td>
<td>0.00</td>
<td>32.25</td>
<td>139.54</td>
<td>1.30</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate</td>
<td>83.25</td>
<td>23.83</td>
<td>29.85</td>
<td>136.93</td>
<td>1.64</td>
</tr>
<tr>
<td>Mining</td>
<td>35.17</td>
<td>18.47</td>
<td>22.97</td>
<td>76.61</td>
<td>2.18</td>
</tr>
</tbody>
</table>

Note: Sectors are listed in order of Total Effect. * 10 Jobs **Type II Multiplier includes both indirect and induced effects. Source: IMPLAN.
Tourism, however, is now the leading industry in La Plata County. Tourism is a very labor-intensive industry, and more than one-fourth of all employment in La Plata County is in the tourism industry. Tourism industry jobs are mostly found in the service, trade and lodging sectors; although the economic impacts of tourism reach far beyond. The natural beauty of La Plata County has also created a wave of amenity migration, which has boosted the construction and real estate sectors. Tourism appears to be an industry that will experience considerable growth in the future.

Although agriculture is not a great source of income in La Plata County, agricultural land makes up over half of the county. What happens to this land in the future will influence the shape of the economy. The current trend is towards more numerous, smaller farms and ranches that are not profitable. While the division of farmland is changing, the amount of farmland in La Plata County has remained stable.

The data presented in this report can help residents and decision makers in La Plata County better understand the economic base of the region in which they live and the economic direction in which the county is headed. However, policy will not fall directly out of the facts presented in this report. The data must be combined with local knowledge to make effective policy decisions and reach county objectives to help lead to the long-term economic and social development of La Plata County.

Acknowledgements
Without implication, the authors would like to acknowledge K. Lee Elder and Phil Watson for their previous work in Colorado county economic base analysis and for their help and guidance on this project. The authors would like to acknowledge the thoughtful reviews and guidance of Ed Morlan and Donna Graves. The Colorado State Agricultural Experiment Station and Colorado State University Cooperative Extension provided financial support for this project.

17. Works Cited


<table>
<thead>
<tr>
<th>Industry</th>
<th>Industry Output*</th>
<th>Employment</th>
<th>Employment Compensation*</th>
<th>Proprietor Income*</th>
<th>Other Property Income*</th>
<th>Indirect Business Tax*</th>
<th>Total Value Added*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>607.38</td>
<td>10985.17</td>
<td>248.06</td>
<td>49.94</td>
<td>49.03</td>
<td>15.14</td>
<td>362.17</td>
</tr>
<tr>
<td>Finance, Insurance and Real Estate</td>
<td>532.26</td>
<td>2644.59</td>
<td>49.22</td>
<td>28.24</td>
<td>242.65</td>
<td>51.00</td>
<td>371.12</td>
</tr>
<tr>
<td>Construction</td>
<td>429.94</td>
<td>3701.93</td>
<td>96.55</td>
<td>35.88</td>
<td>15.19</td>
<td>2.95</td>
<td>150.56</td>
</tr>
<tr>
<td>Trade</td>
<td>300.04</td>
<td>6869.67</td>
<td>122.43</td>
<td>10.10</td>
<td>39.17</td>
<td>38.93</td>
<td>210.63</td>
</tr>
<tr>
<td>Transportation, Communication and Utilities</td>
<td>219.33</td>
<td>864.89</td>
<td>31.86</td>
<td>11.24</td>
<td>42.53</td>
<td>13.73</td>
<td>99.35</td>
</tr>
<tr>
<td>Government</td>
<td>161.62</td>
<td>3870.39</td>
<td>137.07</td>
<td>0.00</td>
<td>12.09</td>
<td>0.00</td>
<td>149.17</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>149.49</td>
<td>1079.75</td>
<td>28.85</td>
<td>1.74</td>
<td>16.99</td>
<td>1.51</td>
<td>49.10</td>
</tr>
<tr>
<td>Mining</td>
<td>131.57</td>
<td>355.08</td>
<td>11.91</td>
<td>11.07</td>
<td>31.04</td>
<td>6.79</td>
<td>60.80</td>
</tr>
<tr>
<td>Agriculture</td>
<td>36.95</td>
<td>1323.74</td>
<td>10.15</td>
<td>5.60</td>
<td>8.73</td>
<td>2.56</td>
<td>27.03</td>
</tr>
<tr>
<td>Other</td>
<td>0.53</td>
<td>142.20</td>
<td>1.27</td>
<td>0.00</td>
<td>-0.74</td>
<td>0.00</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Note: Sectors are listed in order of industry output. * Millions of dollars
Source: IMPLAN
http://www.coworkforce.com/

http://www.dola.state.co.us/

http://www.dlg.oem2.state.co.us/demog/demog.htm


http://co.laplata.co.us/budget.htm

http://co.laplata.co.us/


www.implan.com

