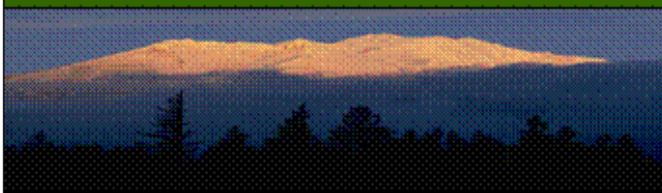
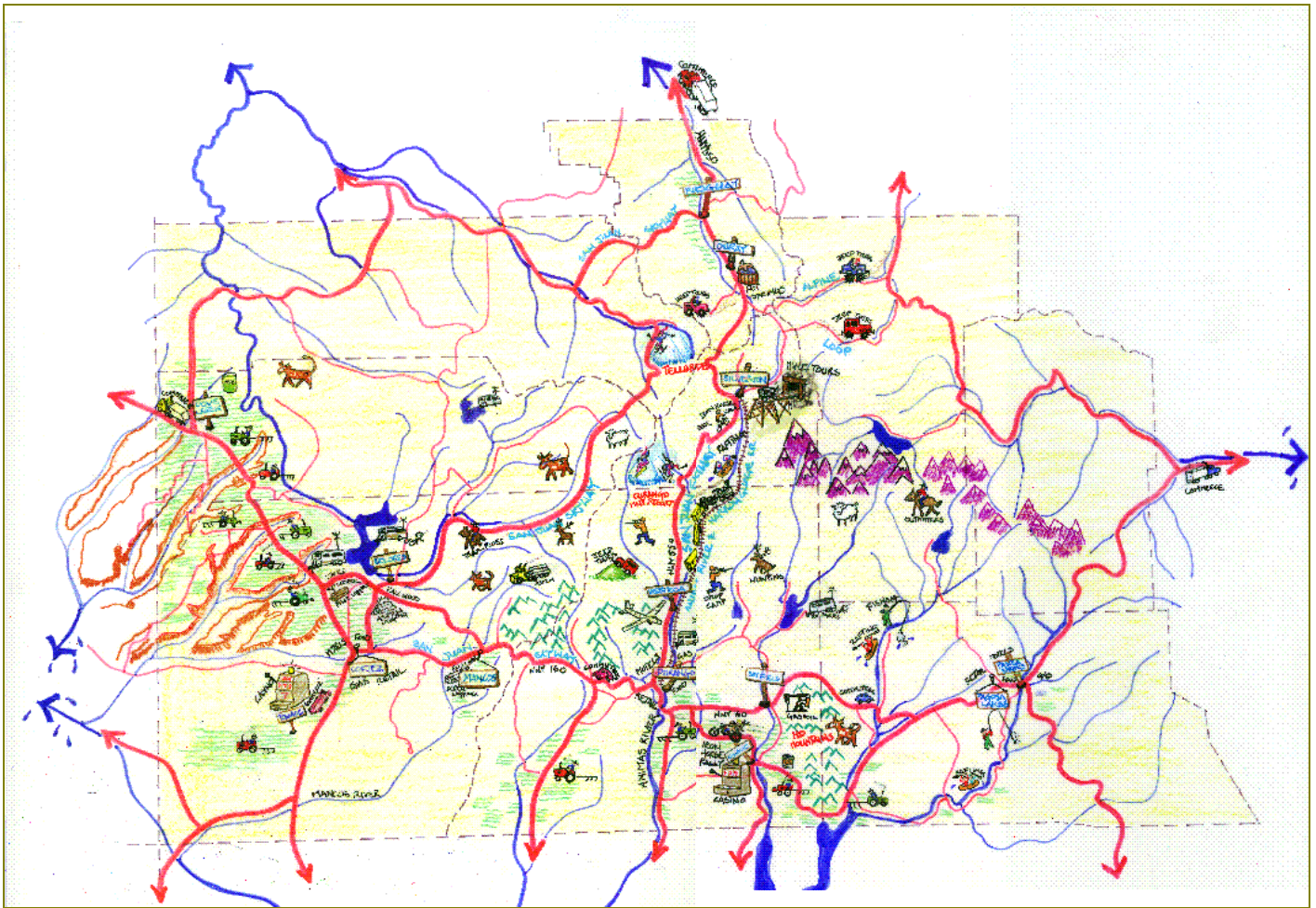




Cultural Descriptor



Work Routines



Cultural Descriptor: Work Routines

A work routine is a predictable way in which people earn a living, including where and how. The types of employment, the skills needed, the wage levels and the natural resources required . . . the opportunities for advancement, the business ownership patterns, and stability of employment activities . . . can be used to evaluate how alternative uses of natural resources will affect the ways people earn a living and how changes in work routines, in turn will impact future natural resource uses.

The evaluation of “how alternative uses of natural resources will affect the ways people earn a living and how changes in work routines, in turn impact the future natural resource uses,” brings the social, economic and ecological dimensions of land use planning together. The close connection between the natural features in the San Juan and Dolores River Basins, and the emerging settlement patterns, have been and will continue to be significantly shaped by livelihood opportunities and work routines.

As described in detail in the Settlement Patterns descriptor, it was mining and high altitude mining towns that provided the initial export base to establish an economy in Southwest Colorado. Today, mining is pretty much defunct, but many of the mining towns survive and in some cases flourish as ski resort and/or tourism oriented economies. The resource extraction of mining has been replaced by the extraction of oil, natural gas, coal bed methane and CO₂ energy products.

The tourism industry, which has always been around to supplement the natural resource industries, ascended beginning in the 1960s to become a dominant force. If current trends are sustained, what has been called tourism is being overshadowed by the combination of resort development and “amenity migration” (defined on page 18).

The farms, ranches and sawmills, that were initially developed to support the mines and supply towns grew to become the mainstay of the Southwest Colorado’s export economy during the first half of the 20th Century. As tourism expanded and amenity migration emerged as a major economic force, the natural resource sectors didn’t initially contract but were overshadowed by growth the “new west” sectors. By the early 1990s, however, the timber industry was in decline, and agriculture came under increasing pressure from development, high land values, and input costs that were growing much more rapidly than commodity prices, compounded by crippling drought cycles.

The ascendance of tourism strengthened and expanded the customer base for local small businesses. This benefit has been coupled with challenges of growth in lower pay, seasonal “service sector” jobs at the same time that higher paying natural resources jobs have declined in number. Growth on the lower wage end of service sector jobs has been accompanied by growth of higher end service sector jobs as well. These high-end service jobs (e.g. consulting, business services and health jobs) are a result of structural changes in the national economy, and the resulting opportunities for amenity migrants to make a living outside of urban areas.

While the economic influence of natural resource or commodity sectors of the regional economy have been diluted, they continue to play an important, though changing role in the “new west” economy.

The agricultural landscape has become perhaps the most prized asset in the region by developers and conservationists alike. The timber industry, which once was a backbone industry of many of the region’s towns, has declined steeply. And yet, as efforts get underway to restore forests to more natural conditions, and reduce the growing threat of catastrophic wildfire, businesses skilled in removal and processing of trees are an essential, and in many places, missing resource.

Economic Base Analysis and Trends During the 1990s:

The purpose of economic base analysis is to understand what economic “exports” are bringing “new” or “outside” dollars into the local economy. The Settlement Patterns Descriptor described mining as the original export in Southwest Colorado, with money brought in from mining products used to purchase local timber products for mine props and houses, and local agricultural products to feed miners and those that supplied miners. In short mining was the “base industry.” Making mine props was an “indirect base industry” which existed to supply a key component to the mining process. And farming, ranching, making house lumber, and retail outlets were “residential services,” to supply the needs of miners, suppliers and their families.

The reason that mining towns like Rico, and Silverton went from peak populations of 4,000 to 5,000 down to a few hundred is because mining played out and there was no “base industry” to support “indirect base” and “residential services” employment. Telluride is an example of a mining Town that busted, and came back on a new “base industry”, i.e. skiing, tourism and resort development. Even though these amenity-based industries do not export a physical product, visitors bring in outside dollars, which have a “direct base export effect.”

The other stage described in Settlement Patterns Descriptor was the emergence of the River Valley Towns, which evolved from supplying the mining towns and processing mined products to becoming exporters in their own right. Once mining waned, transportation networks were utilized and developed to export farm products, cattle, and timber products creating a new “economic base” to bring in “outside dollars.” Over time, these same transportation networks served to import tourists, which had the “export effect” of bringing in new dollars. Another growing source of outside dollars has been the federal government in the form of federal employee wages, federal public works projects (e.g. Bureau of Reclamation Dams) and transfer payments (e.g. Social Security and Medicare).

An additional source of outside dollars has been the role that the major towns in Southwest Colorado play as regional trade centers. For example, the goods and services that people from the Navajo Nation purchase when they shop in Durango or Cortez are dollars that are earned elsewhere and spent locally, producing another variation on the “export effect.” The most recent “export effect” to bring new dollars into Southwest Colorado is what was described in the Settlement Patterns Descriptor as “amenity migration.” Some of these amenity migrants are retirees, and some are second home owners. Both of these aspects of amenity migration have provided “direct base income and employment” in the construction sectors. A portion of all of these direct base/outside dollar/export effect earnings and employment generate spending in the “residential services” sectors where locals purchase their goods and services.

Data to determine the make up of the economic base (i.e. source of outside dollars) in any given County, relies in large measure on the reporting of employment and earnings within the framework of the SIC. The SIC (Standard Industrial Classification) has categories within which employment and earnings by County are reported by the BEA (Bureau of Economic Analysis). The SIC categories were set up in an era when the export economy was dominated by industrial and extractive industries. Hence, the SIC categories make it easy to identify jobs and earnings in the mining, manufacturing sectors. Agriculture, the other traditional export sector, is more problematic, because the basis of BEA earning and employment numbers is what businesses report when they file unemployment compensation reports, which family farms are not required to report.

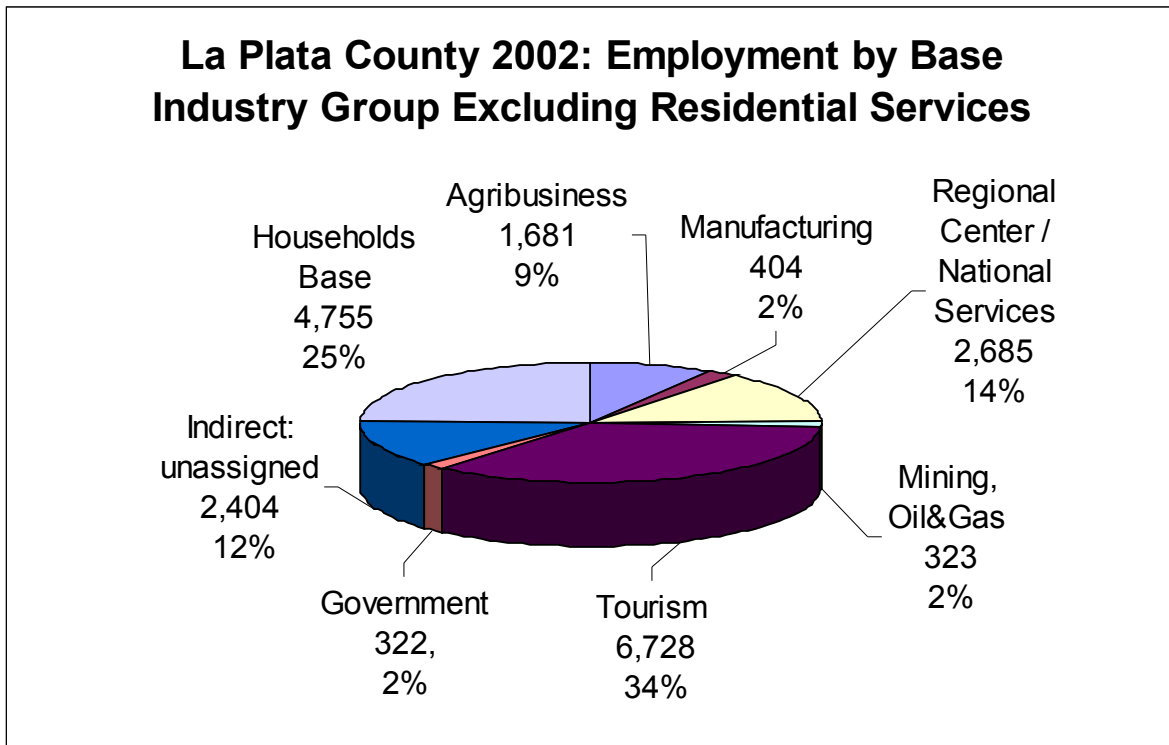
The challenge is to understand the growing importance in the economic base of Southwest Colorado of “industries” that do not fit neatly into a particular SIC category. A clear example of this challenge is the “tourism industry.” Some SIC sectors such as “Hotels and Lodging Places” are dominated by tourism and business travel. Other SIC sectors such as “Eating and Drinking Places,” “Specialty Retail”, and “Amusements” are a mix of tourism base industry and local “resident services” earnings. In short there is no clean SIC category called “tourism.” The same can be said about Regional Goods and Services, and Retirees. Yet in recent times these have been the “growth industries” in Southwest Colorado. In 1994, the Colorado State Demographer entered into a partnership with the Office of Community Services at Fort Lewis College, and the San Juan Public Lands Center to create an economic base analysis that rectified this problem. This “Economic Base Analysis”

has since been expanded to all 63 counties in Colorado.

The Economic Base Analysis looks at each SIC sector to determine which sectors, and what proportion of each sector are exports. These export sectors are clustered into a set of “Base Industry Groups.” The “La Plata County 2002 Employment and Income Summary by Base Industry Group” appears as Table WR-1 on the following page. Figure WR-1 below presents employment by Base Industry Group.

La Plata County Base Industry and Trend Analysis

Figure WR-1



Employment in the Mining, Oil and Gas (2%), Agribusiness including ranching (9%, which includes ranching) and Manufacturing (3% which includes saw mills) are in part related to public land resources, and will be dealt with later in this section under La Plata County natural resources.

The larger pieces of the pie are Tourism (34% including resorts, second homes, tourist services and transportation) and Households (25% including retirees, commuters as well as dividends, interest and rental income) and are related to the “Amenity Migration” trends described under the “Settlement Patterns” descriptor. The Base Industry Group analysis will provide the most currently available snapshot in time followed by employment trends in related SIC categories over the past 10 years. The base industry analysis is presented in a more detailed table format in Table WR 1 below:

Table WR 1
La Plata County 2002 Employment and Income Summary
by Base Industry Group

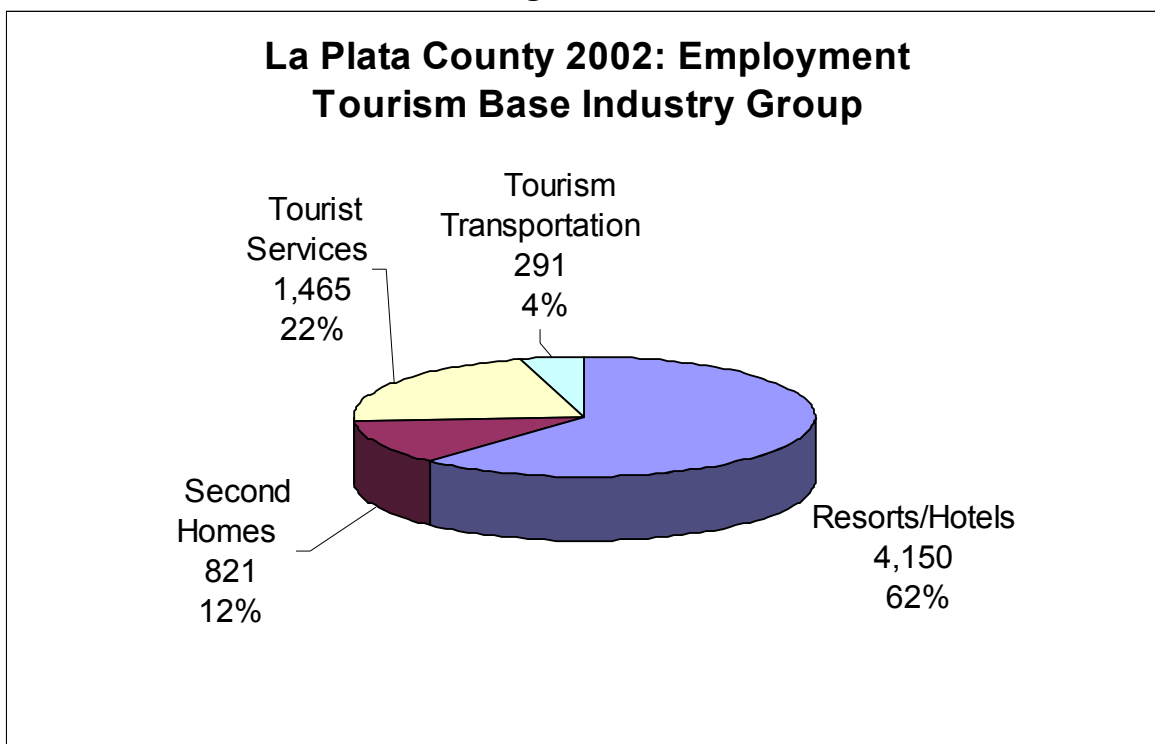
	Jobs		Income (\$000)		Average Wage
	Amount	Pct. of Basic	Amount	Pct. of Basic	
Agribusiness	1,681	8.7	\$24,590	4.1	\$14,624
Mining	323	1.7	\$20,324	3.4	\$62,889
Manufacturing	404	2.1	\$12,019	2.0	\$29,731
Regional Center / National Services	2,685	13.9	\$96,380	16.0	\$35,897
Tourism	6,728	34.8	\$148,097	24.6	\$22,013
Resorts	4,150	21.4	\$69,182	11.5	\$16,669
Second Homes	821	4.2	\$31,206	5.2	\$37,994
Tourist Services	1,465	7.6	\$35,634	5.9	\$24,316
Tourism Transportation	291	1.5	\$12,075	2.0	\$41,535
Government	322	1.7	\$24,638	4.1	\$76,462
Indirect: unassigned	2,404	12.4	\$103,913	17.3	\$43,218
Households	4,755	24.6	\$169,938	28.3	\$35,740
Retirees	3,116	16.1	\$111,355	18.5	
Commuters	157	0.8	\$5,613	0.9	
Households with public assistance income (excluding retirees)	347	1.8	\$12,402	2.1	
Households: dividends, interest and rental income (excluding retirees)	1,135	5.9	\$40,568	6.7	
Total Basic	19,357	100.0	\$ 601,336	100.0	\$31,065
Worker Local Res. Services	7,983		\$285,296		
Total All Industries	27,340		\$828,953		
Total Personal Income				\$1,372,169.07	
Ratio: Total / Basic	1.41			1.38	

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/leifa1.cfm>

Tourism and Amenity Migration Driven Employment in La Plata County

The 35% of employment in the Tourism Base Industry Group is broken out in Chart WR-2 below:

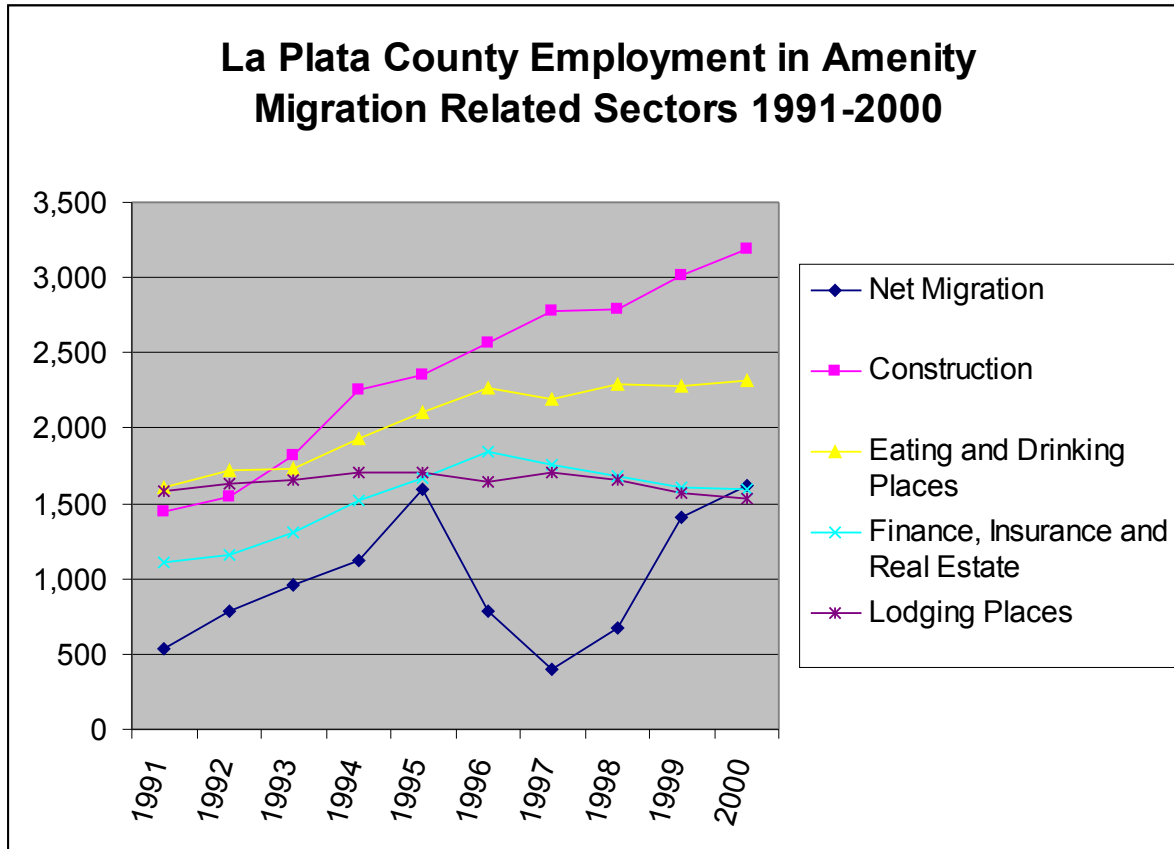
Figure WR-2



While 62% of the employment within the tourism base industry group is in resorts, which include hotels and lodging places, 12% of employment in this group is in second homes. The amenity migration boom in La Plata County in the 1990s stimulated a great deal of construction employment. The Colorado Demographer's Base Industry Analysis classifies second homes as "Tourism" since they are occupied by visitors. The other dimensions to the construction stimulus generated by the amenity migration are homes built by retirees and by "early retirees" who sell a home and/or business and move to Southwest Colorado as amenity migrants. The employment stimulated by these migrants shows up in the "Households" base industry group broken out in Chart WR-1 above. The Households Base Industry Group reflects, in part, employment generated by retirees as well as employment generated by the expenditure of dividends and interest flowing in with amenity migrants.

To move from the 2001 snapshot provided by the 2001 Base Industry Group Analysis to an analysis of employment trends during the 1990s it is useful to look at Bureau of Economic Analysis (BEA) employment data in key sectors. Figure WR-4 provides a starting point for such analysis.

Figure WR-4



Annual Migration into La Plata County climbed to a peak in 1995 at over 1,500 people, dipped back to the 500-750 range in 1996-98, and was back over 1,500 by 2000.

Employment in lodging places shows a slight decline during the 1990s. At the same time employment in the construction sectors doubled from 1,500 to over 3,000 jobs. Employment in Eating and Drinking Places also grew fairly steadily from just over 1,500 to about 2,300 jobs. Employment Finance Insurance and Real Estate began at slightly over 1,000 peaked in 1996 at about 1,800 and leveled off to just over 1,500.

This combination of growth in the construction (121% for the decade) eating and drinking places (44% for the decade) and Finance, Insurance and Real Estate (44% for the decade) sectors and stagnation in the lodging sector (-4% for the decade) indicates that economic growth in the 1990s was driven by “amenity migration” while “tourism” remained relatively flat.

La Plata County Employment Trends All Sectors

Having focused on indicators of tourism and amenity growth, it is worth evaluating employment trends in the economy as a whole starting with the primary SIC (Standard Industrial Classification) sectors. In 2001 the Bureau of Economic Analysis switched from the SIC to the NAICS classification which uses a different set of accounts. Therefore, the trend analysis is focused on 1991-2000 to allow for consistent analysis based on SIC classifications.

Table WR-2
La Plata County Employment by Major SIC Category 1991-2000

Economic Sector	1991	2000	% Total 2000	% Change 91-00
Population	33,411	44,566		33%
Total Employment	19,718	29,797	100%	51%
Agriculture	1,038	1,311	4%	26%
Mining, Oil and Gas	414	315	1%	-24%
Construction	1,439	3,186	11%	121%
Manufacturing	644	1,023	3%	59%
Transportation, Communications and Utilities	715	969	3%	36%
Wholesale and Retail Trade	4,420	6,834	23%	55%
Finance, Insurance and Real Estate	1,108	1,591	5%	44%
Services	6,628	10,653	36%	61%
Government	3,312	3,915	13%	18%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

The highlighted sectors in Table WR-2 are those that grew at a faster rate than total employment. Construction which showed the highest rate of growth (121%) is detailed in Table WR-3:

Table WR-3
La Plata Construction Employment Trends 1991-2000

Economic Sector	1991	2000	% Total 2000	% Change 91-00
Construction	1,439	3,186	100%	121%
Building Construction	296	703	22%	138%
Maintenance and Special Trades	823	2,349	74%	185%
Heavy Construction, other	320	133	4%	-58%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Construction employment detail reinforces the base industry and amenity migration analysis above. The fast growing “Building Construction” and “Maintenance and Special Trades” involve housing and commercial construction. The only construction category to decline was “Heavy Construction” which involves heavy equipment and road construction, which is increasingly headquartered in Montezuma County.

The second highest rate of employment growth was in “Services” (61%), which, as in any economy, is the largest sector (36% in La Plata County). Growth in the services sector is generally perceived has growth in “low paying service jobs.” Table WR-4 below corrects this misperception by displaying the wide range of employment types in the SIC “Services” category.

Table WR-4
La Plata County Services Sector Employment Trends 1991-2000

Economic Sector	1991	2000	% Total 2000	% Change 91-00
Services	6,628	10,653	100%	61%
Lodging Places	1,587	1,530	14%	-4%
Personal Services	504	485	5%	-4%
Business Services	513	1,349	13%	163%
Repair Services, parking	300	616	6%	105%
Amusement and Recreation Services	717	1,638	15%	128%
Health Services	1,279	2,048	19%	60%
Legal Services	172	172	2%	0%
Private Education Services	102	184	2%	80%
Social Services, Including Day Care	405	645	6%	59%
Membership Organizations (including tribal)	205	733	7%	258%
Engineering and Management Services	333	591	6%	77%
Private Household Services	615	663	6%	8%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

The growth in Business Services (163%) and Engineering and Management Services (77%) are likely reflective of the increase in the general complexity of the La Plata County economy and growth in consulting services based in La Plata County by people able to operate from an amenity based community in a mobile information age economy.

The biggest component of the Services Sector is Health Care (19% of services), which kept pace with the overall 60% employment growth in services over the decade. Durango has long been a focal point for health services, which is an asset in attracting retirees and other amenity migrants. As of 2003 the health care system in La Plata County is undergoing a period of change and uncertainty.

The largest employment jump in "Membership Organizations" (258%) reflects the fact that a substantial portion of Southern Ute Tribal employment is placed in this category. The Tribe is also very likely the source of growth in Amusement and Recreational Services (128%) primarily related to employment resulting from the opening of the Sky Ute Casino. Southern Ute Tribal enterprise employment is also reflected in energy, management and engineering employment figures. The growing economic clout of the Tribe is reflected in a recent article in the Durango Herald.

October 1, 2003

Tribe builds Growth Fund office

By Brian Newsome

Herald Day City Editor

With a population of about 1,000, Ignacio is hardly the place one would expect to find a multistory office building where multimillion dollar deals are made.

The Southern Ute Indian Tribe would disagree.

The tribe is building a 51,000-square-foot, three-story office building to house its Growth Fund and energy ventures, which together have elevated the tribe to billionaire status in less than a decade. Construction is scheduled for completion in fall of 2004.

About 150 employees from the tribe's business-management office, Energy Department and the tribally owned Red Willow Production Co. will work in the new building. It will also include "incubator" space for newly formed or acquired companies until those businesses add employees and need to find space of their own.

Employees of Red Willow will occupy most of the new offices. Started in 1993, the company has gone from five employees to more than 50. It is worth about \$500 million.

"(The Growth Fund) has properties from the Gulf of Mexico all the way to Canada," said Robert Santistevan, director of the Growth Fund, "and this is the world headquarters here."

Across the highway, the tribe is completing construction on a new Tribal Affairs Building, where governmental departments and services will be located. It's part of a two-phase capital-improvement plan for a tribal campus.

The Growth Fund is charged with making money to benefit the tribe. It oversees the tribe's most lucrative assets, including Red Willow.

In a few years, the tribe has become worth more than \$1.5 billion, mostly from coal-bed methane gas managed by the Growth Fund.

Bob Zahradnik, director of operations for the Growth Fund, said the rapid growth of the tribe's operations has outpaced its workspace. He notes "several hundred million dollars in acquisitions" this year alone.

"That's why we need the staff," he said. "That's why we need the space."

For Zahradnik, Santistevan and others, the new building will mean a move from Durango to Ignacio, where almost all of the tribe's services and departments are already located.

The site for the new office, located across from the Sky Ute Casino in what is known as the Show Me Farm, may also someday include a new museum and retail space, though the Tribal Council has not yet approved those projects.

La Plata County Wholesale and Retail Trade:

Table WR-5
La Plata County Wholesale and Retail Trade 1991-2000

Economic Sector	1991	2000	% Total 2000	% Change 91-00
Wholesale and Retail Trade	4,420	6,834	100%	55%
Wholesale Trade	494	772	11%	56%
Building Materials, Hardware, Garden	182	330	5%	81%
Furniture, Apparel and General Merchandise	476	1,096	16%	130%
Food Stores	570	686	10%	20%
Automotive Dealers and Service Stat	404	626	9%	55%
Eating and Drinking Places	1,609	2,314	34%	44%
Miscellaneous Retail Trade	684	1,011	15%	48%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

The fast growing retail sectors i.e. Building Materials, Hardware and Garden (81%) and Furniture, Apparel and General Merchandise (130%) reflect a convergence of three trends.

- The expansion and establishment of super stores such as WalMart and Home Depot in these sectors.
- Increased demand for building materials and furnishings stimulated by the amenity migration and related construction booms, which are also supporting higher end home furnishing and fixture outlets.
- Durango as a regional trade center for growing rural and Navajo Nation populations.

La Plata County Mining (includes oil and gas):

As the La Plata County Base Industry Group Employment Table WR1 and Figure WR-1 indicate, Mining (including Oil and Gas) represents only 2% of Base Industry Employment in La Plata County. The employment trend between 1991 and 2001 is presented in Table WR-6 below

Table WR-6
La Plata County Employment Trends in Mining and Extractive Industries 1991-2000

Economic Sector	1991	2000	% Total 2000	% Change 91-00
Mining and Extractive Industries	414	315	100%	-24%
Oil and Gas Extraction	353	232	74%	-34%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

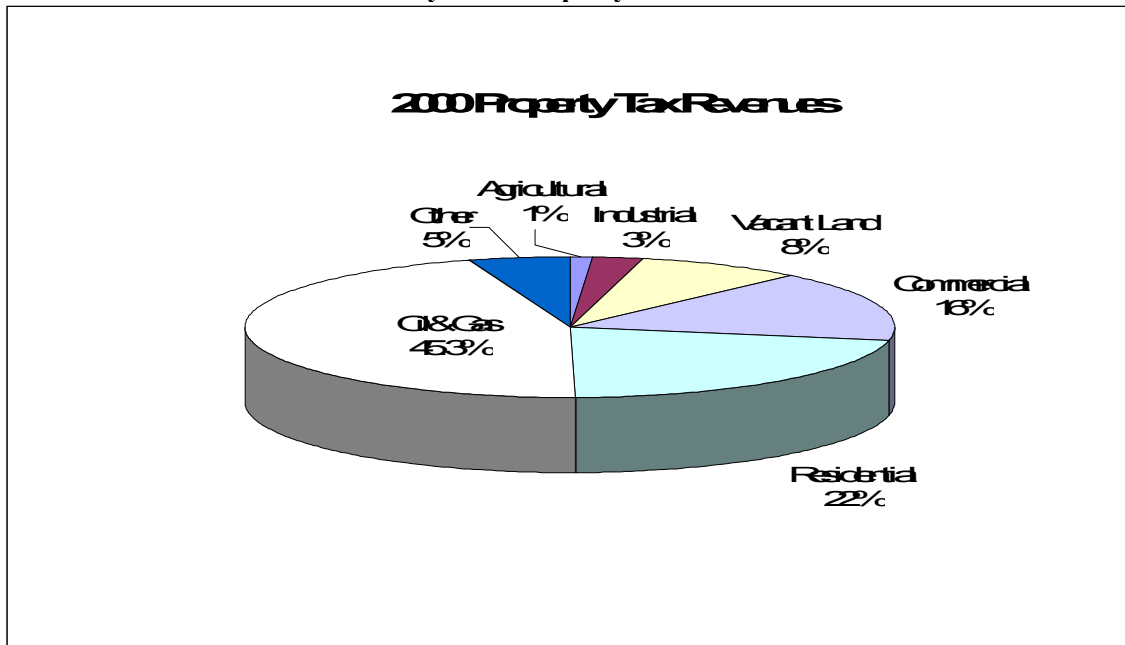
☞ Employment in this sector rose from 104 in 1980 to 414 in 1991, largely due to coal-bed methane development. As the employment trends table indicates, employment dropped by 135 jobs between 1991 and 2001, as the coal bed methane well field moved from the development to the operational phase. A 2001 “spacing order” by the Colorado Oil and Gas Conservation Commission increasing potential well density from one well per 320 acres to one well per 160 acres and a 2005 order reducing spacing to 80 acres, coupled with the emerging National Energy Plan, could touch off another round of well development.

☞ While oil and gas jobs are high paying, (averaging nearly \$69,000 per job in 2001) the number of jobs is a small fraction of total employment in the County.

☞ What is significant is the 45% contribution oil and gas production make to property tax revenues which in 2000, was more than double the contribution of commercial or residential revenues:

Figure WR-5

La Plata County 2000 Property Tax Revenue Sources



Source: Region 9 Comprehensive Economic Development Strategy, March 2001

4. In spite of the dominant contribution of oil and gas to the local tax base, coal bed methane production has been extremely controversial in La Plata County due to concerns about impacts on the value, aesthetics and safety of residential parcels.
5. There are also concerns about the impact of coal bed methane on surface and groundwater quality, and flammability.

The economic dimensions of coal bed methane development in La Plata County (market demand for gas, employment, tax revenues and property values) intersect with safety concerns as well as environmental and social values. This clash between economic, social and environmental values is manifest in the political and institutional arena. La Plata County has been engaged in a dispute with the Colorado Oil and Gas Conservation Commission and the oil and gas industry over the prerogatives of the County to regulate surface impacts drilling, vs. those areas in which the COGCC has regulatory authority. As of 2005, the COGCC has expanded the range of environmental issues considered, and provided for more local government input in the in the well permit and spacing order review process. One energy company is negotiating and MOU with La Plata County addressing the impacts on private property and public infrastructure of gas drilling.

In addition to drilling on private land there is coal bed methane drilling in the HD Mountain portion of the SJNF, which has raised concerns about aesthetic, environmental and recreational impacts on public land. The San Juan Public Lands Office is conducting a San Juan Basin EIS on coal bed methane drilling on public and private land.

Issues related to coal bed methane drilling in La Plata County are reflective of a variety of trends identified in this assessment including:

The interaction of changes in the economic structure, settlement patterns and social mosaic. In the past much of the oil and gas drilling was on farm and ranch scale parcels. As farms and ranches have been subdivided into smaller parcels, the economic and aesthetic impact on property values are much greater. As the agricultural economy has become more difficult, equity and opportunity in the potential for future residential use has become more important to the farmer and rancher.

Dilution of the employment contribution of natural resource industries. Even though employment in the mining, oil and gas sectors has increased in recent years, employment expansion in other amenity-oriented sectors has been much greater. Since oil and gas production has very high revenue to employment ratios, the primary economic impact is on the property tax base.

The complexity of institutional interrelationships: local, state, federal and private sector. The clash among local, state and federal planning and regulatory prerogatives surrounding private sector economic decisions is apparent. The basin wide EIS is an attempt to address this complexity, a significant departure from the well by well permitting response that had characterized drilling on private land. Private landowners and La Plata County are seeking some of the programmatic protections that have been in place on federal lands for some time.

La Plata County: Agricultural Products and Services

A comparison of the Census of Agriculture for 1992 and 2002 suggests a trend towards smaller, less commercially oriented farm and ranch units. The comparison shows a higher number of farms (the term “farm” includes ranches) with less total land in farms, less acres harvested and smaller average size of farm units. In large measure the trends these numbers reflect is the subdivision of commercial scale farms and ranchers into smaller parcels, some of which that are kept in agricultural use on a more part time or “hobby farm” basis. There is however another trend involving more intensive small scale agricultural production. The resulting products can be seen at farmers markets, in retail greenhouse outlets and in the marketing of non-traditional or “exotic” animals.

**Table WR-7
La Plata County Census of Agriculture 1992-2002 Compared**

Measure	1992	1997	2002	%92-02
# of Farms	508	561	923	82%
Land in Farms	587,339	580,135	562,664	-4%
Cropland Acres Harvested	44,460	41,955	34,820	-22%
Average Size of Farms (acres)	828	743	610	-26%
Median Size Farm	NA	NA	100	
Average Age of Farmer	53.5	54.2	NA	

The La Plata County employment trends table indicate employment levels in the agricultural products and services sector at the same level as 20 years ago. However the composition of this sector includes much larger greenhouse, nursery and ag services employment, offsetting fewer commercial farmers and ranchers. The shift in employment during the 1990s is illustrated in the sub-sector table below:

**Table WR-8
La Plata Agricultural Employment Trends Comparing 1991-2000**

Economic Sector	1991	2000	% Change 91-00
Agriculture	1,038	1,311	26%
Crops And Livestock	844	829	-2%
Agricultural Services	194	482	148%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Table WR 8 indicates a slight decline in employment in Crop and Livestock employment (-2%), but an increase in employment in the Agriculture Sector as a whole which is the result of a 148% increase in Agricultural Services. In 2001 the Region 9 Economic Development District worked with the Colorado Demographer to assemble a more complete picture of the contribution of agriculture which is presented in Table WR-9 below, which includes farm and livestock veterinary services which account for 311 agricultural services jobs, with another 447 jobs in landscaping and “small animal” veterinary services. WR-9 also presents “Indirect Base” Manufacturing, Wholesale Trade and Finance jobs with agricultural dependent income, bringing total agribusiness employment to 2,358 which generating \$27.6 million in job income.

**Table WR-9
La Plata County Agribusiness Components 2001**

Components of Agribusiness 2001	Number of Jobs	Job Income \$(000)
Agriculture-Crops & Livestock	1099	\$ (1,510)
Agriculture-Farm Services	35	\$ 951
Agriculture-Veterinary Services	135	\$ 3,335
Agriculture-Veterinary Services (livestock)	276	\$ 5,358
Agriculture-Landscaping	311	\$ 5,835
Manufacturing-Food & Kindred Products	211	\$ 5,996
Wholesale Trade-Agricultural Inputs	118	\$ 2,792
Wholesale Trade-Agricultural Processing	159	\$ 4,311
Finance	14	\$ 562
Total	2,358	\$ 27,630

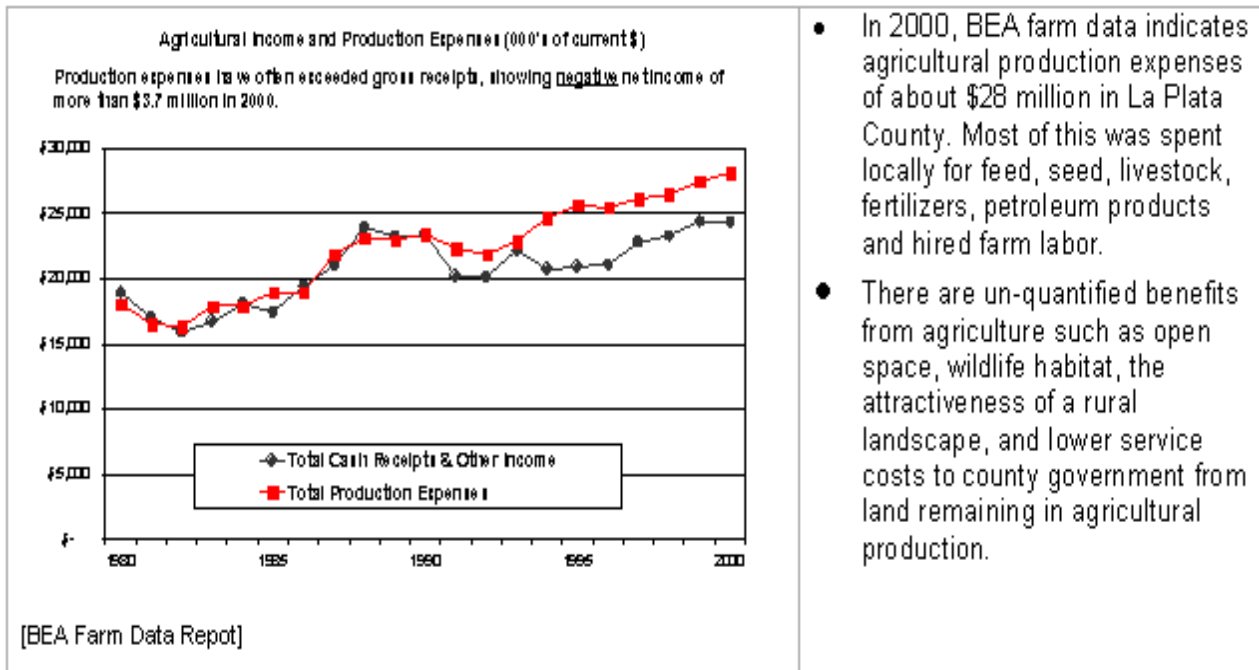
Source: Colo. Demography Section

- Efforts are being made to refine our view of the contributions of agriculture to the local economy by looking at jobs in other sectors that support, or are supported by, agriculture. This is known as agribusiness.

Source: Region 9 Comprehensive Economic Development Strategy, Update 2004

The challenges faced by farmers and ranchers are reflected in a long term trend of input costs rising much faster than revenues as reflected in the BEA Farm Data report presented in the Region 9 CEDS:

**Figure WR-6
La Plata County Agricultural Income and Expenses: 1980-2000**



Source: Region 9 Comprehensive Economic Development Strategy, Update 2004

The negative net income picture presented in the above graph is compounded by weather conditions, with 2002 being the third drought year running. In spite of these statistics, a social and economic assessment cannot ignore the incredible resilience of the agricultural sector in Southwest Colorado.

Some key factors that contribute to this resilience include:

- **The deep cultural roots in agriculture as a way of life.** People persist in agriculture against all odds. Focus groups with ranch families in La Plata, Montezuma and Archuleta Counties in 1995, during a period of drought, low prices and uncertainty about public land grazing policy revealed a commitment to ranching as “a way of life,” that involved the entire family, frequently with multi-generational roots, a wide diversity of challenges, independence and closeness to the land. Some focus group participants had no other occupational background. Others had tried other occupations and found them unfulfilling. Some participants had mobile professional skills, and were only staying in the area to be part of a family ranching operation.
- **Rising land values.** This is a double-edged sword. On one hand, rising land prices make it difficult for existing agricultural operations to expand and for a new generation of farmers and ranchers to get established. On the other hand those who have land equity have seen it grow, providing forbearance and credit to ride out rough times, and the opportunity to sell off pieces of land when the need for cash dictates.
- **Diversification of agricultural products and revenue sources.** As the net return to traditional ranching has declined, ranchers have sought other means of supplementing income. An increasingly common example is to sell hunting rights and in some cases provide outfitting and guide services. A growing number of farmers and ranchers are developing products to sell into niche markets. La Plata County has a growing number of farms and ranches evolving “sustainable agricultural” practices which combine care of the land with new product and market approaches. Hay has proved to be the most consistently profitable farm crop. Navajo family sheep herds continue to be an important culturally based market, along with quality hay tailored to the horse and dairy markets. A La Plata County example of a new niche is an iris and flower seed

farm that, with a small number of acres, has expanded from multi-weekend iris sales from their farm to the La Plata County Fairgrounds.

- **Growing recognition of non-product services.** Growth pressures have spawned a growing recognition of previously “taken-for-granted” non-product benefits that farms and ranches provide. Open space, aesthetics, wildlife habitat, and low public cost to public revenue ratios are among the most obvious. As the La Plata Open Space Conservancy, Colorado Cattleman’s Association Land Trust, Montezuma Land Conservancy and other land trusts have become more active, farms and ranches have been a major land conservation priority. It is becoming clear that irrigated fields and managed lands are best sustained by competent, hard working private owners.
- **Open space benefits are largely contingent on the economic viability of agriculture.** The other growing recognition is that no regulatory scheme can preserve agriculture and agricultural open space, absent economic viability. As this awareness grows there is a search for means of compensating people in agriculture for non-product services. The 2002 La Plata County Summit set in motion an effort to explore transfer of development rights (TRS), purchase of easements and other tools to supplement donated conservation easements as the currently available tool. TDRs are also being implemented in Montezuma County as part of the Dolores River Valley Plan.

One of the challenges relative to growth, identified in the 1995 ranch family focus groups is the subdivision of privately owned mid-elevation “transitional pasture”, and reduced stocking levels on ranch lands with non-agriculturally oriented owners. The availability and allocation of this scarce commodity is an important issue to the future of ranching.

Public land grazing permits play a key role in the on-going viability of many ranches. Grazing and hay production on privately owned land in the valleys is for many ranchers part of a rotation that involves summer grazing on the National Forest land and winter/spring grazing on lower elevation BLM land. With increasing pressure to improve public rangeland conditions, ranchers are challenged with practices that improve land stewardship within the parameters of economic viability. The viability of public land grazing will be enhanced to the extent that support services and informal networks that serve ranchers can provide good information to the ranching community about developing the stewardship/economic viability balance. Networks and support services can also play an important role in providing information to the general public about the benefits, challenges, and stewardship commitments of ranchers.

La Plata County Manufacturing Employment (including wood products)

Manufacturing employment has grown faster (59%) than population (33%) between 1991 and 2000. The same held true during 1980s. Three factors have contributed to this trend:

- The development and promotion of Bodo industrial park has provided a setting for manufacturing businesses.
- The attraction of living in La Plata County has resulted in business start-ups and relocations on the part of people with entrepreneurial experience.
- The Navajo Nation has provided a pool of people skilled in the hand-work involved in many of the local manufacturing businesses.
- Trends in the manufacturing sub-sectors in between 1993 and 2000 (best span in the 1990s with unsuppressed data in sub-sectors with 100 or more jobs) are presented in the table below:

**Table WR-10
La Plata County Employment in Primary Manufacturing Sectors 1993-2000**

Economic Sector	1993	2000	% Increase 91-00
Manufacturing	721	1,023	42%
Food and Kindred Products	113	215	90%

Textile Mill Products and Apparel	213	56	-74%
Lumber and Wood Products incl. Furniture	33	331	903%
Printing and Publishing	138	223	62%

Colo. Demography Section Website <http://www.dola.state.co.us/Demog/Economy.htm>

Between 1993 and 2000 textile and apparel lost 157 jobs, while lumber and wood products expanded by 298 jobs and food products gained 102 jobs. Further analysis needs to be done on how much of the food and wood products jobs are related to natural resources produced locally. Food products are relevant to the interest in adding value to local agricultural production.

A relevant consideration in the wood products sector is the extent to which the raw materials come from the SJNF. The assumption is that in La Plata County many of these jobs involve finished products from imported raw materials, but this question is worthy of verification. There is also an emerging forestry related business niche, i.e. businesses that provide fire hazard reduction services. Some of these businesses involve heavy equipment (e.g. hydro-axe machines) and others combine selective thinning, in some cases coupled with chipping equipment. Many of these businesses got established after extreme drought conditions became apparent 2001 and the Missionary Ridge Fire of 2003. Determining how these businesses are classified within the NAICS Code will allow for future tracking.

A constraint in the manufacturing sector is that wage levels are not adequate to housing costs in La Plata County. Much of the labor force commutes in from the Navajo Nation adding to pressures on the transportation system, which also carries tourism, goods movement and local commuter traffic.

La Plata County Government Employment

As Figure WR-1 indicates, Government Employment is only 2% of total direct base employment in La Plata County. The demographer counts "Federal Government Administration" as the source of direct base employment because incoming federal dollars have an export effect. The Government Employment Trends Table below shows Federal Civilian Employment as the one type of government employment that actually declined by -2% between 1991 and 2000, and represents only 10% of total government employment La Plata County.

Table WR-11
La Plata County Employment Trends: Government

Economic Sector	1991	2000	% Change 91-00
Government	3,312	3,915	18%
Federal Government, Civilian	402	394	-2%
Military	132	124	-6%
State Government	803	1,283	60%
Local Government	1,975	2,114	7%

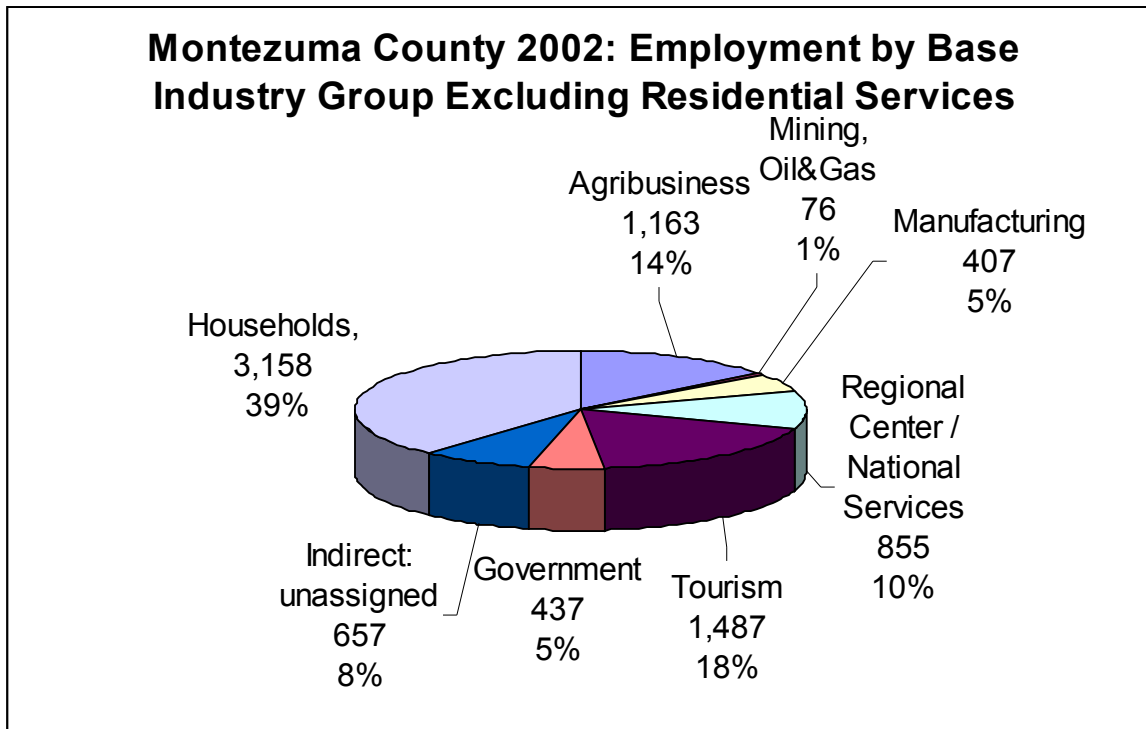
Federal Civilian Employment figures reflect the downsizing of federal employment that took place throughout the 1990s. These reductions in workforce occurred during the same period when federal land usage was growing and management issues were becoming increasingly, complex, contentious and litigious. This is a social and institutional reality that needs to be considered in land management planning, and policy development.

By contrast, local government grew 7% representing the largest share of the total government employment (54%). State government saw the most substantial growth (60%) representing 33% of total government employment. Growth in local and State employment reflects in part the growing demand for services as the population has increased, and amenity migrants have brought with them higher demand for governmental services. It should also be pointed out that this employment growth has occurred under the restraint of tax limitation amendments.

Montezuma County Base Industry and Trend Analysis

The Economic Base Analysis looks at each SIC sector to determine which sectors, and what proportion of each sector are exports. Base industries include both traditional exported products (e.g. logs and cattle) as well industries that have an “export effect” in that they bring new dollars into the local economy (e.g. tourism, regional trade, social security payments to retirees). These export sectors are clustered into a set of “Base Industry Groups.” The “Montezuma County 2002 Employment and Income Summary by Base Industry Group” appears as Table WR-12 on the following page. Figure WR-7 below presents employment by Base Industry Group.

Figure WR-7



Employment in the Mining, Oil and Gas (1%), Agribusiness (14%, which includes ranching) and Manufacturing (5% which includes saw mills) are in part related to public land resources, and will be dealt with later in this section under La Plata County natural resources.

The larger pieces of the pie are Tourism (18% including resorts, second homes, tourist services and transportation) and Households (39% including retirees, commuters as well as dividends, interest and rental income) are related to the “Amenity Migration” trends described under the “Settlement Patterns” descriptor. The Base Industry Group analysis will provide the most currently available snapshot in time followed by employment trends in related SIC categories over the past 10 years.

The base industry analysis is presented in a more detailed table format in Table WR 12 below:

Table WR 12
Montezuma County 2002 Employment and Income Summary
by Base Industry Group

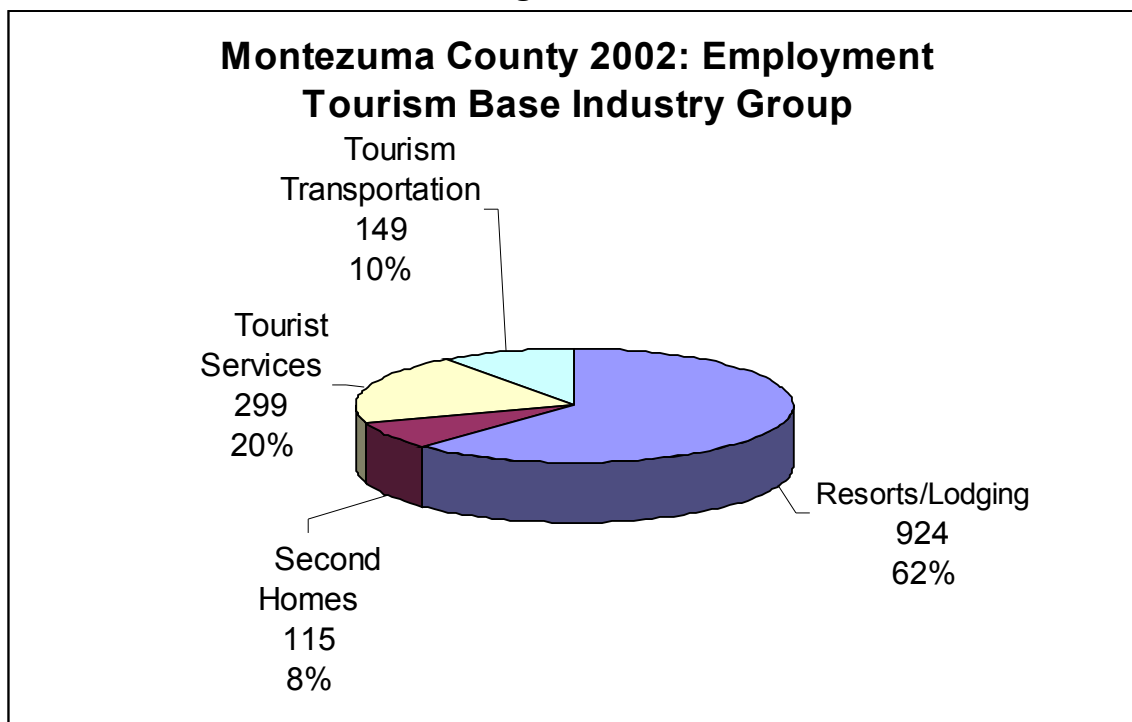
Basic Industry Groups	Jobs	% of Basic	Income (\$000)	% of Basic	Average Wage
Agribusiness	1,163	14.09	\$13,362.32	0	\$11,491
Agricultural Production	787	9.54	\$4,017.91	1.91	
Agricultural Processing	152	1.84	\$4,744.02	2.26	
Agricultural Inputs	224	2.71	\$4,600.40	2.19	
Mining	76	0.92	\$3,622.09	1.72	\$47,458
Manufacturing	407	4.93	\$9,305.60	4.43	\$22,846
Regional Center / National Services	855	10.36	\$26,415.90	12.57	\$30,884
Communications	12	0.15	\$691.64	0.33	
Construction	484	5.87	\$14,626.93	6.96	
Finance, Insurance and Real Estate	21	0.26	\$733.36	0.35	
Trade and Transportation	50	0.61	\$2,072.03	0.99	
Professional and Business Services	288	3.48	\$8,291.94	3.94	
Private Education and Health Services	0	0	\$0.00	0	
Tourism	1,487	18.01	\$26,326.46	12.52	\$17,709
Resorts	924	11.19	\$12,263.56	5.83	\$13,276
Second Homes	115	1.4	\$3,394.05	1.61	\$29,438
Tourist Services	299	3.62	\$6,923.54	3.29	\$23,181
Tourism Transportation	149	1.8	\$3,745.32	1.78	\$25,154
Government	437	5.29	\$21,307.94	10.14	\$48,771
Indirect: unassigned	657	7.96	\$22,973.98	10.93	\$34,954
Investment Construction	0	0	\$0.00	0	
Households	3,158	38.26	\$86,576.63	41.19	\$27,413
Retirees	1,934	23.42	\$53,004.96	25.22	
Commuters	386	4.68	\$10,581.17	5.03	
Households with public assistance income (excluding retirees)	320	3.88	\$8,772.87	4.17	
Households with dividends, interest and rental income (excluding retirees)	519	6.28	\$14,217.63	6.76	
Worker Local Res. Services	3,655		\$100,205.76		
Total All Industries	11,910		\$303,587.45		
Total Personal Income			\$557,763.83		
Ratio: Total / Basic	1.44		1.44		

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/leifa1.cfm>

Tourism & Amenity Migration Driven Employment in Montezuma County

The 18% of employment in the Tourism Base Industry Group is broken out in Figure WR-8 below:

Figure WR-8

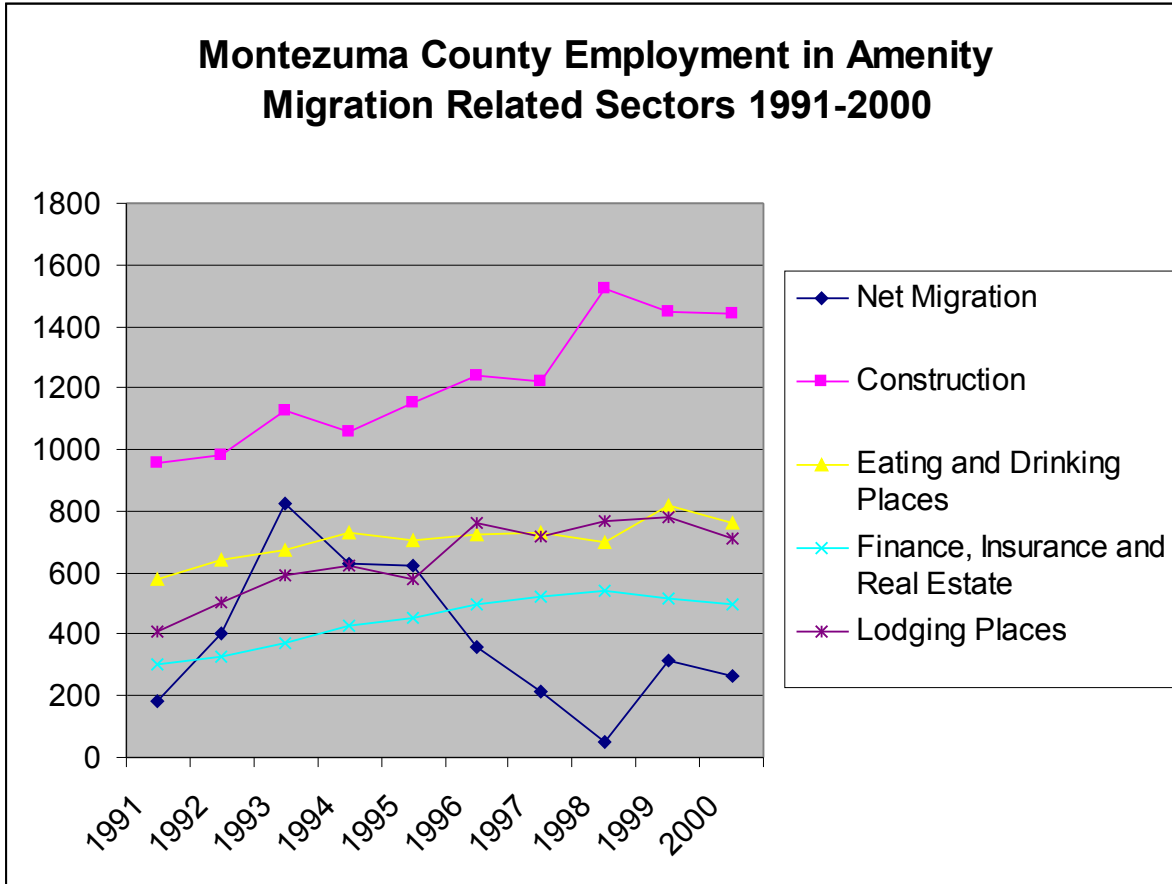


While 62% of the employment within the tourism base industry group is in resorts, which include hotels and lodging places, 8% of employment in this group is in second homes. The amenity migration boom in Montezuma County in the 1990s stimulated a great deal of construction employment. The Colorado Demographer's Base Industry Analysis classifies second homes as "Tourism" since they are occupied by visitors.

The other dimensions to the construction stimulus generated by the amenity migration are homes built by retirees and by "early retirees" who sell a home and/or business and move to Southwest Colorado as amenity migrants. The employment stimulated by these migrants shows up in the "Households" base industry group broken out in Chart WR-12 above. The Households Base Industry Group reflects, in part, employment generated by retirees as well as employment generated by the expenditure of dividends and interest flowing in with amenity migrants. In Montezuma County Base Employment generated by retirees (1,934 jobs) is larger than Base Employment generated by Tourism (1,487 jobs).

To move from the 2002 snapshot provided by the Base Industry Group Analysis to an analysis of employment trends during the 1990s it is useful to look at Bureau of Economic Analysis (BEA) employment data in key sectors. Figure WR-9 provides a starting point for such analysis.

Figure WR-9



Annual Net Migration into Montezuma County climbed to a peak in 1993 at over 800 people, dipped back to the 600 range in 1994-95, remaining in the 200-400 range since 1996 with the exception of 1998.

Finance, Insurance and Real Estate jobs grew during the 1990s by about 200 jobs representing (65%) which in combination with an increase of 481 jobs (50%) in the construction sector reflect employment growth from amenity migration. In contrast to La Plata County where lodging employment was relatively flat, employment in lodging places grew in Montezuma County by about 300 jobs a (74%) indicating that tourism was continuing to expand as part of the Montezuma County economic base. Employment in Eating and Drinking Places increased by just over 180 jobs (32%), slightly more than the 27% increase in population and less than the 41% increase in total employment from 1991-2000.

In summary, Montezuma County saw economic growth related to amenity migration while continuing to expand it's economic base in tourism related sectors.

Montezuma County Employment Trends in Major Sectors

Having focused on indicators of tourism and amenity growth, it is worth evaluating employment trends in the economy as a whole starting with the primary SIC (Standard Industrial Classification) sectors in 2001 the Bureau of Economic Analysis switched from the SIC to the NAICS classification which uses a different set of accounts. There for the trend analysis is focused on 1991-2000 to allow for consistent analysis based on SIC classifications:

Table WR-13
Montezuma County Employment by Major SIC Category 1991-2000

Economic Sector	1991	2000	Increase 91-2000	% Change 91-2000	% Total 2000
Population	18,710	23,830	5,120	27%	
Total Employment	9,111	12,809	3,698	41%	
Agriculture	867	1,050	183	21%	8%
Mining and Extractive Industries	464	133	-331	-71%	1%
Construction	959	1,440	481	50%	11%
Manufacturing	408	601	193	47%	5%
Transportation, Communications and Utilities	293	426	133	45%	3%
Wholesale and Retail Trade	1,948	2,812	864	44%	22%
Finance, Insurance and Real Estate	301	496	195	65%	4%
Services	1,647	3,896	2,249	137%	30%
Government	2,224	1,955	-269	-12%	15%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcd1.cfm>

The highlighted sectors in Table WR-13 are those that grew at a faster rate than total employment (41%). Services which showed the highest rate of growth (137%) is detailed in Table WR-14:

Table WR-14
Montezuma County Services Sector Employment Trends 1991-2000

Economic Sector	1991	2000	Increase 1991-2000	% Change 91-2000	% Total 2000
Services	1,647	3,896	2,249	137%	100%
Lodging Places	408	710	302	74%	18%
Personal Services	136	224	88	65%	6%
Business Services	72	129	57	79%	3%
Repair Services, parking	139	165	26	19%	4%
Amusement and Recreation Services	37	532	495	1338%	14%
Health Services	212	906	694	327%	23%
Legal Services	38	48	10	26%	1%
Private Education Services	18	1	-17	-94%	0%
Social Services, Including Day Care	40	171	131	328%	4%
Membership Organizations (Incl. Tribe)	134	508	374	279%	13%
Engineering and Management Services	181	255	74	41%	7%
Private Household Services	232	247	15	6%	6%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcd1.cfm>

The largest increase in the number of service jobs was 694 jobs in Health Services a 327% increase, which was driven by the opening of a new nursing home in Mancos and expanded hospital and medical services in general. This is consistent with the high number of direct base employment jobs attributed to retirees in Table WR-12. The largest percentage increase (1338%) in service employment was in Amusement and Recreation Services. Most of the 495 new jobs resulted from the opening of the Ute Mountain Tribe Casino. The 374 new jobs (279% increase) in Membership Organizations are also primarily attributable to the Ute Mountain Ute Tribe, since many Tribal government jobs are counted in this sector. As with the Southern Ute Tribe, employment in economic enterprises appears in other sectors, e.g. construction employees working for Weeminuche Construction Authority. Other expanded employment by Tribal Enterprises, such as their truck stop, hotel and convention facility are post 2000 and do not appear in this analysis. As mentioned previously the 74% increase in lodging places indicates continued expansion in the Montezuma County tourism sector.

The next highest percentage in Major SIC category employment was in the Finance, Insurance and Real Estate Sector. Detail in the Finance and Insurance sub-sectors is suppressed due to confidentiality, but as Table WR-15 illustrates most of in 159 of 165 new jobs in this sector were in Real Estate which grew by 237%.

Table WR-15

Montezuma County Finance, Insurance, Real Estate Employment Trends 1991-2000

Economic Sector	1991	2000	Increase 91-2000	% Change 91-2000	% Total 2000
Finance, Insurance and Real Estate	301	496	195	65%	100%
Real Estate	67	226	159	237%	46%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

The growth in Real Estate employment appears to reflect business opportunities related to growth related to amenity migration which should also be reflected in construction employment which overall grew by 50% between 1991 and 2000. As Table WR-16 indicates, the largest growth in the number of jobs (295) and percentage (105%) was in Building Construction and Maintenance and Special Trades which along with Building Construction are the sub-sectors that involve the housing and new commercial development that were stimulated by the amenity migration trend. Employment in the Heavy Construction (primarily heavy equipment work) continued to expand, but at a slower rate (43%). Montezuma County is home to major earth moving contractors which export services to all of the Four Corners States.

Table WR-16

Montezuma County Construction Employment Trends 1991-2000

Economic Sector	1991	2000	Increase 91-2000	% Change 91-2000	% Total 2000
Construction	959	1,440	481	50%	100%
Building Construction	195	239	44	23%	17%
Maintenance and Special Trades	282	577	295	105%	40%
Heavy Construction, Other	482	624	142	29%	43%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

The fast growing employment retail sectors i.e. Building Materials, Hardware and Garden (84%) and Furniture, Apparel and General Merchandise (94%) depicted in Table WR-17 reflect a convergence of three trends.

- The expansion of Wal-Mart into a super store.
- Increased demand for building materials and furnishings stimulated by the amenity migration and related construction.
- Cortez as a regional trade center for growing rural (e.g. Dolores County and Southeastern Utah and Navajo Nation populations).

The 189 jobs (70% growth) in the Automotive Dealers and Service Stations warrants further investigation.

Table WR-17

Montezuma County Employment Wholesale and Retail Trade 1991-2000

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total 2000
Wholesale and Retail Trade	1,948	2,812	864	44%	100%
Wholesale Trade	210	242	32	15%	9%
Building Materials, Hardware, Garden	112	206	94	84%	7%
Furniture, Apparel and General Merch.	352	682	330	94%	24%
Food Stores	254	243	-11	-4%	9%

Automotive Dealers and Service Stations	271	460	189	70%	16%
Eating and Drinking Places	578	761	183	32%	27%
Miscellaneous Retail Trade	172	218	46	27%	8%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Montezuma County Mining (includes oil and gas):

As the Montezuma Base Industry Group Employment Figure WR-7 and Table WR12 indicate, Mining (including Oil and Gas) represents only 1% of Base Industry Employment in Montezuma County. The employment trend between 1991 and 2000 is presented in Table WR-6 below

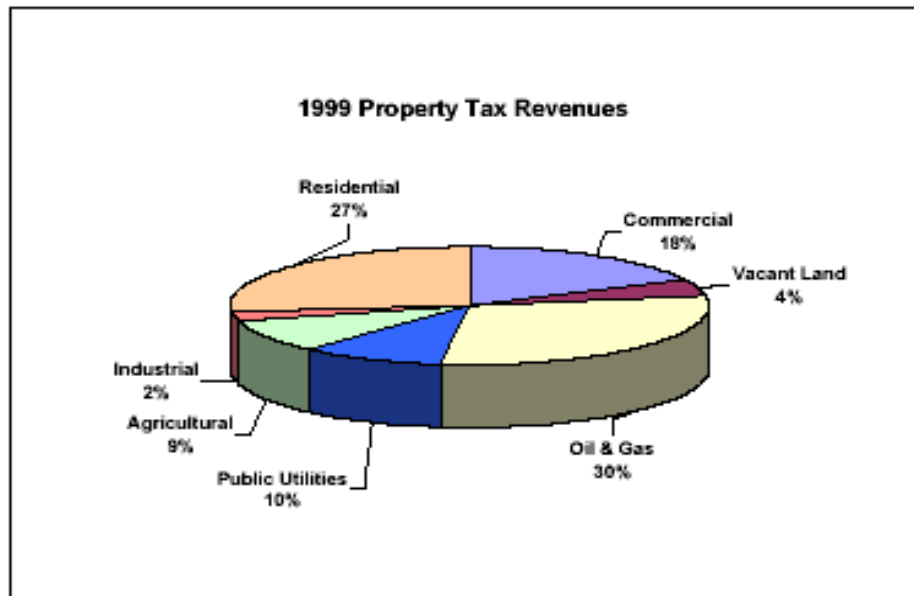
Table WR-18
Montezuma County Employment Trends: Mining and Extractive Industries 1991-2000

Economic Sector	1991	2000	Decrease 1991-2000	% Total 2000	% Change 91-00
Mining and Extractive Industries	464	133	-331	1%	-71%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

- Employment in this sector (primarily oil and gas) declined by 331 jobs between 1991 and 2000. This reflects the completion of the more intensive development of the CO2 gas field and the move to primarily operational activities with 3-6 new wells per year.
- While oil and gas jobs are high paying, (averaging nearly \$47,458 per job in 2001) the number of jobs is a small fraction (<1%) of total employment in the County.
- What is significant is the 30% contribution oil and gas production make to property tax revenues which in 1999, exceeded residential revenues:

Figure WR-10
Montezuma County 1999 Property Tax Revenue Sources



[Abstract of Assessment and Levies 1999 Montezuma County]

Source: Region 9 Comprehensive Economic Development Strategy, March 2001

- When compared to the controversy over coal bed methane drilling in La Plata, CO2 drilling in Montezuma County is relatively non-controversial. Much of the drilling is on public land and most of the private property owners that are affected own large agricultural parcels and receive royalty payments.
- There were, however, appeals and litigation concerning the impacts of exploration on archaeological resources in Canyons of the Ancients National Monument. The result was a settlement stipulating measures for monitoring and mitigating these impacts.

Montezuma County: Agricultural Products and Services

Table WR-19 indicates 21% growth in agricultural employment between 1991 and 2000. As of 2000, 17% of agricultural employment was in veterinary and ag support services.

Table WR-19
Montezuma County Agricultural Employment Trends Comparing 1991-2000

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total
Agriculture	867	1,050	183	21%	100%
Crops And Livestock	D	873	NA	NA	83%
Agricultural Services	D	177	NA	NA	17%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

In 2001 the Region 9 Economic Development District worked with the Colorado Demographer to assemble a more complete picture of the contribution of agriculture which is presented in Table WR-20 below, which in addition to 799 crop and livestock includes veterinary services which account for 162 jobs, with additional ag related jobs in agricultural processing, inputs, freight and warehousing as well as food products, bringing

agribusiness employment to 1,196 jobs

**Table WR-20
Montezuma County Agribusiness Components 2001**

Agribusiness 2001	Employment	Income
Crops and Livestock	799	\$ (626)
Farm Services	13	\$ 305
Veterinary Services	162	\$ 2,387
Landscaping	19	\$ 123
Food and Kindred Products	62	\$ 2,246
Motor Freight and Warehousing	12	\$ 956
Irrigation and Pipelines	1	\$ 1
Wholesale Trade - Agricultural Inputs	71	\$ 1,609
Wholesale Trade - Agricultural Processing	41	\$ 895
Finance	16	\$ 523
Total	1,196	\$ 8,419

Income is in \$000

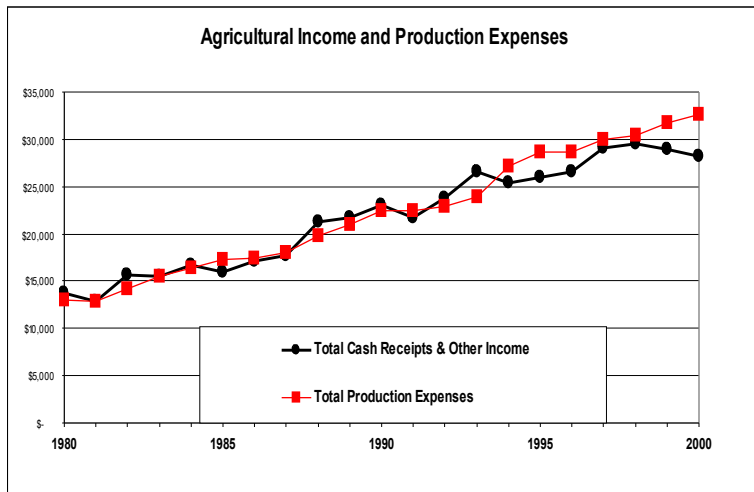
Source: Region 9 Comprehensive Economic Development Strategy, Update 2004

- Efforts are being made to refine our view of the contributions of agriculture to the local economy by looking at jobs in other sectors that support, or are supported by, agriculture. This is known as agribusiness.
- Ag inputs and processing are businesses (wholesale trade) that provide products and services to farmers, i.e. chemicals, seed, fertilizer, feed, fuel, machinery and crop processing or marketing.

The challenges faced by farmers and ranchers are reflected in a long term trend of input costs rising much faster than revenues as reflected in the BEA Farm Data report presented in the Region 9 CEDS:

**Figure WR-11
Montezuma County Agricultural Income and Expenses: 1980-2000**

[BEA Farm Data Report]



Source: Region 9 Comprehensive Economic Development Strategy, Update 2004

- According to available BEA data, production expenses have exceeded gross receipts since 1994, showing *negative* net income of about \$4.4 million in 2000. This can reflect a variety of factors such as weather, market prices, and the limitations of BEA farm data as described above.
- In 2000, BEA farm data indicates agricultural production expenses of about \$32.6 million in Montezuma County. Most of this was spent locally for feed, seed, livestock, fertilizers, petroleum products and hired farm labor.

The negative net income picture presented in the above graph is compounded by weather conditions, with 2002 being the third drought year running. In spite of these statistics, a social and economic assessment cannot ignore the incredible resilience of the agricultural sector in Southwest Colorado.

Some key factors that contribute to the resilience of agriculture include:

- **The deep cultural roots in agriculture as a way of life.** People persist in agriculture against all odds.

Focus groups with ranch families in La Plata, Montezuma and Archuleta Counties in 1995, during a period of drought, low prices and uncertainty about public land grazing policy revealed a commitment to ranching as “a way of life,” that involved the entire family, frequently with multi-generational roots, a wide diversity of challenges, independence and closeness to the land. Some focus group participants had no other occupational background. Others had tried other occupations and found them unfulfilling. Some participants had mobile professional skills, and were only staying in the area to be part of a family ranching operation.

- **Rising land values.** This is a double-edged sword. On one hand, rising land prices make it difficult to for existing agricultural operations to expand and for a new generation of farmers and ranchers to get established. On the other hand those who have land equity have seen it grow, providing forbearance and credit to ride out rough times, and the opportunity to sell off pieces of land when the need for cash dictates.
- **Diversification of agricultural products and revenue sources.** As the net return to traditional ranching has declined, ranchers have sought other means of supplementing income. An increasingly common example is to sell hunting rights and in some cases provide outfitting and guide services. A growing number of farmers and ranchers are developing products to sell into niche markets. Hay has proved to be the most consistently profitable farm crop. Navajo family sheep herds continue to be an important culturally based market, along with quality hay tailored to the horse and dairy markets. A Montezuma County example of a new niche is the wineries that have developed in McElmo Canyon which in addition to income from export sales have provide a focal point for an October wine fest in Montezuma County. The Saturday farmer’s market in the County Courthouse parking lot draws more vendors with more locally grown products with each passing year. There are also a growing number of tree farms in Montezuma County.
- **Growing recognition of non-product services.** Growth pressures have spawned a growing recognition that the many previously “taken-for-granted” non-product benefits that farms and ranches provide. Open space, aesthetics, wildlife habitat, and low public cost to public revenue ratios are among the most obvious. As the La Plata Open Space Conservancy, Colorado Cattleman’s Association Land Trust, Montezuma Land Conservancy and other land trusts have become more active, farms and ranches have been a major land conservation priority. It is becoming clear that irrigated fields and managed lands are best sustained by competent, hard working private owners.
- **Open space benefits are largely contingent on the economic viability of agriculture.** The other growing recognition is that no regulatory scheme can preserve agriculture and agricultural open space, absent economic viability. As this awareness grows there is a search for means of compensating people in agriculture for non-product services. In addition to some 5,000 acres in conservation easements facilitated by the Montezuma Land Conservancy, a Transferable Development Right (TDR) system implemented in the Dolores River Valley as part of the Dolores River Valley Plan. The Montezuma Land Conservancy has also been instrumental in securing \$4.6 million in matching funds from Great Outdoors Colorado to purchase scenic easements along the San Juan Skyway in the Dolores and Mancos River Valleys.

As in La Plata County, one of the challenges relative to growth, identified in the 1995 ranch family focus groups is the subdivision of privately owned mid-elevation “transitional pasture”, and reduced stocking levels on ranch lands with non-agriculturally oriented owners. The availability and allocation of this scarce commodity is an important issue to the future of ranching.

Public land grazing permits play a key role in the on-going viability of many ranches. Grazing and hay production on privately owned land in the valleys is for many ranchers part of a rotation that involves summer grazing on the National Forest land and winter/spring grazing on lower elevation BLM land. With increasing pressure to improve public rangeland conditions, ranchers are challenged with practices that improve land stewardship within the parameters of economic viability. The viability of public land grazing will be enhanced to the extent that support services and informal networks that serve ranchers can provide good information to the ranching community about developing and monitoring the stewardship/economic viability balance. Networks and support services can also play an important role in providing information to the general public about the benefits, challenges, and stewardship commitments of ranchers.

Montezuma County Manufacturing Employment (including wood products)

Manufacturing employment has grown faster (47%) than population (27%) and jobs (41%) between 1991 and 2000. The same held true during 1980s. Three factors have contributed to this trend:

- The attraction of living in Montezuma County has resulted in business start-ups and relocations on the part of people with entrepreneurial experience.
- The Navajo Nation has provided a pool of people skilled in the hand-work involved in many of the local manufacturing businesses.

Trends in the manufacturing sub-sectors in between 1991 and 2000 are presented in Table WR-21 below:

Table WR-21
Montezuma County Employment in Primary Manufacturing Sectors 1991-2000

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total 2000
Manufacturing	408	601	193	47%	100%
Food and Kindred Products	35	64	29	83%	11%
Textile Mill Products and Apparel	49	106	57	116%	18%
Lumber and Wood Products including Furniture	186	207	21	11%	34%
Printing and Publishing	47	67	20	43%	11%
Stone, Clay and Glass Products	47	78	31	66%	13%

Colo. Demography Section Website <http://www.dola.state.co.us/Demog/Economy.htm>

As Table WR-21 indicates, the lumber and wood products remain the major component of the manufacturing sector (34%), but the rate of growth between 1991 and 2000 was the slowest of any sub-sector (11%). It is also likely that the employment growth involves a shift to smaller furniture and craft firms. A relevant consideration in the wood products sector is the extent to which the raw materials come from the SJNF.

There is an emerging forestry related business niche, i.e. businesses that provide fire hazard reduction services. Some of these businesses involve heavy equipment (e.g. hydro-axe machines) and others combine selective thinning, in some cases coupled with chipping equipment. Many of these businesses got established after extreme drought conditions became apparent 2001 and the resulting large scale fires in Mesa Verde National Park. Determination of how these businesses are classified within the NAICS Code will allow for future tracking.

The most significant growth was in textile mill products and apparel manufacturing both in the increase in jobs (57) and percentage (116%). Much of this growth may be in Osprey outdoor equipment which is directly related to public land outdoor recreation opportunities. Unfortunately much of Osprey's production has been moved overseas, but design and management jobs remain in Cortez.

A major industrial recruitment success in Montezuma County involves Tuffy Security which specializes in lockable accessories for Jeeps. The owner of this business is an amenity migrant that relocated his business to enjoy an avid interest in outdoor recreation.

Montezuma County Government Employment

As Figure WR-22 indicates, Local Government, which makes up 75% of government employment, lost 247 jobs (-14%). This loss of jobs is attributable to the compound impact of the TABOR (tax limitation) amendment coupled with a ratcheting down of oil and gas revenues reflecting the decline in CO2 production values. This reduction in local government employment was particularly problematic during a period of population growth and increasing demand for services in the mid 1990s.

Table WR-22

Montezuma County Employment Trends: Government

Economic Sector	1991	2000	Increase 99-2000	% Change 91-2000	% Total 2000
Government	2,224	1,955	-269	-12%	100%
Federal Government, Civilian	380	354	-26	-7%	18%
Military	75	68	-7	-9%	3%
State Government	62	73	11	18%	4%
Local Government	1,707	1,460	-247	-14%	75%

Colo. Demography Section Website <http://www.dola.state.co.us/Demog/Economy.htm>

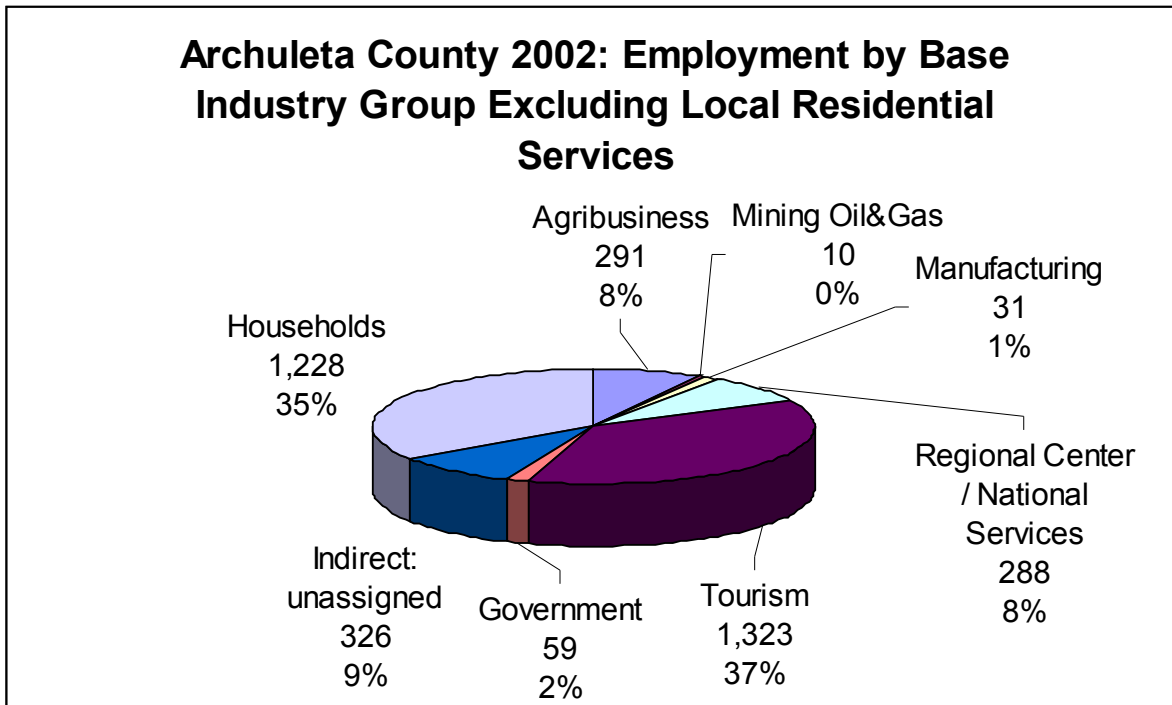
As Table WR-11 indicates, Government Employment is 5% of total direct base employment and 10% of direct base earnings in Montezuma County. The demographer counts “Federal Government Administration” as the source of direct base employment because incoming federal dollars have an export effect. The Government Employment Trends Table WR-22 shows Federal Civilian Employment declined by 26 jobs (-7%) between 1991 and 2000, representing 18% of total government employment Montezuma County.

Federal Civilian Employment figures reflect the downsizing of federal employment that took place throughout the 1990s. These reductions in workforce occurred during the same period when federal land usage was growing and management issues were becoming increasingly, complex, contentious and litigious. This is a social and institutional reality that needs to be considered in land management planning, and policy development.

Archuleta County Base Industry and Trend Analysis

The Economic Base Analysis looks at each SIC sector to determine which sectors, and what proportion of each sector are exports. Base industries include both traditional exported products (e.g. logs and cattle) as well industries that have an “export effect” in that they bring new dollars into the local economy (e.g. tourism, regional trade, social security payments to retirees). These export sectors are clustered into a set of “Base Industry Groups.” The “Archuleta County 2002 Employment and Income Summary by Base Industry Group” appears as Table WR-23 on the next page. Figure WR-11 below presents employment by Base Industry Group.

Figure WR-11



As Figure WR-11 indicates 72% of the base industry employment in Archuleta County is a combination of Tourism and Households (predominately jobs supported by direct base income to retirees). As Table WR-23 indicates, these two groups are the lowest paying base industry groups at \$21,000 and \$28,000 respectively. The other significant categories of employment are Regional/National Services and Agribusiness at 8% each. Most of the Regional and National Services Jobs are construction related resulting in an average wage of \$35,450. The 291 jobs in agribusiness show negative net income as will be discussed in the agriculture section below.

Table WR 23
Archuleta County 2002 Employment and Income Summary
by Base Industry Group

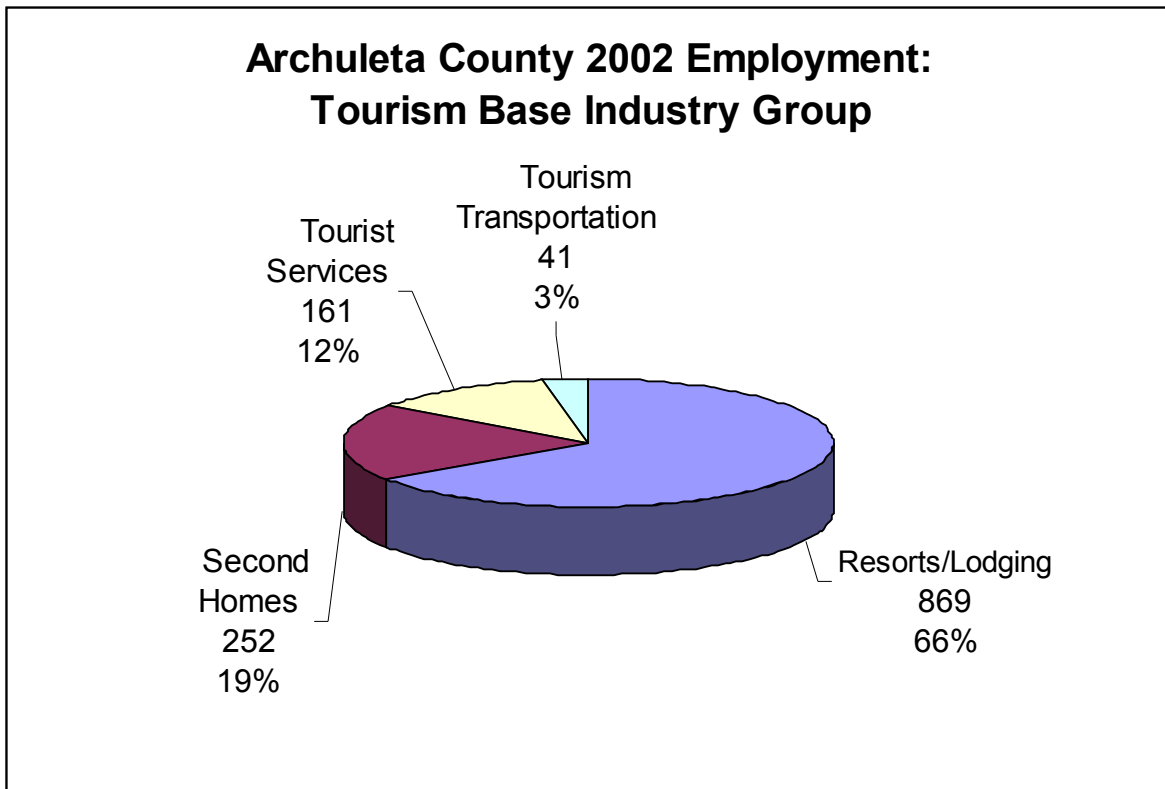
Basic Industry Groups	Jobs	% of Basic	Income (\$000)	% of Basic	Average Wage
Agribusiness	291	8.2	-\$5,910	0.0	(\$20,297)
Agricultural Production	249	7.0	-\$6,838	0.0	
Agricultural Processing	19	0.5	\$477	0.6	
Agricultural Inputs	23	0.7	\$451	0.5	
Mining including Oil and Gas	10	0.3	\$613	0.7	\$60,526
Manufacturing	31	0.9	\$1,121	1.3	\$35,625
Regional Center / National Services	288	8.1	\$10,206	12.0	\$35,450
Communications	3	0.1	\$181	0.2	
Construction	246	6.9	\$8,283	9.7	
Finance, Insurance and Real Estate	9	0.3	\$344	0.4	
Trade and Transportation	24	0.7	\$1,267	1.5	
Professional and Business Services	6	0.2	\$131	0.2	
Private Education and Health Services	0	0.0	\$0	0.0	
Tourism	1,323	37.2	\$27,831	32.7	\$21,035
Resorts/Lodging	869	24.4	\$13,749	16.1	\$15,819
Second Homes	252	7.1	\$9,336	11.0	\$37,064
Tourist Services	161	4.5	\$3,620	4.3	\$22,519
Tourism Transportation	41	1.2	\$1,127	1.3	\$27,242
Government	59	1.7	\$3,509	4.1	\$59,148
Indirect: unassigned	326	9.2	\$13,092	15.4	\$40,152
Investment Construction	0	0.0	\$0	0.0	
Households	1,228	34.5	\$34,661	40.7	\$28,229
Retirees	802	22.5	\$22,634	26.6	
Commuters	64	1.8	\$1,817	2.1	
Households with public assistance income (excluding retirees)	102	2.9	\$2,881	3.4	
Households with dividends, interest and rental income (excluding retirees)	260	7.3	\$7,329	8.6	
Total Basic	3,561	100.0	\$85,244	100.0	\$23,936
Worker Local Res. Services	919		\$25,941		
Total All Industries	4,480		\$115,545		
Total Personal Income			\$210,217		
Ratio: Total / Basic	1.26		1.36		

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/leifa1.cfm>

Tourism and Amenity Migration Driven Employment in Archuleta County

The 37% of employment in the Tourism Base Industry Group is broken out in Figure WR- 12 below:

Figure WR-12



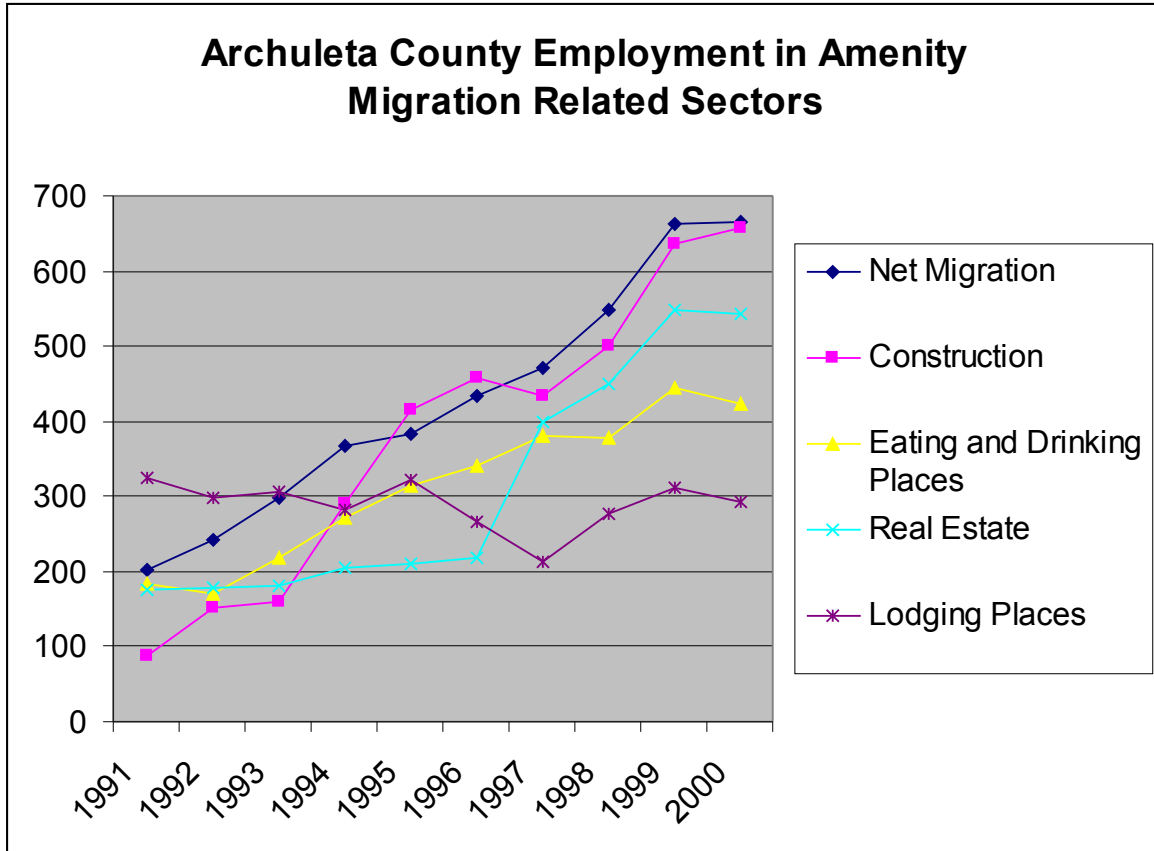
Of the 1,323 jobs in the Tourism Base Industry Group 2/3 are resort and lodging employment. The other components of this group are 252 jobs involving construction and maintenance of second homes (19%), and 161 jobs (12%) in tourist services which includes Wolf Creek Ski Area.

While 66% of the employment within the tourism base industry group is in resorts, which include hotels and lodging places, 19% of employment in this group is in second homes. The Colorado Demographer's Base Industry Analysis classifies second homes as "Tourism" since they are occupied by visitors.

The other dimensions to the construction stimulus generated by the amenity migration are homes built by retirees and by "early retirees" who sell a home and/or business and move to Southwest Colorado as amenity migrants. The employment stimulated by these migrants shows up in the "Households" base industry group and the Regional National Services Group broken out in Chart WR-12 above. The Households Base Industry Group reflects, in part, employment generated by retirees as well as employment generated by the expenditure of dividends and interest flowing in with amenity migrants.

To move from the 2002 snapshot provided by the Base Industry Group Analysis to an analysis of employment trends during the 1990s it is useful to look at Bureau of Economic Analysis (BEA) employment data in key sectors. Figure WR-13 provides a starting point for such analysis focusing on sectors that are relevant to the dominant economic influence of the Amenity Migration trend in Archuleta County.

Figure WR-13



As Figure WR-13 indicates Annual Net Migration into Archuleta County climbed to a peak in 1999 of nearly 700 people. It is also interesting to note that construction jobs which had been well below the rate of migration jumped in the mid-1990s to mimic migration levels. This indicates that construction services that were previously being imported from La Plata County took root in local Archuleta County businesses. Real Estate employment also began to rise in response to migration rates between 1996 and 1997. Employment in Eating and Drinking places also increased in proportion to migration, while employment in lodging places actually declined during this period.

As Table WR-24 below indicates, the 85% growth between 1991-2000 was accompanied by growth in the construction (639% for the decade) Finance, Insurance and Real Estate (209% for the decade) eating and drinking places (130% for the decade) and stagnation in the lodging sector (-10% for the decade) indicates that economic growth in the 1990s was driven by “amenity migration” while “tourism” remained relatively flat.

Archuleta County Employment Trends in Major Sectors

Having focused on indicators of tourism and amenity growth, it is worth evaluating employment trends in the economy as a whole starting with the primary SIC (Standard Industrial Classification) sectors. In 2001 the Bureau of Economic Analysis switched from the SIC to the NAICS classification which uses a different set of accounts. Therefore the trend analysis is focused on 1991-2000 to allow for consistent analysis based on SIC classifications:

Table WR-24
Archuleta County Employment by Major SIC Category 1991-2000

Economic Sector	1991	2000	Increase 91-2000	% Change 91-00	% Total 2000
Population	5,345	9,898	4,553	85%	
Total Employment	2,460	4,768	2,308	94%	
Agriculture	258	290	32	12%	6%
Mining and Extractive Industries	24	47	23	96%	1%
Construction	89	658	569	639%	14%
Manufacturing	67	109	42	63%	2%
Transportation Communications Utilities	77	97	20	26%	2%
Wholesale and Retail Trade	514	1,143	629	122%	24%
Finance, Insurance and Real Estate	248	667	419	169%	14%
Services	756	1,171	415	55%	25%
Government	428	586	158	37%	12%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Archuleta County Construction Employment Trends 1991-2000

The highlighted sectors in Table WR-24 are those that grew from 1991-2000 at a faster rate than total employment (94%). Construction, which increased by 569 jobs, showed the highest percentage growth (638%) primarily due to the amenity migration trend described above. Table WR-25 shows relatively even rates of growth in the general contractor and trade sub-sectors, along with the establishment of heavy construction (primarily earth moving) jobs.

Table WR-25
Archuleta County Construction Employment Trends 1991-2000

Economic Sector	1991	2000	Increase 91-2000	% Change 91-2000	% Total 2000
Construction	89	658	569	639%	100%
Building Construction	37	252	215	581%	38%
Maintenance and Special Trades	45	324	279	620%	49%
Heavy Construction, Other	6	82	76	1267%	12%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Archuleta County Finance, Insurance, Real Estate Employment Trends 1991-2000

The second highest percentage increase in jobs (169%) was the 419 jobs in Finance, Insurance and Real Estate, primarily in Real Estate, as reflected in Table WR-26 below:

Table WR-26
Archuleta County Finance, Insurance, Real Estate Employment Trends 1991-2000

Economic Sector	1991	2000	Increase 91-2000	% Change 91-2000	% Total 2000
Finance, Insurance and Real Estate	248	667	419	169%	100%
Real Estate	176	544	368	209%	82%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Archuleta County Wholesale and Retail Trade Sector Employment Trends 1991-2000:

Another sector which saw above average job growth was Wholesale and Retail Trade which is

presented in Table WR-27. This sector saw the largest numerical increase in jobs at 628 which represents a 122% increase. The biggest sub-sector within which this increase occurred was 424 new jobs in eating and drinking places. The largest percentage increase was in the Building Materials, Hardware and Garden sub-sector which grew by 300% or 126 jobs. A very visible manifestation of growth in the retail sector is all of the relatively new commercial development in the Pagosa Lakes area that was annexed into the City of Pagosa Springs.

**Table WR-27
Archuleta County Wholesale and Retail Trade Sector Employment Trends 1991-2000**

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total 2000
Wholesale and Retail Trade	514	1,143	629	122%	100%
Wholesale Trade	17	33	16	94%	3%
Building Materials, Hardware, Garden	42	168	126	300%	15%
Furniture, Apparel and General Merch.	33	53	20	61%	5%
Food Stores	*87	154	67	77%	13%
Automotive Dealers and Service Stat	*51	97	46	90%	8%
Eating and Drinking Places	184	424	240	130%	37%
Miscellaneous Retail Trade	104	213	109	105%	19%

*1994-00
*1994-00

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Archuleta County Services Sector Employment Trends 1991-2000

Job growth in the services sector of 55% was a little over half of the rate of job growth overall. The other trend of note is that the Services sub-sectors that did grow were those that fit with the amenity migration sensitive sectors such as amusement and recreation, health services and engineering services (probably driven by the growth in construction).

**Table WR-28
Archuleta County Services Sector Employment Trends 1991-2000**

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total 2000
Services	756	1,171	415	55%	100%
Lodging Places	324	293	-31	-10%	25%
Business Services	72	106	34	47%	9%
Repair Services, parking	*16	83	67	419%	7%
Amusement and Recreation Services	*29	121	92	317%	10%
Health Services	28	108	80	286%	9%
Legal Services	14	13	-1	-7%	1%
Engineering and Management Services	5	37	32	640%	3%
Private Household Services	199	202	3	2%	17%

*1992
*1994

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

Archuleta County Mining and Extractive Industries (includes oil and gas):

The 23 new jobs in the extractive industries most likely involved the establishment of local gravel production operations in Archuleta County in support of construction growth. However, there could be future growth in the oil and gas sector based on proposed coal-bed methane development under study in the San Juan Basin.

Table WR-29

Archuleta County Employment Trends: Mining and Extractive Industries 1991-2000

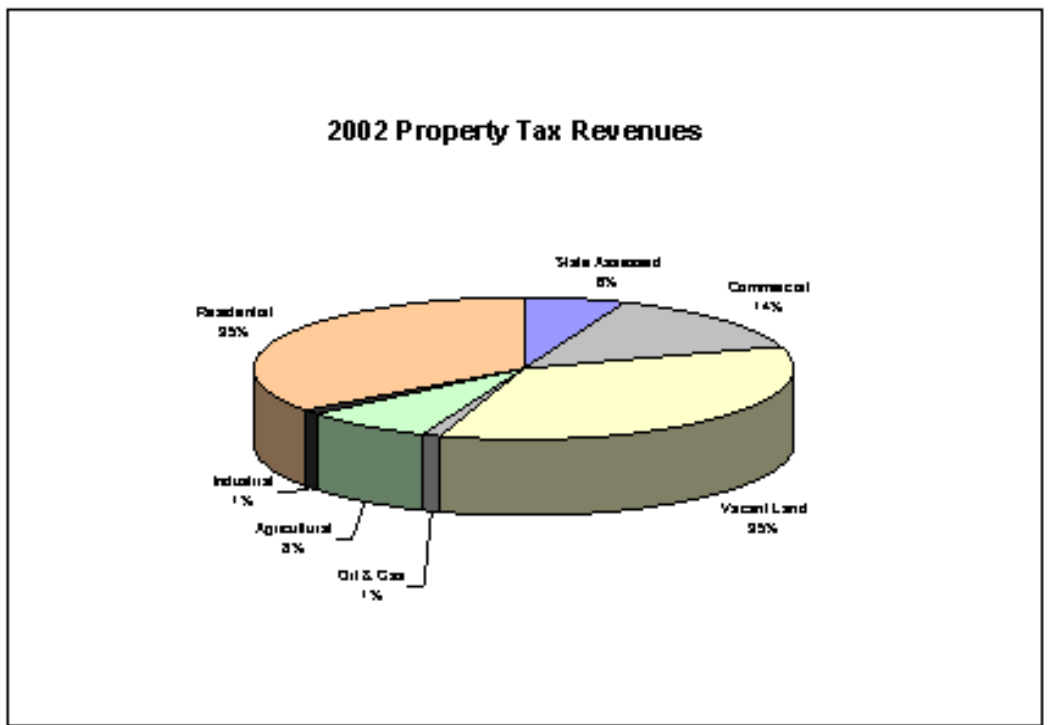
Economic Sector	1991	2000	Decrease 1991-2000	% Total 2000	% Change 91-00
Mining and Extractive Industries	24	47	23	96%	100%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

In contrast to La Plata and Montezuma Counties, oil and gas represents a very small portion (1%) of the local property tax revenues.

Figure WR-14

Archuleta County 2002 Property Tax Revenue Sources



Source: Region 9 Comprehensive Economic Development Strategy, March 2004

1991-2000 Employment Trends Reinforce Influence of Amenity Migration

A sectors and sub-sectors that show substantial growth in Tables WR-24 through WR-29 above all reinforce the economic dominance of sustained growth from amenity migration in Archuleta County. One of the biggest symptoms of this high rate of growth and economic change are the dramatic changes starting to occur in the agricultural economy.

Archuleta County: Agricultural Products and Services

Table WR-30 shows 12% growth in agricultural employment between 1991 and 2000.

**Table WR-30
Archuleta County Agricultural Employment Trends Comparing 1991-2000**

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total
Agriculture	258	290	32	12%	100%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

In 2001 the Region 9 Economic Development District worked with the Colorado Demographer to assemble a more complete picture of the contribution of agriculture which is presented in Table WR-31 below, which in addition to crops and livestock jobs (248) includes veterinary services (31), landscaping (20 jobs), and 4 agricultural processing jobs. The indication in Table WR-31 is a net loss of \$1 million in what is primarily livestock income.

**Table WR-31
Archuleta County Agribusiness Components 2001**

Agribusiness 2001	Employment	Income
Crops and Livestock	248	\$ (1,076)
Veterinary Services	31	\$ 682
Landscaping	20	\$ 494
Manufacturing-Farm Equipment	1	\$ 64
Wholesale Trade - Agricultural Processing	4	\$ 104
Total	304	\$ 268

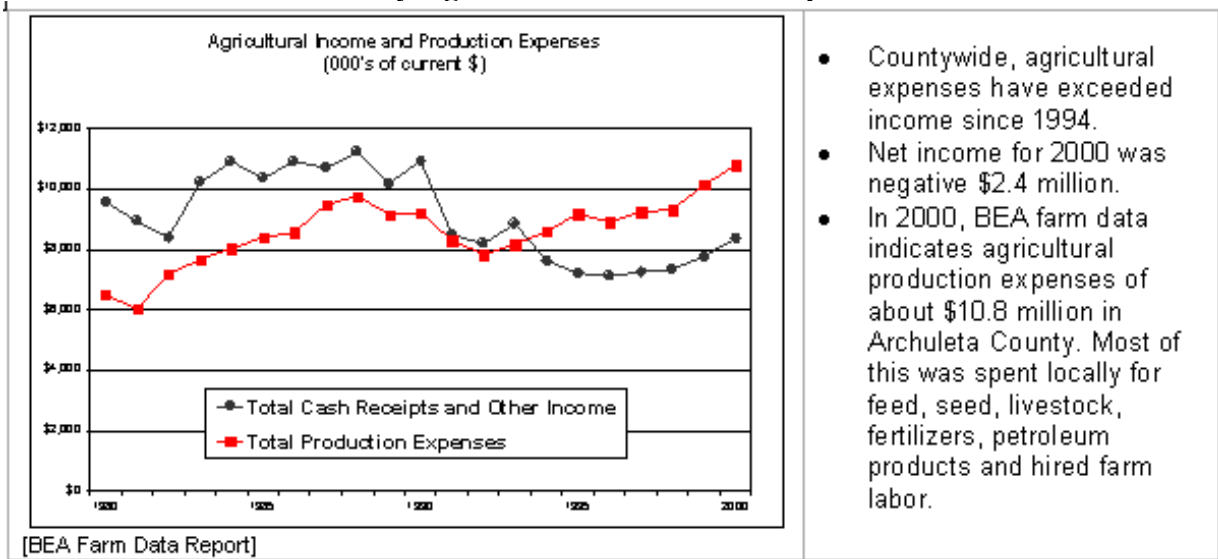
Income is in \$000

Source: Region 9 Comprehensive Economic Development Strategy, Update 2004

The challenges faced by farmers and ranchers are reflected in a long term trend of input costs rising much faster than revenues as reflected in the BEA Farm Data report presented below in Table WR-15. The negative net income picture presented in this graph is compounded by weather conditions, with 2002 the third drought year running. In spite of these statistics, a social and economic assessment cannot ignore the incredible resilience of the agricultural sector in Southwest Colorado.

Some key factors that contribute to this resilience are presented above in the La Plata County agricultural analysis on page 17. It should also be pointed out that in spite of the negative net income; \$10.2 million was spent in production expenses. Some of these expenditures went directly into the Archuleta County economy, with much of the balance going into the regional economy. It is also likely that some of the added employment indicated in Table WR-30 involves people that don't rely on ranching as a livelihood, but as a lifestyle amenity.

Figure WR-15
Archuleta County Agricultural Income and Expenses: 1980-2000



Source: Region 9 Comprehensive Economic Development Strategy, Update 2004

As in La Plata County, one of the challenges relative to growth, identified in the 1995 ranch family focus groups is the subdivision of privately owned mid-elevation “transitional pasture”, and reduced stocking levels on ranch lands with non-agriculturally oriented owners. The availability and allocation of this scarce commodity is an important issue to the future of ranching.

Public land grazing permits play a key role in the on-going viability of many ranches. Grazing on privately owned land in the valley is for some ranchers, part of a rotation that involves summer grazing on the National Forest land and winter/spring grazing on lower elevation BLM land. With increasing pressure to improve public rangeland conditions, ranchers are challenged with practices that improve land stewardship within the parameters of economic viability. The viability of public land grazing will be enhanced to the extent that support services and informal networks that serve ranchers can provide good information to the ranching community about developing the stewardship/economic viability balance. Networks and support services can also play an important role in providing information to the general public about the benefits, challenges, and stewardship commitments of ranchers.

Archuleta County Manufacturing Employment (including wood products)

As Table WR-32 indicates most of the jobs gained in the Manufacturing Sector are in publishing and printing. With the closure of the last major sawmill during the 1990s employment in the wood products sector declined by 90%. This decline limits the private sector infrastructure for fuel hazard mitigation that has become a priority since 2000.

Table WR-32
Archuleta County Employment in Primary Manufacturing Sectors 1991-2000

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total 2000
Manufacturing	67	109	42	63%	100%
Lumber & Wood Products	*71	7	-64	-90%	6%
Printing and Publishing	15	47	32	213%	43%

*1992

Colo. Demography Section Website <http://www.dola.state.co.us/Demog/Economy.htm>

Archuleta County Government Employment

As Figure WR-33 indicates, Local Government, which makes up 80% of government employment, also showed the largest employment gain (136 jobs) between 1991 and 2000. This is reflective of the increasing demand for

services resulting from the growth during the 1990s. There were also modest gains in employment in Federal and State government at a time when Federal employment declined in La Plata and Montezuma Counties.

Table WR-33
Archuleta County Employment Trends: Government

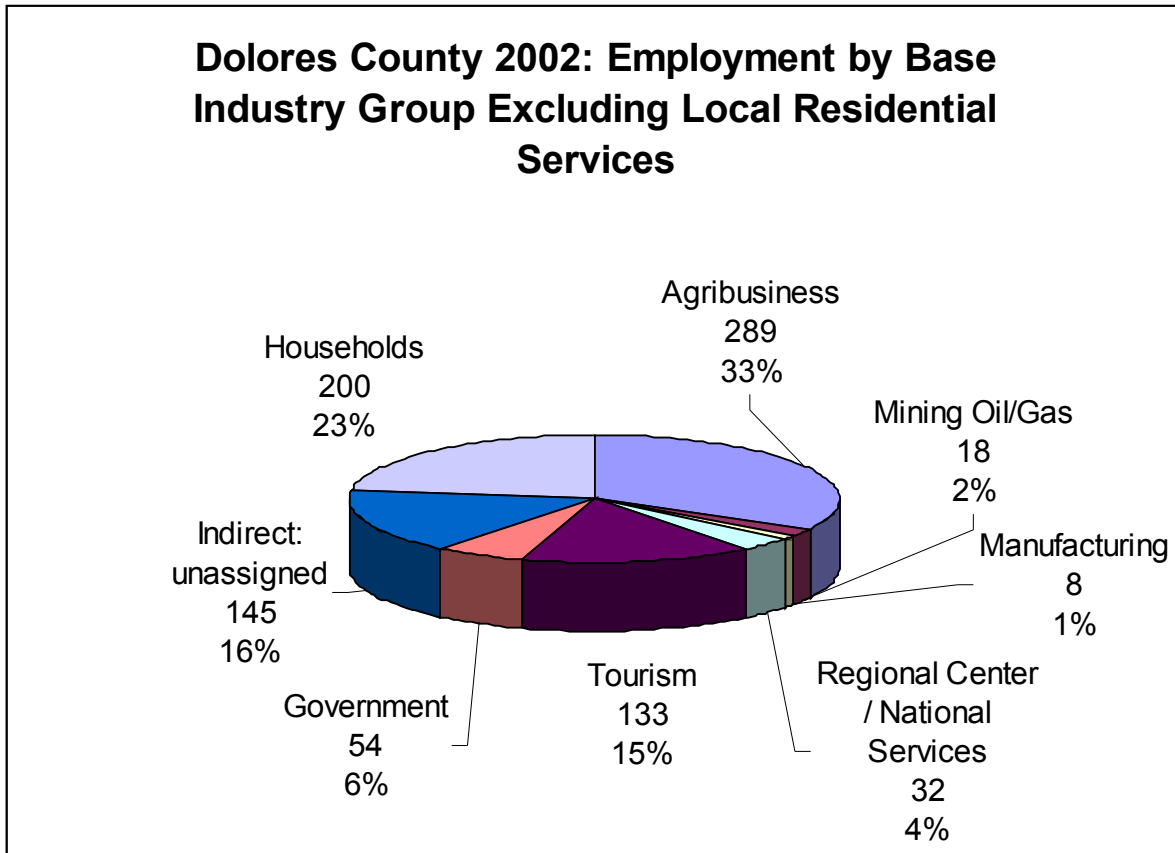
Economic Sector	1991	2000	Increase 99-2000	% Change 91-2000	% Total 2000
Government	428	586	158	37%	100%
Federal Government, Civilian	45	56	11	24%	10%
Military	22	29	7	32%	5%
State Government	29	33	4	14%	6%
Local Government	332	468	136	41%	80%

Colo. Demography Section Website <http://www.dola.state.co.us/Demog/Economy.htm>

Dolores County Base Industry and Trend Analysis

The Economic Base Analysis looks at each SIC sector to determine which sectors, and what proportion of each sector are exports. Base industries include both traditional exported products (e.g. crops and cattle) as well industries that have an “export effect” in that they bring new dollars into the local economy (e.g. tourism, regional trade, social security payments to retirees). These export sectors are clustered into a set of “Base Industry Groups.” The “Dolores County 2002 Employment and Income Summary by Base Industry Group” appears as Table WR-16 on the next page. Figure WR-16 below presents employment by Base Industry Group.

Figure WR-16



As Figure WR 16 and Table WR 34 indicate 33% of the base industry employment in Dolores County is in agribusiness, followed by households which primarily results from expenditure of outside dollars by retirees and commuters who work outside of Dolores County. Tourism accounts for 15% of base industry employment which is primarily second home construction and resorts. Dolores County’s agricultural base is on the mesas in the West part of the County, while the second home/resort component of the economy is in the mountainous eastern part of the County.

**Table WR-34
Dolores County 2002 Employment and Income Summary
by Base Industry Group**

Basic Industry Groups	Jobs	% of Basic	Income (\$000)	% of Basic	Average Wage
Agribusiness	289	32.2	\$5,506	23.7	\$19,041
Agricultural Production	221	24.7	\$3,081	13.3	\$13,916
Agricultural Processing	46	5.1	\$1,851	8.0	\$40,451
Agricultural Inputs	22	2.5	\$573	2.5	\$26,106
Mining	18	2.0	\$1,047	4.5	\$57,814
Manufacturing	8	0.9	\$234	1.0	\$29,202
Regional Center / National Services	32	3.6	\$1,446	6.2	\$44,627
Communications	0	0.0	\$0	0.0	
Construction	25	2.8	\$679	2.9	
Finance, Insurance and Real Estate	0	0.0	\$0	0.0	
Trade and Transportation	0	0.0	\$68	0.3	
Professional and Business Services	7	0.8	\$699	3.0	
Private Education and Health Services	0	0.0	\$0	0.0	
Tourism	133	14.8	\$1,521	6.6	\$11,448
Resorts	32	3.6	\$757	3.3	
Second Homes	93	10.3	\$503	2.2	
Tourist Services	5	0.6	\$233	1.0	
Tourism Transportation	2	0.3	\$28	0.1	
Government	54	6.0	\$1,239	5.3	\$22,893
Indirect: unassigned	145	16.2	\$4,189	18.1	\$28,798
Investment Construction	0	0.0	\$0	0.0	
Households	200	22.3	\$7,316	31.5	\$36,528
Retirees	114	12.7	\$4,174	18.0	
Commuters	37	4.1	\$1,336	5.8	
Households with public assistance income (excluding retirees)	24	2.6	\$861	3.7	
Households with dividends, interest and rental income (excluding retirees)	26	2.9	\$945	4.1	
Total Basic	897	100	\$23,193	100	\$25,854
Worker Local Res. Services	33		\$1,217		
Total All Industries	930		\$27,460		\$25,854
Total Personal Income			\$45,314		
Ratio: Total / Basic	1.04		1.18		

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/leifa1.cfm>

Tourism and Amenity Migration Driven Employment in Dolores County

When the base industry tourism employment is broken out as in Figure WR-17, 70% of the jobs are supported by second home construction, and 24% are supported by resorts and hotels. This activity is primarily in the eastern part of Dolores County on the West Fork of the Dolores River and its tributaries. These resort developments and second homes are geared to seclusion, and limited clientele, for example the redevelopment of the Dunton Hot Springs into an exclusive rustic resort. The value placed on seclusion is reflected in the fact that West Fork residents fought and stopped completion of the paving of the West Fork Road and the return of allocated funds to the Federal Treasury.

Figure WR-17

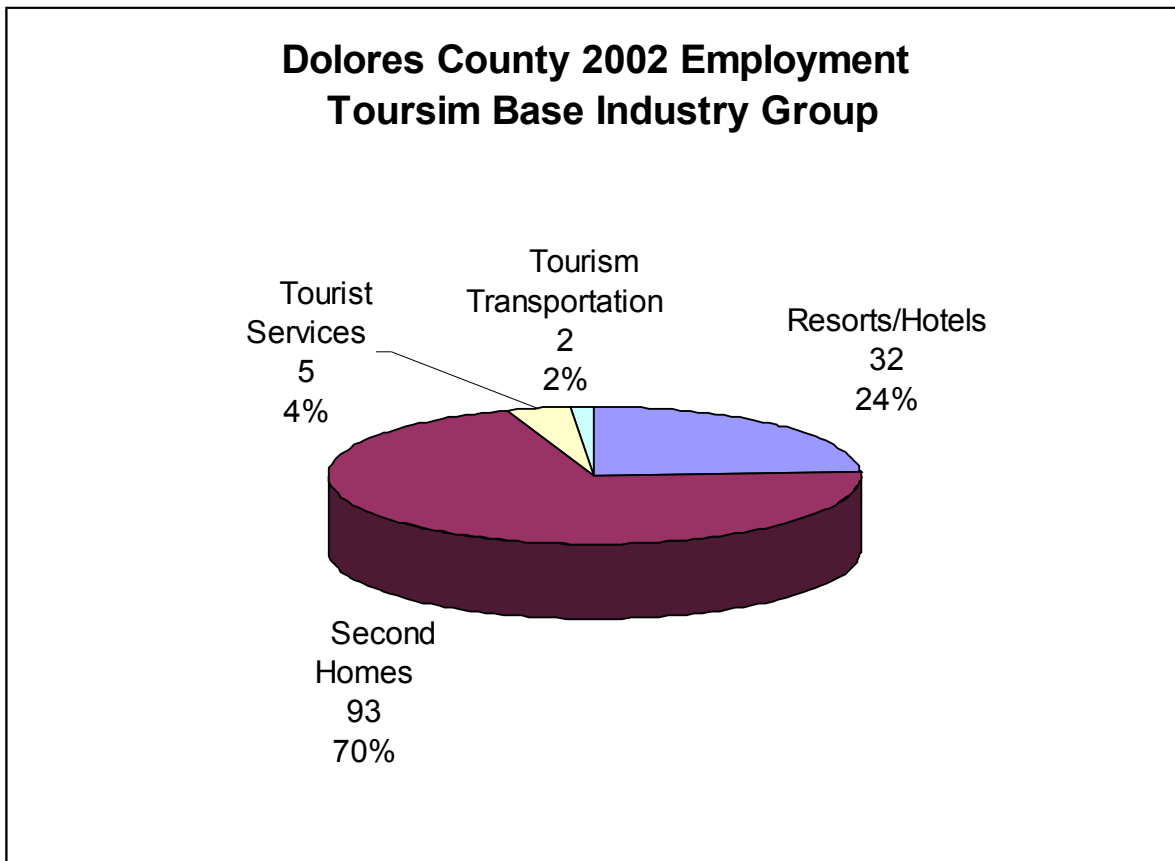
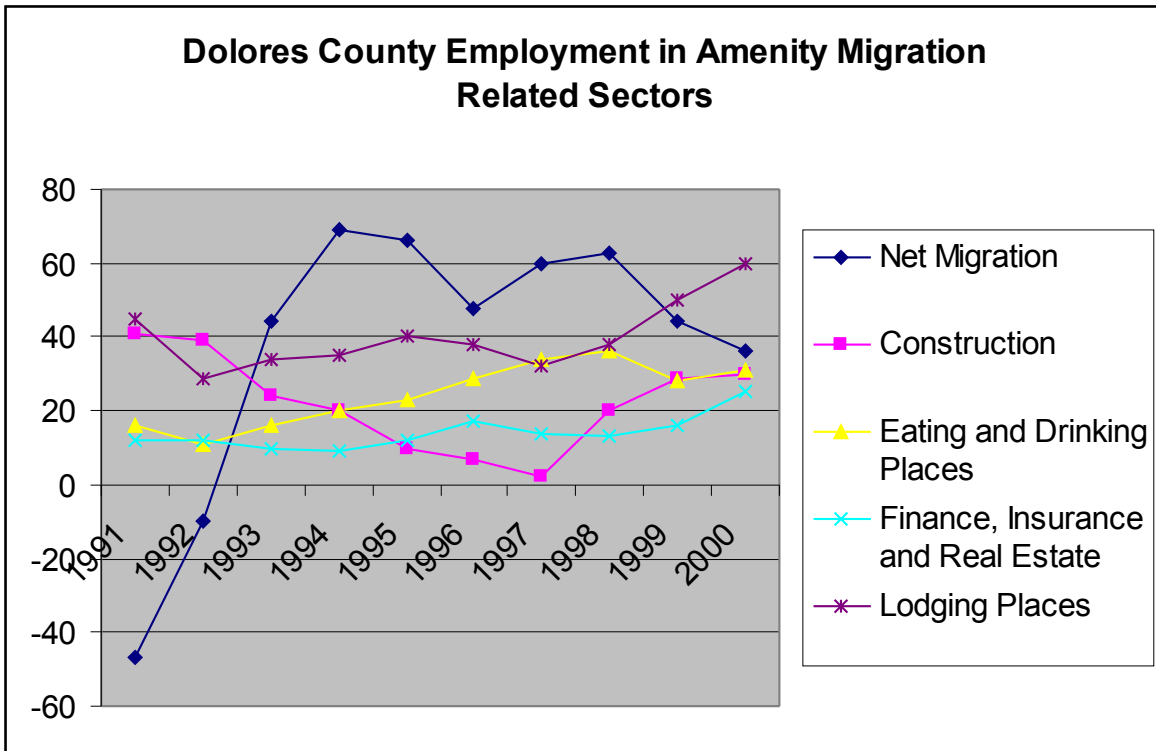


Figure WR-18



As Figure WR-18 indicates, net migration went from negative 40 in 1991 to the 40-60+ range in the period from 1994 on. This growth involves the gradual subdivision and residential development on the mesas in Western Dolores County encouraged in part by to provision of rural water to areas where water hauling had previously been required. This was coupled with higher end development in the West Fork area which again is reflected in a growing number of jobs in the lodging sector which includes resorts.

Table WR-35
Dolores County Employment by Major SIC Category 1991-2000

Economic Sector	1991	2000	Increase 91-2000	% Change 91-00	% Total 2000
Population	1,437	1,844	407	28%	
Total Employment	735	784	49	7%	100%
Agriculture	197	259	62	31%	33%
Mining and Extractive Industries	21	37	16	76%	5%
Construction	41	30	-11	-27%	4%
Manufacturing	0	8	8		1%
Transportation Communications Utilities	133	28	-105	-79%	4%
Wholesale and Retail Trade	106	133	27	25%	17%
Finance, Insurance and Real Estate	12	25	13	108%	3%
Services	45	60	15	33%	8%
Government	180	204	24	13%	26%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

As WR-35 indicates, overall employment growth in Dolores County was only 7% as compared to population growth of 28%. This is most likely and indication that population growth involved

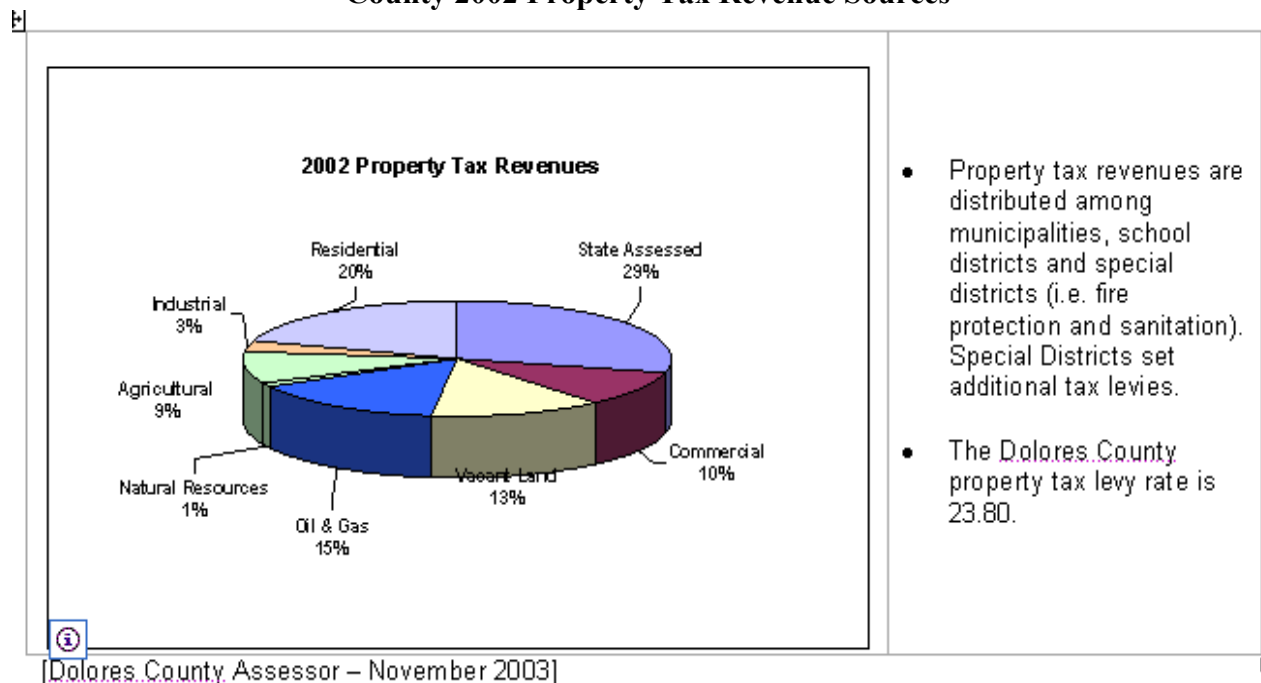
primarily people that were retired or living in Dolores County and working in another County.

The largest growth in the number of jobs was Agriculture which added 62 jobs (31% growth). There was growth of 27 jobs in Wholesale and Retail Trade (half which were in Eating and Drinking Places), 24 jobs in government (10 Federal and 15 Local). The 108% growth rate in the Finance, Insurance and Real Estate reflects opportunities in these sectors to serve the new migrants.

Other sectors that showed job growth were Mining and Extractive Industries (16 jobs or 76%) most likely due to continued CO2 production and resumption of natural gas drilling, and an increase of 15 jobs (33%) in the services sector.

As figure WR-18 below indicates, Dolores County's dependence on oil and gas property is only 15%, a good deal lower than Montezuma or La Plata County.

Figure WR-18
County 2002 Property Tax Revenue Sources



Source: Region 9 Comprehensive Economic Development Strategy, March 2004

Dolores County: Agricultural Products and Services

Table WR-30 shows 12% growth in agricultural employment between 1991 and 2000.

**Table WR-30
Dolores County Agricultural Employment Trends Comparing 1991-2000**

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total
Agriculture	197	259	62	32%	100%

Source: Colorado Demography Section at <http://dola.colorado.gov/demog/empgcod1.cfm>

In 2001 the Region 9 Economic Development District worked with the Colorado Demographer to assemble a more complete picture of the contribution of agriculture which is presented in Table WR-31 below, which in addition to crops and livestock jobs (225) includes farm services (33) landscaping (9 jobs), 11 warehousing jobs and 14 agricultural processing jobs. This brings total agribusiness employment to 300 jobs.

**Table WR-31
Dolores County Agribusiness Components 2001**

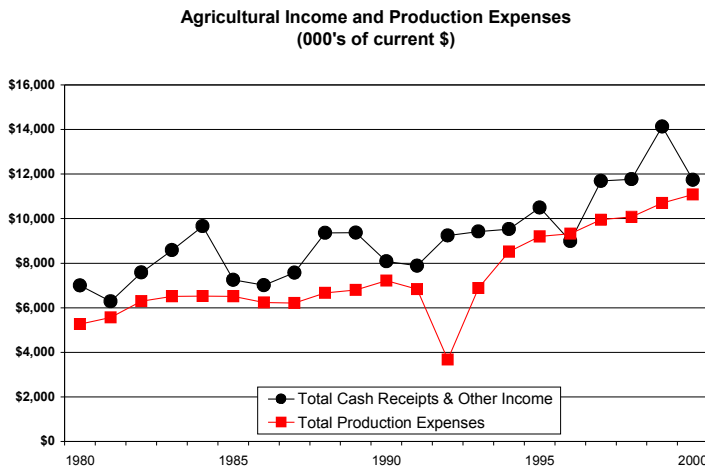
Agribusiness 2001	Employment	Income
Crops and Livestock	225	\$ 1,021
Farm Services	33	\$ 473
Landscaping	9	\$ 79
Motor Freight and Warehousing	11	\$ 2,095
Wholesale Trade - Agricultural Inputs	7	\$ 266
Wholesale Trade - Agricultural Processing	14	\$ 464
Finance	1	\$ 22
Total	300	\$ 4,420

Income is in \$000

- Efforts are being made to refine our view of the contributions of agriculture to the local economy by looking at jobs in other sectors that support, or are supported by, agriculture. This is known as agribusiness.
- There are un-quantified benefits from agriculture such as open space, wildlife habitat, the attractiveness of a rural landscape, and lower service costs to county government from land remaining in agricultural production.

Figure W-R 19 below tracks agricultural income and production expenses over a 20 year period between 1980 and 2000. With the exception of a drought period during the mid-1990s Dolores County showed net positive income over this entire period. This is in sharp contrast to Montezuma and Archuleta Counties which showed negative net income during much of the late 1990s. A significant factor in this growth in income is the added production under irrigation from the Dolores Project in what had previously been a non-irrigated agricultural economy.

Figure WR-19
Dolores County Agricultural Income and Expenses: 1980-2000



- Dolores is the only county in Region 9 that has consistently shown positive net agricultural income since 1980 ('96' was a bad year)
- There is often a very slim margin between production expenses and income, in 2000 this was only \$655,000 in Dolores County.
- Much of the \$11.4 million in production expenses is spent locally.
- A full picture of the Dolores County agricultural economy would need to include NW Montezuma County.

[BEA Farm Data Report 2000]

Source: Region 9 Comprehensive Economic Development Strategy, Update 2003

Figure WR-32 indicates a sharp decrease in Motor Freight and Warehousing. This is a reflection of most of the major wheat and dry bean warehouses and cleaning facilities going out of business. As indicated above, the decline in wheat and bean production and processing has been made up for by increased production under irrigation, particularly alfalfa and other hay products.

Table WR-32
Dolores County Employment in Transportation Sectors 1991-2000

Economic Sector	1991	2000	Increase 99-2000	% Change 91-00	% Total 2000
Transportation, Communications and Utilities	133	28	-105	-79%	100%
Motor Freight and Warehousing	129	23	-106	-82%	82%

Colo. Demography Section Website <http://www.dola.state.co.us/Demog/Economy.htm>

Dolores County Government Employment

Dolores County also bucked the regional trend in government employment with an increase in federal employment and a minor decrease in state employment.

Table WR-33
Dolores County Employment Trends: Government

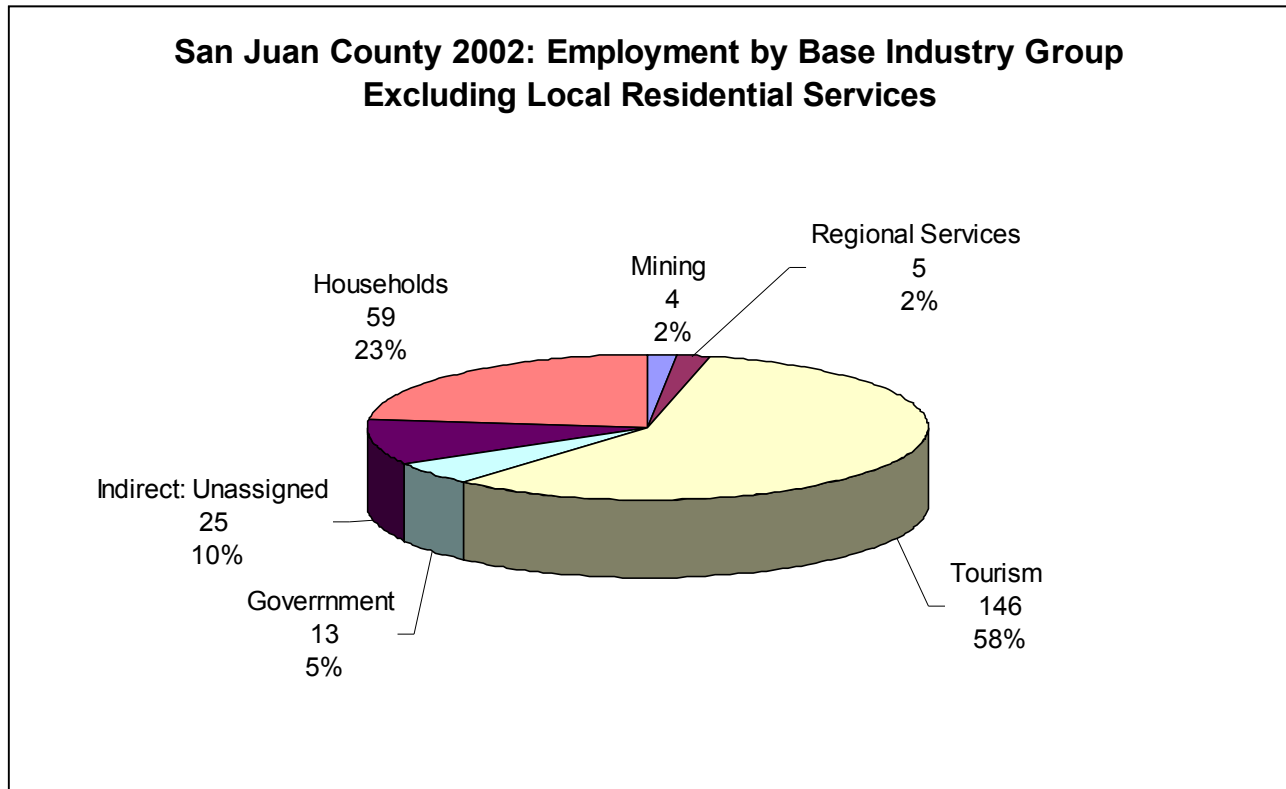
Economic Sector	1991	2000	Increase 99-2000	% Change 91-2000	% Total 2000
Government	180	204	24	13%	100%
Federal Government, Civilian	10	21	11	110%	10%
Military	6	6	0	0%	3%
State Government	8	6	-2	-25%	3%
Local Government	156	171	15	10%	84%

Colo. Demography Section Website <http://www.dola.state.co.us/Demog/Economy.htm>

San Juan County Base Industry and Trend Analysis

The Economic Base Analysis looks at each SIC sector to determine which sectors, and what proportion of each sector are exports. Base industries include both traditional exported products (e.g. crops and cattle) as well industries that have an “export effect” in that they bring new dollars into the local economy (e.g. tourism, regional trade, social security payments to retirees). These export sectors are clustered into a set of “Base Industry Groups.” The “San Juan County 2002 Employment and Income Summary by Base Industry Group” appears as Table WR-34 on the next page. Figure WR-21 below presents employment by Base Industry Group.

Figure WR-21



As Figure WR 21 and WR 34 indicate 58% of the direct base employment in San Juan County is in the Tourism sector with another 23% in Households, representing primarily funds coming in to retirees, i.e. over 70% of base industry employment in the San Juan County economy come from tourism and retirees.

Table WR 34
San Juan County 2002 Employment and Income Summary
by Base Industry Group

Basic Industry Groups	Jobs	% of Basic	Income (\$000)	% of Basic	Average Wage
Agribusiness	0	0	\$10.05	0.14	
Agricultural Production	0	0	\$0.00	0	
Agricultural Processing	0	0	\$9.00	0.12	
Agricultural Inputs	0	0	\$1.05	0.01	
Mining	4	1.72	\$133.61	1.85	
Manufacturing	0	0	\$0.00	0	
Regional Center / National Services	5	1.98	\$234.13	3.23	
Communications	0	0	\$0.00	0	
Construction	5	1.83	\$227.60	3.14	
Finance, Insurance and Real Estate	0	0.15	\$6.03	0.08	
Trade and Transportation	0	0	\$0.00	0	
Professional and Business Services	0	0	\$0.50	0.01	
Private Education and Health Services	0	0	\$0.00	0	
Tourism	146	57.18	\$3,761.97	51.97	
Resorts	35	13.69	\$914.32	12.63	
Second Homes	65	25.4	\$1,766.90	24.41	
Tourist Services	40	15.77	\$919.36	12.7	
Tourism Transportation	6	2.31	\$161.39	2.23	
Government	13	5.08	\$468.06	6.47	
Indirect: unassigned	25	9.83	\$860.45	11.89	
Investment Construction	0	0	\$0.00	0	
Households	59	23	\$1,614.48	22.3	
Retirees	44	17.1	\$1,200.48	16.58	
Commuters	-9	-3.42	(\$239.82)	-3.31	
Households with public assistance income (excluding retirees)	11	4.18	\$293.39	4.05	
Households with dividends, interest and rental income (excluding retirees)	13	5.13	\$360.44	4.98	
Total Basic	119		\$3,263.94		
Worker Local Res. Services	374		\$9,678.03		
Total All Industries			\$15,115.57		
Total Personal Income	1.46		1.34		
Ratio: Total / Basic					

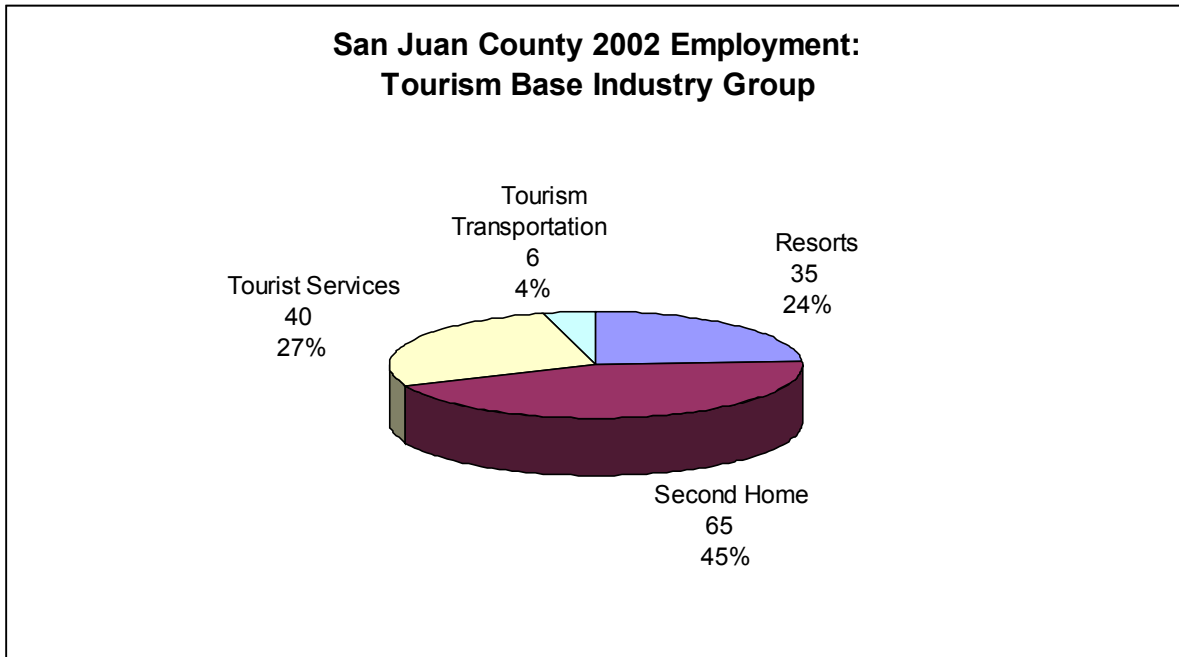
Source: Colorado Demography Section at <http://dola.colorado.gov/demog/leifa1.cfm>

As indicated in Figure WR 22, 27% of tourism base industry employment is in tourist services reflecting the retail jobs supported by visitors arriving on the train and highway tourists. The 24% of the employment in this sector attributed to Resorts, is reflective of a growing number of Silverton residents that commute to work at Durango Mountain Resort as well as the gradual re-emergence of lodging services in Silverton. The 6 jobs in the Tourism Transportation Sector most like reflects businesses offering motorized tours of the mining road loops around Silverton. This number is probably low, and is growing in the post 2002 period as transportation is being sold into remote winter areas for a from of back country recreation known as “extreme skiing.”

It is noteworthy that 45% of the tourism related employment involves the construction and support of second homes. Since the mines closed for the last time in the early 1990s, many people reside in Silverton on a seasonal basis. Silverton has reached the point where the existing housing stock has been bought up and remodeled and

new construction is occurring, both in town and on some of the many patented mining claims in and around Silverton. Property values have been steadily rising and the second home trend, which has been primarily for summer use, will likely accelerate and get some additional stimulus as Silverton continues to develop winter recreation options.

Figure WR-22



San Juan County Employment Trends

The number of businesses and the number of employees in each of the SIC categories in San Juan County is so limited that data in virtually every category is suppressed to conform with confidentiality rules. This allows for very little quantitative analysis beyond what is presented above in the base industry analysis.

One exception is mining which supported 152 jobs in 1991 and 0 jobs in 2000. These figures are a key element in the transformation that Silverton has been undergoing since the early 1990s. Prior to the closure of the last of the mines in the early 1990s, mining jobs provided a year round, high wage employment which in turn provided some measure of stability for local businesses.

Once the mines closed, most businesses became much more reliant on tourism, which was predominately stimulated by the daily arrival of the narrow gauge train from Durango. As a result many businesses close and business owners and their families leave once the train stops running.

From the time of the Sunnyside Mine closing in 1991, there was talk about the potential to create a year round attraction to capitalize on challenging ski opportunities in the Mountains around Silverton. This vision is coming to fruition with the development of Silverton Mountain Ski Area which offers unique and challenging opportunities known as Extreme Skiing. A recent decision on the part of the BLM increased the Silverton Mountain capacity from 80 skiers per day to as many as 475, which will eventually support winter employment and business opportunities that could help to expand the current 600 year round residential population, which is expected to double in the foreseeable future. Another advance is the opening of Kendall Mountain to more localized family skiing which is an amenity for year round family residents. (Durango Herald, July 30, 2005)



















In addition to expanded economic opportunities related to skiing, Silverton is developing other opportunities to build on its mining heritage and high altitude setting. Silverton has long been the home of an avalanche school. Efforts to position Silverton as a center for mine reclamation and high altitude ecological studies resulted in the formation of the Mountain Studies Institute (MSI), a non-profit corporation focused on research and education in

high altitude physical and social ecology. Silverton has also established an annual music festival which is drawing increasing numbers each summer.



















As San Juan County gradually builds diversity back in to it's economy the role of construction and second home development (described above in the base analysis) has become an increasingly important economic driver. One concern that arises from this trend is the impact of escalating housing costs for the working Silverton residents that have held on through thick and thin. Property values have been rising steadily based on these trends. One indicator of increasing housing costs is that assessed valuation in San Juan County increased from \$28.6 million in 2003 to \$40.5 million in July of 2005, an increase of over 40% increase in two years. To begin meeting the affordable housing challenge, Colorado Housing Inc. plans to add 6 houses and 24 affordable apartments to the existing 12 self-help housing units on Green Street. An additional 20 acres on Highway 550 has been purchased for workforce housing. ("Silverton Turns the Corner" Durango Herald, July 30, 2005).

Another major accomplishment on the part of the community is the historic renovation of the Town Hall after it was gutted by fire. The renovation of the Town Hall, is reflective of the resilience of the Silverton community. Silverton's economic future is geared to applying this resilience to making a virtue of it's high altitude setting and heritage. Even the closure of the mines has leveraged active water restoration efforts as well as active participation in regional efforts to preserve and in some cases acquire historic mining sites, accessible by the road infrastructure developed during the mining era. This combination of high altitude recreation and mining heritage provide an expanded foundation for San Juan County's economic future.

San Juan Plan Revision Applications: Work Routines

-   Virtually every sector of the economy in Southwest Colorado is in some way involves the public lands as a source of raw materials, water, scenery, recreational opportunities and the enjoyment of nature and solitude.
-   The economic analysis presented under the Work Routines descriptor reinforces the critical dynamic between renewable and non-renewable commodity uses, the exponential expansion of recreational uses, and the continuing evolution of economic activity related to tourism and amenity migration.
-   As Community Study Groups have worked their way across all of the landscapes on each of the three districts this dynamic has been expressed in the placement and articulation of uses, outstanding features, concerns and opportunities. The same dynamic is obvious in reviewing the desired future statements produced by each Study Group.
-   Traditional users don't want to be crowded out of the public lands and the viability of their livelihood. Recreational users don't want to see the outstanding features that draw them to the public lands degraded.
-   It is not a simple matter of expanding recreational uses, and amenity based economies prevailing over traditional uses.
-   There is recognition that the remaining "timber operators" have an important role to play in the widely agreed upon need for forest restoration, forest health, and fire hazard reduction, and that the economic viability of these businesses is a concern.
-   There is recognition that the viability of the remaining ranches is a critical component in the privately owned open spaces, wildlife habitat, and riparian corridors, and that the loss of ranches hastens the fragmentation and development of the sensitive lands within and adjacent to the public land boundary.
-   There is recognition that much of the infrastructure that is being used and adapted by recreational and wildlife populations such as roads, trails and ponds were originally developed and in many cases continue to be maintained by traditional commodity users.
-   There is recognition that recreation itself can become an extractive industry with substantial impacts on the natural landscape and many challenges with regard to the stability of businesses and recreation

based jobs.

-    While there appears to be acceptance of continued commodity uses predicated on continued improvement in stewardship practices, oil and gas development tends to be much more controversial. While the contribution of oil and gas to the local tax base is generally understood, there is a great deal of controversy on the Columbine District/La Plata HRU where coal bed methane is impacting privately owned land, and the execution of large scale leases in valued areas such as the HDs landscape have generated substantial and persistent opposition.
-    On the Dolores District/Montelores HRU CO2 development generates minimal controversy as it is mostly on public land and private surface owners are receiving royalties. However, on the BLM lands to the north drilling in areas such as Dry Creek Basin are prompting concern with regard to the wildlife habitat, grazing, and solitude that characterize the use of these areas. There is also concern about the possibility of renewed uranium mining.
-    While recreational conflicts will be discussed under the Recreational Activities Cultural Descriptor, an economic dimension of this issue has to do with the relative priorities placed on commercial and non-commercial recreation.
-    Virtually all of the economic uses in the region, on an off public lands, in Southwest Colorado depend on water which in turn depends on the health of the watersheds which originate on the Public Lands.
-    While the public land agencies employ a significant number of people the demands on these agencies are increasing at a time when budgets are static or declining. For the public land agencies to do more with less, communities will need to provide stewardship functions that have historically been performed by the agencies. The agencies will need to target their resources to maximize the effectiveness of voluntary contributions.
-    Agency/community relations will need to be driven by collaboration and cooperation to avoid wasting precious resources in conflict.