FORTY-THIRD ANNUAL

COLORADO BUSINESS ECONOMIC OUTLOOK

2008

Sponsored by the University of Colorado at Boulder, Leeds School of Business, and Compass Bank

Compass Bank

University of Colorado at Boulder
Colorado LEEDS
School of Business
BUSINESS RESEARCH DIVISION

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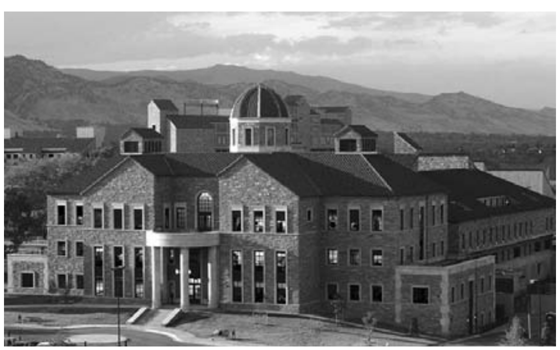
Introduction

The Business Research Division (BRD) at the Leeds School of Business is proud to present our 43rd annual *Colorado Business Economic Outlook*. This year's outlook holds a special place in BRD history as it is the first forecast prepared in our new state-of-the-art home in the Koelbel Building. Just as funding for the building was provided by a partnership of students, private-sector donors, and the State of Colorado, we present the *2008 Colorado Business Economic Outlook* as a product of a similar partnership that relies on research conducted by our committee members from the public and private sector, our research staff, and our students.

This forecast analyzes changes that have taken place in all sectors of the economy during the past year, and looks at the events and activities that will shape the changes in our population, employment, and overall economy for the coming year. The information in the book is presented at the Forty-third Annual Outlook Forum in Denver, as well as at 30 subsequent forecast speeches held throughout the state during the year to key industry organizations, local and regional eocnomic development groups, and the Kansas City Federal Reserve Board.



Methodology

The Colorado Business Economic Outlook has evolved into a year-round project, with forecasts presented throughout the year and the BRD staff monitoring the state and national economy on an ongoing basis.

Preparation of the forecast and booklet begins with a formal kickoff meeting in September, when members from all estimating groups meet to discuss trends and issues that might affect economic growth during the upcoming year. We are fortunate to have more than 90 members from the business, education, and government communities who serve on our estimating groups. During the second half of September and the month of October, the 13 committees convene to apply this information to their industry-specific issues. From this series of meetings the sector write-ups and forecasts are prepared and submitted to the BRD in early November, when they are edited and published in this book. In June of the following year, the Steering Committee, or sector chairs, meets to review their forecasts and identify factors that may positively or negatively drive change in their industry's economic performance during the second half of the year. These updates are published in the summer issue of our quarterly newsletter, the *Colorado Business Review.*

The Colorado Business Economic Outlook is unique in that it provides forecasts and commentary for each of the state's North American Industry Classification System (NAICS) sectors. This, along with the fact that the forecast is developed from a combination of detailed statistical analysis, extensive survey research, and expert opinion, provides insight that is particularly relevant to the short-term forecasting process.

Related Economic Research

The BRD's mission is to conduct quality, relevant, and meaningful business and economic research at the local, state, and regional level with the explicit purpose of expanding the knowledge base of decision makers. The annual Colorado Business Economic Outlook provides the foundation for much of the research the BRD conducts within the state. Within the past few years we have completed such projects as a Roadmap for Colorado Nanotechnology, the Impact of the Federal Facilities on the Denver Metro Area, and the Directory and Industry Analysis of the Colorado Photonics Cluster.

Through a partnership with Compass Bank, the BRD compiles the Business Leaders Confidence Index® (BLCI) for business and government leaders who need quarterly up-to-date, relevant, and understandable information about Colorado's economic future. Since its inception in early 2003, the index has correctly tracked the concern of Colorado business leaders about our entry into the war in Iraq, improved confidence after the initial phases of the war were completed, the improving strength of the Colorado economy relative to the national economy, the recent impacts of hurricanes in the Gulf Coast, housing, and the current economic slowdown. Additional information about participating on the panel and quarterly updates are available throughout the year at www.blci.com.

In addition, the BRD publishes the *Colorado Business Review (CBR)* and conducts various contract research projects. The *CBR* highlights research conducted by BRD staff, Leeds School faculty, and key business leaders. The *CBR* can be found on the BRD web site: http://leeds.colorado.edu/brd/.

Acknowledgments

We are humbled and gratified to have so many dedicated partners in the construction of our new home, as well as the compilation of this forecast and the other contract research conducted by our organization. Additionally, if you have questions about the economic sectors or state regions, we encourage you to contact these individuals. A complete list of contributors appears at the back of this book. And the next time you are in Boulder, please stop by and see us in our new digs in the Koelbel building.

Finally, I would like to acknowledge the support of our primary sponsor, Compass Bank, particularly Rafael Bustillo, Docia Baldridge, and Rene Meaux. In addition, I would like to recognize the hard work of the Leeds School of Business and University of Colorado at Boulder personnel in preparing, presenting, and promoting this project. My sincerest thanks go to Gary Horvath, Managing Director; Brian Lewandowski, Research Analyst; Cindy DiPersio, Project Coordinator; Lynn Reed, Graphic Designer; Kim Warner, Project Manager; Terry Rosson, Program Assistant; and, Colin Hickey, Scott Vos, and Luke Willoughby, Student Research Assistants, for their help in assembling and presenting the 2008 Business Economic Outlook Forum. The assistance provided by Greg Swenson and Dirk Martin, both with the Office of News Services, and Doug Nogami, Director of Communications for the Leeds School of Business, is also greatly appreciated.

Colorado Economic Forecast for 2008

The sections that follow provide a summary of 2007, a forecast for 2008, and industry specific data analysis and insight into the key factors influencing each of the sectors. We trust this information will prove useful in your business and policy decision-making process.

Richard L Wobbekind

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Compass Bank is pleased to once again sponsor the Business Economic Outlook Forum.

Through the ongoing efforts of the Leeds School of Business and the many committee members who share their industry experience, the Outlook Forum has been an invaluable information source for 43 years.

Our Compass on Business partnership with the University of Colorado's Leeds School of Business dates back to 2002 and has allowed us to collaborate with the Business Research Division on a variety of initiatives aimed at helping local businesses monitor and respond to changing economic trends.

One of these joint initiatives is the Colorado Business Leaders Confidence Index® (BLCI). The BLCI gathers opinions and experiences from business leaders across the state via input received in a quarterly online survey. The result is a glimpse into what business leaders and owners are expecting for the coming quarter. With the BLCI in its fifth year, we have found that the survey participants continue to accurately predict key changes in the economy.

We invite you to add your opinions to others who are participating in the quarterly BLCI by joining online at www.blci.com. Survey participants are invited to access an exclusive BLCI Roundtable—an online community with local business and economic resources.

Compass Bank has a long-standing commitment to local businesses, and we are pleased to support the distribution of relevant information and important insights through our sponsorship of the Outlook Forum.

Thank you for your involvement in this program and your support of the Leeds School of Business.

Rafael Bustillo
Denver President
Compass Bank

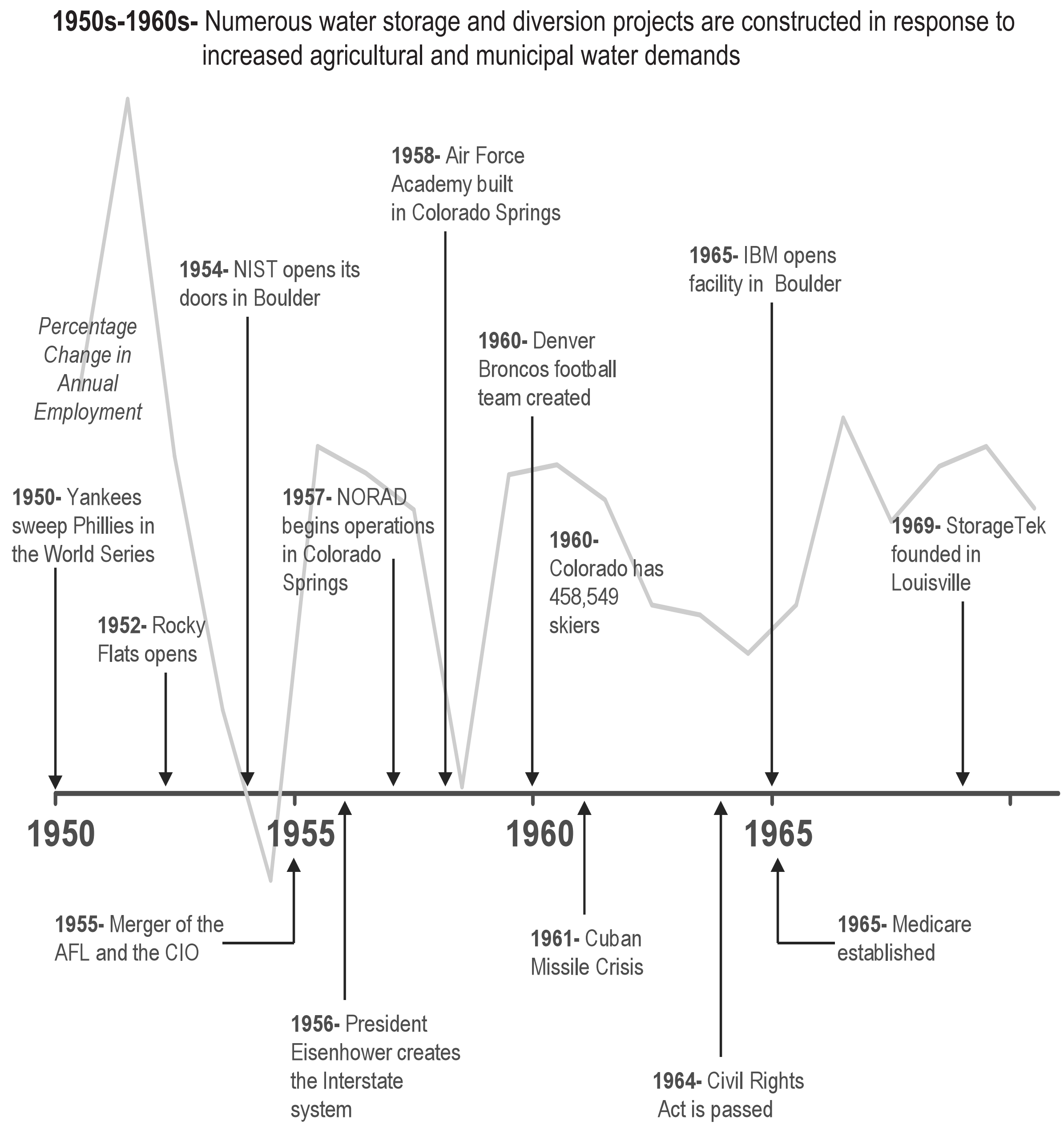
Colorado Then and Now

In 1950 the population of the United States was about 151 million, and approximately 1.3 million people resided in Colorado. The Dow Jones reached a monthly high of 235, Colorado per capita personal income was $1,516, and the New York Yankees beat the Philadelphia Phillies 4-0 in the World Series. Since then, the U.S. population has grown to more than 300 million, and Colorado's population is nearing 5 million. The Dow surged, passing 14,000, and state per capita income has increased to almost $40,000. The United States has experienced periods of relative peace, along with wars in Asia, the Cold War, and now the war on terrorism. The state has endured floods and droughts, economic booms and busts, as well as booms and busts by its major sports teams. Most recently, fans of the Colorado Rockies experienced the joy of sweeping our way to the World Series, followed by the ticket sales fiasco and the disappointing Fall Classic showing.

The adjacent timeline provides Colorado's annual employment changes expressed in percentages, along with a glimpse of some of the social, economic, educational, and political changes that have occurred since 1950. These landmarks form the foundation for events that will affect our economy in the years ahead. Colorado events are listed above the line, and national events are listed below.

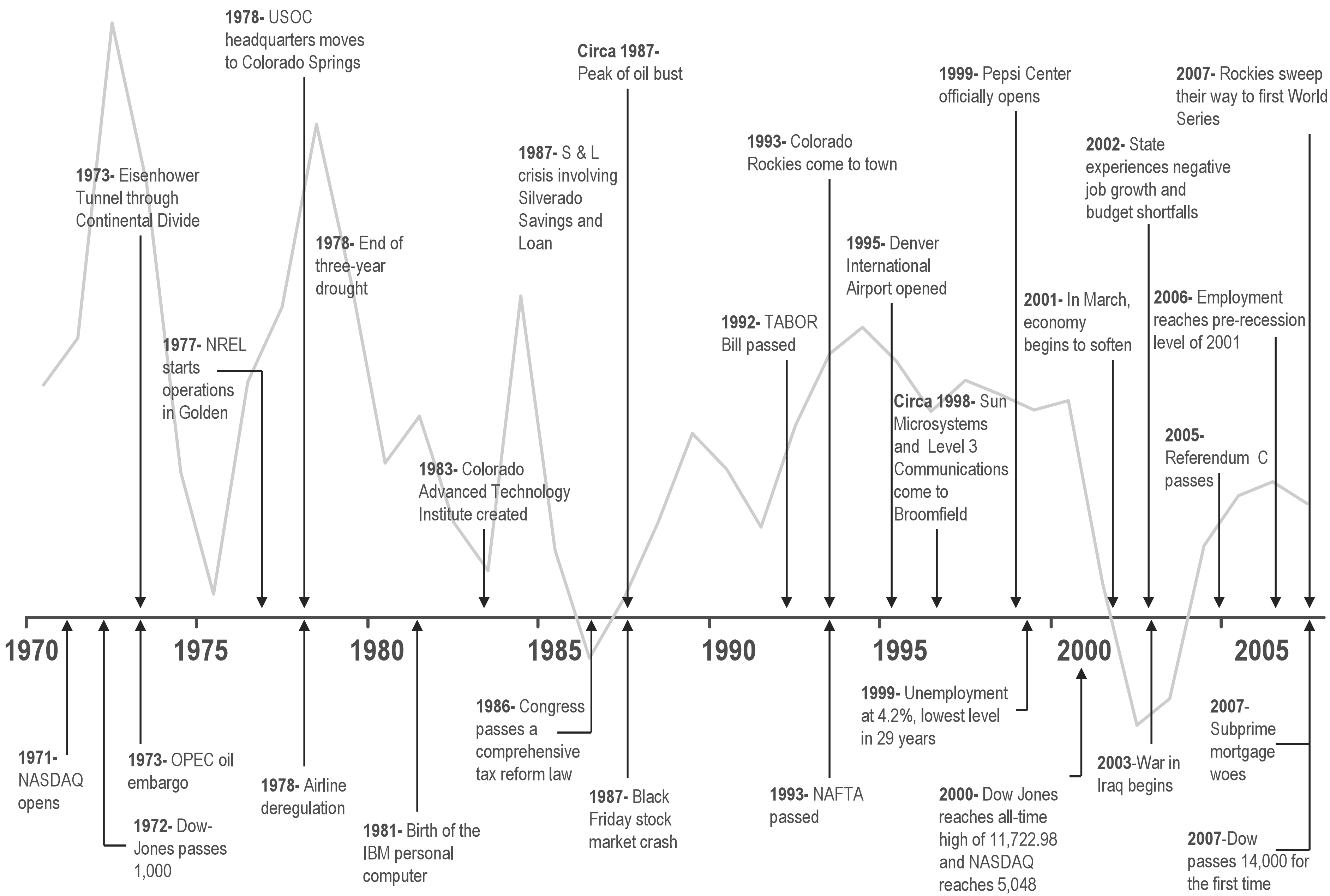
The employment downturn in 2003 marked only the sixth time since 1939 (when records were first kept) that Colorado showed negative job growth. During this same period, the United States recorded negative job growth on 11 occasions.

This timeline emphasizes the importance of learning from the past. A historical perspective of earlier events can help businesses make more effective decisions today and in the future. ✜



1970s- 1980s- Major population growth resulting in traffic problems and pollution

1990s- 2000s- LoDo is revitalized and technology booms and busts



U.S. Economic Outlook

The national economic outlook is critical to the future economic performance of Colorado. Although the western states, including Colorado, have generally outperformed the national economy in recent years, strong linkages exist between what happens regionally, nationally, and globally. This section highlights the projected economic activity at the national level and lays the foundation for an examination of the Colorado economy. A more in-depth discussion about global markets can be found in the International Trade section.

Output

In 2008, real GDP is projected to increase at a rate of 2.4%, comparable to the annualized rate of expansion for the years 2000 through 2007. Said differently, 2008 will mark the sixth time in the

GDP-RELATED NATIONAL ECONOMIC INDICATORS
2003–2008

Indicator	2003	2004	2005	2006	2007[a]	2008[b]
Gross Domestic Product						
Real GDP (% change)	2.5%	3.6%	3.1%	2.9%	2.1%	2.4%
Nominal GDP (% change)	4.7%	6.6%	6.4%	6.1%	4.7%	4.5%
Consumption						
Real Disposable Personal Income (% change)	2.2%	3.6%	1.7%	3.1%	3.4%	2.9%
Real Personal Consumption (% change)	2.8%	3.6%	3.2%	3.1%	2.9%	2.4%
National Consumer Confidence (December)	94.8	102.7	103.8	110.0	99.8[c]	-
Rocky Mountain Consumer Confidence (December)	105.1	121.4	114.4	127.8	130.7[c]	-
Consumer Credit ($ billions)	$2,047.0	$2,191.3	$2,284.7	$2,388.5	$2,440.0	$2,525.0
Auto and Light Truck Sales (million units)	16.6	16.9	16.9	16.5	16.0	16.0
Retail Sales (% change)	4.2%	6.1%	6.6%	6.1%	6.5%	5.3%
Investment						
Real Business Investment (% change)	1.0%	5.8%	7.1%	6.6%	3.9%	4.2%
Industrial Production (% change)	1.1%	2.5%	3.2%	4.0%	2.1%	2.7%
Housing Starts (millions units)	1.85	1.95	2.07	1.81	1.39	1.15
Nominal Pre-Tax Profits (% change)	12.1%	24.0%	11.5%	13.2%	3.3%	3.6%
Change in Business Inventories ($ billions)	$14.3	$54.3	$133.3	$40.3	$7.8	$23.1
Government and Exports						
Real Gov't. Consumption and Investment (% change)	2.5%	1.4%	0.7%	1.8%	1.8%	1.8%
Real Net Exports ($ billions)	-$519	-$594	-$618	-$624	-$580	-$540

[a]Estimated.
[b]Forecast.
[c]September 2007.
Sources: Consensus Forecasts, The Conference Board, Federal Reserve Board, Colorado Department of Local Affairs, Bureau of Labor Statistics, Bureau of Economic Analysis, and Colorado Business Economic Outlook Committee.

past eight years that real GDP has grown below 3%. By comparison, real GDP grew by an annualized rate of 3.1% for the period 1990 through 1999.

Even though growth is expected to remain below potential, the outlook for 2008 reflects an increase from the 2007 estimated rate of real growth, 2.1%. Real growth is projected to be in the 2.0% to 2.2% range during the first half of 2008, with improvement in the range of 2.6% to 2.8% expected in the second half.

The strongest deterrent to more robust GDP growth in 2008 is the continued fallout from the subprime collapse and slumping housing markets. A review of the National Association of Home Builders Housing Market Index shows that the market began to slowly decline in the fall of 2005. After reaching a high of 71 in June and August, the index dropped to 57 by January 2006. At the time, this was not too disturbing because for most of this decade the index has moved between 47 and 71.

However, by the end of 2006 it had declined further, to 33. After an abbreviated uptick in early 2007, the index plunged to 18 in October 2007. This sharp decline was accompanied by record foreclosures, along with sharp decreases in housing prices, in many parts of the country.

The housing slump is not an overnight phenomenon; however, it only began to draw attention in late 2006 and early 2007. At that time, it was

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NATIONAL ECONOMIC INDICATORS
2003–2008

Indicator	2003	2004	2005	2006	2007[a]	2008[b]
Prices						
Consumer Price Index (% change)	2.3%	2.7%	3.4%	3.2%	2.7%	2.3%
Producer Prices (% change)	3.2%	3.6%	4.9%	2.9%	3.4%	2.0%
Employment Costs (% change)	3.8%	3.7%	3.3%	3.1%	3.3%	3.3%
Money and Interest						
3-Month Constant Maturities (year-end rate)	0.9%	2.2%	4.0%	5.0%	4.1%	4.3%
10-Year Constant Maturities (year-end rate)	4.2%	4.2%	4.4%	4.6%	4.7%	4.9%
Fed Funds Rate (year-end)	1.00%	2.25%	4.25%	5.25%	4.50%	4.50%
Employment and Population						
Population (% change)	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%
Unemployment Rate	6.0%	5.5%	5.1%	4.6%	4.6%	4.9%
Nonfarm Employment (% change)	-0.3%	1.1%	1.7%	1.8%	1.3%	1.1%
Other Indicators						
Current Account ($ billions)	-$522	-$640	-$755	-$811	-$780	-$755
Federal Budget Balance ($ billions for fiscal year)	-$378	-$413	-$318	-$248	-$164	-$203

[a]Estimated.

[b]Forecast.

Sources: Consensus Forecasts, The Conference Board, Federal Reserve Board, Colorado Department of Local Affairs, Bureau of Labor Statistics, Bureau of Economic Analysis, and Colorado Business Economic Outlook Committee.

U.S. Economic Outlook

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thought that the subprime loans and the housing slump would have a short-term impact on the economy. That impact has lasted longer and spilled over into more areas of the market than anyone originally expected. At best, it appears that the earliest point at which the housing market will begin to turn around is the latter part of 2008.

In reaction to this situation, the FOMC made a "bold" statement in September 2007 by lowering the Fed Funds rate 50 basis points, to 4.75%. This was followed by an additional cut of 25 basis points in October. As of November, there is no clear consensus regarding additional cuts in 2007 or 2008.

Consumption

During the decade of the 2000s, the consumer has been credited with sustaining economic growth of the economy. Personal consumption accounts for about 70% of the GDP. Since 2001, personal consumption has been driven by a number of factors. Spending has been encouraged by accommodative monetary and fiscal policies. Financial institutions have reacted by providing consumers with a number of creative financing programs. While this has benefited the economy in the short run, long-run fallout remains a concern.

Prior to 2007, these programs were supported by a strong housing market in many parts of the country. Robust appreciation and solid gains in the financial markets contributed to the increased wealth effect of consumers. As a result, they remained confident, and consumption has remained strong through the third quarter of 2007.

The combination of the slump in the housing market, subprime woes, foreclosures, and volatility in the financial markets will cause consumers to realize that the appreciation of their homes and stock portfolios is capable of moving in both directions, in some cases resulting in a negative wealth effect. Accordingly, consumers are likely to exercise greater caution, and consumption will expand more modestly, at 2.4%, in 2008.

At the time this publication was prepared in November 2007, nominal retail sales for 2008 are expected to increase about 5.3%, the lowest rate of growth since 2003. This decline will follow on the heels of a slower than normal 2007 holiday season, as projected by the National Retail Association. This slowdown will carry over into 2008 and into other retail markets. Light truck and auto sales are projected to remain flat, at 16.0 million. The auto market continues to remain sluggish as a function of reduced demand brought about by the purchase of autos through previous low-cost financing or employee discount programs during the first half of the decade.

Although e-commerce accounts for only 3.3% of total retail sales, annual sales are growing at a rate of about 20%. Increased high-speed access is a factor contributing to this rise, as well as customers' confidence in ordering online.

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Investment

Business investment accounts for about 16% of GDP, but plays a critical role in income generation and future growth. The economy has experienced strong real business investment for the period 2004-2006 as a result of strong profits, positive cash flows, and tax incentives. In 2007, corporate profits will grow at a slower rate as a result of rising business costs and the slowing national economy. Real business investment is projected to expand at a rate of about 4.2% in 2008.

This rate of investment in 2008 will result in moderate growth in industrial production of 2.7%. Capacity utilization is expected to move down to its long-term average, which, in turn, lowers the risk of inflation. A sign of caution is evident in the projected change in business inventories. An increase of only $7.8 billion is anticipated for 2007, followed by a more moderate increase of $23.1 billion in 2008. The business inventory-to-sales ratio is similar to the past two years, which suggests there may not be room for additional goods in the short term, particularly given the forecast for below-potential growth.

After peaking at 2.07 million housing starts in 2005, the housing market dropped abruptly, to 1.81 million units, in 2006. The combination of the housing slump, credit crunch, and subprime woes will cause starts to plunge to 1.39 million in 2007 and 1.15 million in 2008.

Government Spending and Net Exports

Real government consumption and investment account for about 19% of GDP, while net exports account for approximately -5%. In 2004, the federal budget deficit topped out at $413 billion. Improvements in the economy and higher tax revenues have resulted in deficits of $318 billion in 2005 and $248 billion the following year. The 2007 deficit will decline further, to $164 billion; however, with an imminent slowdown in economic activity, an increase is projected, to $203 billion, in 2008. The deficit will be driven higher by defense and homeland security costs, as well as mounting costs associated with healthcare and entitlement programs. Real government consumption and investment is projected to grow by 1.8% in 2007 and by roughly the same percentage in 2008.

During 2007, U.S. exports have benefited from strong global economic conditions, increasingly free and fair trade, and a continued decline in the trade-weighted value of the dollar, which has bumped up demand for U.S. products. This is particularly good news because increased exports have helped offset the adverse effects of the housing slump and the credit crunch.

At the time of this writing, the most current data showed that U.S. exports had reached a record level of $138 billion in August 2007. Major export opportunities exist in parts of Asia Pacific, with the strongest growth rates in China, Taiwan, and South Korea, although the trade balance with China is a politically sensitive topic. High rates of growth are also projected for Russia and select Eastern European countries. Some downside risk exists in doing business in these markets, however, given concerns about government stability and their ability to sustain growth. The greatest area of concern is the key markets in Western Europe, where many economies have slowed.

The price for a barrel of oil and our foreign oil tab will be a final factor that will play a major role in the magnitude of the trade imbalance. Without major shocks to oil prices, net exports are expected to drop to $580 billion in 2007, followed by a further decline to $540 billion in 2008.

Prices

Fear of inflation has been a driving force behind the monetary policy of the Bernanke-led Fed. Inflation reached 3.4% in 2005 as measured by the CPI and has been on a steady decline since, dropping to 2.7% in 2007 and a projected 2.3% in 2008. Inflation will be kept in check by the lower costs of housing prices and the overall slow growth of the economy. Energy and fuel costs continue to influence on the upside.

Inflation will be kept in check by the lower costs of housing prices and the overall slow growth of the economy.

Producer prices, as measured by the Producer Price Index (PPI), have been most adversely impacted in recent years by volatile energy prices. The projected PPI growth rate for 2007 is 3.4%, with a lower rate of 2% projected for 2008.

Employment costs are projected to remain flat at 3.3% through 2008. For the past couple of years, moderate employment growth has helped minimize upside wage pressures. This, in turn, has helped offset increasing benefit and medical costs. Employment costs are likely to remain steady as long as unemployment rates are in the range of the natural rate of unemployment (4.5%–5.0%).

Population and Employment

The U.S. population is on track to grow at a rate of about 0.9%, or by approximately 3 million people per year. In October 2006, the United States surpassed the 300 million population mark. The 2008 U.S. population is projected to be roughly 305 million.

Overall, the slow national economy will result in employment growth of about 1.3% in 2007, followed by a slightly lower rate of 1.1% in 2008. As a result of weak labor force growth in 2007, the unemployment rate dropped to 4.6%. With fewer jobs being added in 2008, the unemployment rate will rise to 4.9%. ✜

Colorado Economic Outlook

Colorado is a great place to live and work! As a result, it has one of the country's healthiest and most highly educated populations and a vibrant economy to match. This section highlights some of the key state indicators that drive the Colorado economy. Along with the data provided about the national economy, this information further establishes the foundation for our sector-by-sector employment forecast. The paragraphs that follow briefly discuss Colorado's output, income, population and employment growth, and inflation.

State GDP and Income

During much of the 1990s, Colorado had arguably the top performing state economy in the United States, driven by strong high-tech industry job growth and net migration. While the state economy has not regained the luster that it had prior to the most recent recession, it is again recognized for its strong growth. The following rankings are the most current at the time of publication:

- Real State GDP Growth 10th
- Percentage Change in Personal Income 16th
- Percentage Change in Per Capita Income 33rd
- Value of Per Capita Income 9th
- Percentage Change in Employment 15th
- Percentage Change in Population 8th

Of note, the growth rate of Colorado's real gross domestic product was greater than the national rate in both 2005 and 2006. The rate of growth for personal income was also greater than that for the nation in both years, driven in part by solid population and employment growth. Finally, the 2006 per capita income registered $39,587, compared to $36,629 for the United States.

COMPONENTS OF COLORADO RESIDENT POPULATION
1998–2008
(In Thousands)

Year	Births (Resident)	Deaths (Resident)	Natural Increase	Net Migration	Population Change	Total[a] Population
1998	57.7	26.3	31.4	75.1	106.6	4,102.5
1999	60.7	26.5	34.2	79.3	113.5	4,216.0
2000	63.9	27.0	36.9	73.5	110.4	4,326.4
2001	66.5	27.9	38.6	81.2	119.8	4,446.2
2002	67.8	28.8	38.9	34.9	73.8	4,520.0
2003	69.0	29.0	40.1	23.3	63.4	4,583.4
2004	68.5	29.0	39.4	26.8	66.3	4,649.7
2005	69.0	29.0	39.9	28.9	68.9	4,718.6
2006	69.4	29.2	40.2	54.8	95.0	4,813.5
2007[b]	70.6	29.4	41.2	55.3	96.5	4,910.0
2008[c]	71.0	29.7	41.3	62.5	103.8	5,013.8

[a]Due to rounding, the sum of the individual components may not equal the total.
[b]Estimated.
[c]Forecast.
Source: State Demography Office and Colorado Business Economic Outlook Committee.

STATE AND NATIONAL ECONOMIC COMPARISON
2002–2006

	2002	2003	2004	2005	2006
Colorado					
Real GDP ($ billions)	175.5	176.5	181.6	189.5	198.7
Total Personal Income ($ billions)	153.1	154.8	163.8	175.8	188.2
Per Capita Income ($)	34,014	34,059	35,621	37,702	39,587
Employment (thousands)	2,184.2	2,152.8	2,179.6	2,226.0	2,278.8
BLCI Expectations for State Economy (Q4)	na	61.2	65.7	50.9	50.1
United States					
Real GDP ($ billions)	9,981.8	10,225.7	10,608.9	10,924.0	11,291.4
Total Personal Income ($ billions)	8,872.9	9,150.3	9,711.3	10,284.4	10,966.8
Per Capita Income ($)	30,795	31,466	33,072	34,685	36,629
Employment (thousands)	130,341	129,999	131,435	133,703	136,174
BLCI Expectations for National Economy (Q4)	na	65.2	65.2	39.6	43.8

Sources: Bureau of Labor Statistics, Bureau of Economic Analysis, and Colorado Business Economic Outlook Committee, Colorado BLCI (www.blci.com).

Population

In 2008, approximately 103,800 people will be added to the state population, bringing the total to approximately 5.0 million people. Colorado's population will increase at a rate of 2.1%, compared to 0.9% nationally.

Colorado's population is determined by changes in net migration and the natural increase. The latter is the difference between resident births and deaths and is directly related to the age and age structure of the population. In 2008, a natural rate of increase of 41,300 is projected—71,000 births and 29,700 deaths.

For the period 1992–2001, about 70% of the change in population was a result of net migration. When Colorado entered the 2001 recession, the percentage reversed. Demands for jobs decreased and net migration accounted for only 40% of change in the state population for the 2002–05 period. Since 2006 the percentages have reversed again and about 60% of the change in population is due to net migration.

Inflation

The Denver-Boulder-Greeley CPI is the measure of inflation that is most commonly used for the state of Colorado. With the exception of 2003–05 period, the Denver-Boulder-Greeley CPI has been above that of the nation since 1991. This trend is expected to continue through 2008. The combination of slower than anticipated appreciation in housing prices and overall economic growth led to the reversal in the trend in the above-mentioned three-year period. Since then, Colorado consumers have faced significant increases in food, housing, medical care, and energy prices that have driven the CPI to higher levels. The outlook for 2008 is for the CPI to increase by 2.7%.

Business Leaders Confidence Index

The Business Leaders Confidence Index® (BLCI) is a quarterly leading indicator series, published by the Business Research Division in partnership with Compass Bank, that provides meaningful economic data to the business community. The indicator measures expectations of Colorado business leaders via an online survey and has accurately tracked changes in economic performance relating to major events such as the start of the Iraq War, the effects of hurricane Katrina, and the current housing slump. The series has effectively forecasted the relationship between the performance of state and national economies and is yet another indicator demonstrating that the Colorado economy is outperforming the U.S. economy. Preliminary data project that this trend will continue into the first part of 2008. ✜

CONSUMER PRICE INDEX, U.S. AND DENVER-BOULDER-GREELEY (1982–1984=100)

Year	U.S. C.P.I	U.S. C.P.I Rate	Denver-Boulder-Greeley C.P.I	Denver-Boulder-Greeley C.P.I Rate[a]
1998	163.0	1.6%	161.9	2.4%
1999	166.6	2.2	166.6	2.9
2000	172.2	3.4	173.2	4.0
2001	177.1	2.8	181.3	4.7
2002	179.9	1.6	184.8	1.9
2003	184.0	2.3	186.8	1.1
2004	188.9	2.7	187.0	0.1
2005	195.3	3.4	190.9	2.1
2006	201.6	3.2	197.7	3.6
2007[b]	207.1	2.7	203.4	2.9
2008[c]	211.8	2.3	208.9	2.7

[a]A Consumer Price Index (CPI-U) is not calculated for the state of Colorado. This is the CPI-U for the Denver-Boulder-Greeley CMSA, often used as a proxy for the inflation rate of Colorado (calculated semiannually).

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Labor and Employment, Bureau of Labor Statistics; and Colorado Business Economic Outlook Committee.

Colorado Labor Force and Employment

For the past 43 years the Business Research Division has presented a sector-by-sector forecast of the state's employment with the objective of facilitating an understanding of how organizations and industry perform in relation to the overall economy. While a case can be made that such a forecast should be based on sales or output, it is our belief that the economy is driven by jobs. This section briefly highlights the labor force and wage and salary employment totals.

The data are derived from two U.S. Bureau of Labor Statistics (BLS) sources, Local Area Unemployment Statistics (LAUS) and Current Employment Statistics (CES). The LAUS labor series considers the labor force as everyone of working age who is actively employed or looking for a job. Students, retirees, stay-at home parents, institutionalized individuals, and discouraged workers are not included in the workforce. This data series is more inclusive than the CES data set and is compiled from a survey of households. The labor force includes farm workers, self-employed individuals, and full-time or part-time employees. The unemployment rate is calculated from LAUS data.

The CES labor series is compiled from a survey of companies. It only includes full-time and part-time workers, temporary workers, employees on paid holiday or sick leave, and those who worked for only part of a pay period. This data series is typically used to evaluate trends by sector.

Labor Force

Between 2004 and 2007 household employment grew faster than the labor force. Consequently, the unemployment rate declined from 5.1% to 3.7%. In 2008, Colorado's population will increase by more than 100,000 people. At the same time, wage and salary employment will slow, resulting in a rise in the unemployment rate, to 4.2%.

Employment

In 2007, the sectors of the economy with the highest absolute growth will be Professional and Business Services; Educational and Health Services; Leisure and Hospitality; Trade, Transportation, and Utilities; and Government. Nonfarm wage and salary employment for 2008 will increase 1.9%, reflecting a gain of 43,300 jobs. On the downside, Manufacturing will continue its downward spiral with a loss of 4,000 jobs. The housing slump will take its toll on the Construction industry, which is expected to show a valuation increase, but contract by 1,000 jobs. The decreases in these two areas will be offset by 5,000 new jobs in Natural Resources

COLORADO RESIDENT LABOR FORCE
2002–2008
(In Thousands)

Labor Force	2002	2003	2004	2005	2006	2007[a]	2008[b]
Colorado Labor Force	2,442.8	2,475.7	2,525.5	2,568.1	2,651.7	2,689.7	2,749.1
Unemployed	138.6	152.2	140.9	131.3	114.7	100.3	116.4
Unemployment Rate	5.7%	6.1%	5.6%	5.1%	4.3%	3.7%	4.2%
Total Employment	2,304.2	2,323.5	2,384.6	2,436.8	2,537.0	2,589.4	2,632.7

[a]Estimated.

[b]Forecast.

Note: There are slight differences between the LAUS data series and the CES employment data series used throughout the rest of this booklet.

Source: Colorado Department of Labor and Employment (LAUS data) and Colorado Business Economic Outlook Committee.

and Mining. As a result, job growth for the goods-producing sectors will remain flat in 2008, while the service-producing sectors will be strong, adding 43,300 jobs.

If the 2008 projections hold true, state employment will have added 43,000–55,000 jobs in each of the last four years. While this growth is slower than that of the 1990s, this moderate, yet consistent level of growth is more manageable from both a fiscal and a structural perspective.

As the structure of the economy has evolved over the past decade, there are concerns that the high-paying primary jobs that have been lost are being replaced by lower-paying jobs that do not use the skills and talents of Colorado's workforce. From a fiscal standpoint, this has numerous ramifications for the state and local governments. A simplistic analysis of projected wages based on this forecast suggests that these worries may be justified, based on the projected composition of jobs that will be added in 2008. In other words, it appears that total wages for higher-paying sectors will be offset by more rapid growth in total wages for lower-paying positions.

A strong economy is a diverse economy that provides job opportunities for people with varying skill sets and backgrounds. Moreover, a resilient economy is driven by high-paying primary jobs with a higher than average multiplier effect. The year 2008 will be interesting, not only for the number of jobs added, but the sectors in which they are added. ✤

COLORADO NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
1998–2008
(In Thousands)

Sector	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007[a]	2008[b]
Natural Resources and Mining	13.4	12.3	12.2	12.9	12.9	13.2	14.4	17.2	20.8	24.8	29.8
Construction	134.6	148.5	163.6	167.7	160.4	149.9	151.3	160.0	167.7	165.5	164.5
Manufacturing	191.4	187.4	188.9	179.5	163.8	153.9	151.8	150.4	149.1	144.7	140.7
Trade, Transportation, and Utilities	392.4	404.9	418.9	423.0	412.1	404.5	406.6	413.0	419.5	430.6	436.0
Information	86.4	97.0	108.4	107.3	92.9	84.6	81.2	76.9	75.6	75.7	76.6
Financial Activities	142.8	147.4	147.0	148.3	149.5	154.1	154.6	158.5	160.7	161.9	162.3
Professional and Business Services	283.1	302.4	318.8	312.3	296.2	292.0	304.1	316.8	331.8	350.8	366.3
Educational and Health Services	182.9	186.9	192.8	200.8	208.5	213.0	218.5	224.6	230.9	240.0	248.0
Leisure and Hospitality	231.0	238.5	246.0	247.2	247.0	245.6	251.3	257.5	265.0	273.5	279.5
Other Services	77.3	79.0	80.2	83.8	85.6	85.9	87.4	88.5	90.9	92.9	94.9
Government	322.3	328.4	337.0	344.1	355.4	356.2	358.5	362.6	367.3	374.0	379.1
Total[c,d]	2,057.6	2,132.6	2,213.8	2,226.9	2,184.2	2,152.8	2,179.6	2,226.0	2,279.3	2,334.4	2,377.7

[a]Estimated.

[b]Forecast.

[c]Nonagricultural self-employed, unpaid family workers, and domestics are excluded from the total.

[d]Due to rounding, the sum of the individual sectors may not equal the total.

Source: Colorado Department of Labor and Employment (CES Data) and Colorado Business Economic Outlook Committee.

Agriculture

Record Cash Receipts Not Translating to Bottom Line for Agriculture

Looking back, 2007 will be remembered as the first time in many years that the agriculture industry posted generally good showings across all sectors, with cash receipts from production and government payments projected to increase more than 7%, to a record $6.3 billion, with an additional $790 million from services and forestry. It will also be remembered for the blizzards that brought much of the state, particularly southeast Colorado, to a standstill and caused the death of an estimated 15,000 head of cattle. Nonetheless, as devastating as these storms were to the livestock sector, the heavy snows provided the region with much-needed moisture that helped produce Colorado's largest wheat crop since the late 1990s.

Driven by record cash receipts from farm and ranch marketings, net farm income for 2007 is expected to increase to $771 million, about 5% more than 2006. Farmers and ranchers also incurred sharply higher feed, fuel, and fertilizer costs in 2007. Additionally, higher market prices for wheat and corn were partially offset by decreases in government commodity program payments. Even so, total farm program payments will remain relatively constant as payments to producers for conservation programs increase. Look for net farm income to rise in 2008, to $843 million.

The state's ethanol industry will continue to impact, both directly and indirectly, the net farm incomes of Colorado's farmers and ranchers in 2008. In general, the ethanol industry is currently pushing against blend capacity limits, exerting downward pressure on ethanol prices in the near term. Still, Colorado's three large-scale ethanol plants will use an estimated 45 million bushels of corn in 2008—or about 30% of Colorado's total corn production—to produce 130 million gallons of ethanol. At that level, ethanol produced in Colorado will displace more than three million barrels of imported oil a year. Less shifting of acreage to corn production will occur in 2008 as market prices for all crops are expected to remain at generally high levels. Nevertheless, generally high corn prices translate to increased profitability for farmers and higher feed costs for livestock and dairy producers, keeping the corn and ethanol industries squarely in the middle of the food-or-fuel debate.

Looking ahead to 2008, the agriculture industry is also facing uncertainty relating to water rights and seasonal workers. Ongoing deliberations relative to Colorado's, and particularly agriculture's, rights to waters in the South Platte and Republican river basins present considerable concern for producers who depend on those waters for irrigation. Additionally, shortages of seasonal workers are increasingly having a negative impact on Colorado's more labor-intensive sectors (i.e., fruit, vegetable, and green industries). The federally sponsored H2A visa program has proven an administrative quagmire, as well as a costly and unpredictable option, for producers seeking seasonal workers.

The livestock sector has historically been, and will continue to be, Colorado's largest agricultural sector, representing nearly two-thirds to three-quarters of all farm gate sales. Total livestock sales for 2007 will fall, to $3.9 billion, and are expected to decline further, to $3.8 billion, in 2008. Cash receipts from livestock sales will drop below the $4 billion level in 2007 for the first time since 2003. The decrease is due primarily to fewer cattle being marketed, coupled with slightly lower prices, than in recent years. The decline in cattle numbers is an important concern for Colorado agriculture in that cattle feeding is a major source of wealth creation. While Swift has attracted an international buyer for its beef operations, the reduced fed cattle numbers and imports of Canadian fed cattle create a concern for the long-term economic profitability of Colorado slaughter and processing facilities. Profitability problems in the beef packing industry can only have a large negative impact on cattle producing, feed growing, and the agriculture economy in the state. Most of the livestock industry, however, should experience favorable market conditions in 2008.

Within the livestock sector, cash receipts from cattle and calves for 2007 are projected to decline about 10%, to $3 billion, for 2007. Cash receipts will continue to slip into 2008, stemming from a smaller calf crop in 2007 and fewer feeder cattle being imported for finishing in Colorado feedlots. Fed cattle prices are expected to remain strong in 2008, at about $104 per 100 pounds, but margins will continue to be squeezed by high corn and feedstuff costs. Between 80 and 100 million bushels of corn are used annually as feed for Colorado's cattle industry, so even small movements in corn prices have a significant impact on the overall profitability of Colorado's livestock sector.

Drought conditions in the southeast United States have also thrown an interesting twist into the cattle and calves market. The U.S. industry should be in the middle of an expansion phase, with more beef cattle in the herd in 2007 compared to 2006, and more calves coming in the future. This expansion would tend to moderate the high cattle prices seen for the past five years but the drought in the southeast is expected to delay the industry expansion at least one more year.

Dairy is becoming an increasingly important part of Colorado's agricultural economy. Cash receipts from dairy products are projected to be record-high for 2007, at more than $420 million, in response to highest-ever high milk prices that have averaged near $18 per 100 pounds. In particular, Colorado is experiencing significant growth in organic dairy production, which, in turn, is helping to drive organic hay and grain production. For 2008, dairy cattle numbers are expected to climb by approximately 3%, to about 118,000 head, with dairy prices weakening by as much as 10%, putting the value of statewide production at $390 million.

Higher prices for feeder and slaughter lambs have helped offset a roughly 2% decrease in lamb production during 2007. For the year, lamb prices have been as much as 10% higher than during 2006. Going into 2008, production is expected to decrease only marginally, with market prices remaining steady to slightly higher. Sales of wool and lambs will total approximately $128 million in 2008. Hog production and hog prices have experienced some gains nationally during 2007. However, with poultry continuing to make steady market

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VALUE ADDED BY AGRICULTURAL SECTOR, COLORADO 1999–2008 (In Millions of Dollars)

Year	Livestock	Crops	Total Value of Production	Value of Services and Forestry[a]	Government Payments[b]	Gross Value of Farm Revenue	Total Farm Production Expenses	Net Farm Income
1999	$3,015.8	$1,341.8	$4,357.6	$578.7	$374.2	$5,310.5	$4,362.0	$948.5
2000	3,325.3	1,229.2	4,554.5	537.9	351.4	5,443.8	4,683.5	760.3
2001	3,303.5	1,417.9	4,721.4	584.3	320.1	5,625.8	4,366.6	1,259.2
2002	3,208.1	1,319.4	4,527.5	679.5	211.0	5,418.0	4,706.3	711.7
2003	3,445.8	1,442.7	4,888.5	643.6	319.9	5,852.0	4,871.4	980.6
2004	4,279.8	1,381.1	5,660.9	647.8	221.2	6,529.9	5,177.3	1,352.6
2005	4,126.1	1,477.6	5,603.7	736.1	382.0	6,721.8	5,416.9	1,304.9
2006	4,120.5	1,527.9	5,648.4	769.7	244.6	6,662.7	5,928.8	733.9
2007[c]	3,901.0	2,165.0	6,066.0	790.0	240.0	7,096.0	6,325.0	771.0
2008[d]	3,777.0	1,966.0	5,743.0	810.0	290.0	6,843.0	6,000.0	843.0

[a]Includes sales of forest products, custom feeding fees, custom harvest fees, and other farm income.

[b]Includes farm program payments directly to producers.

[c]Estimated.

[d]Forecast.

Source: Colorado Business Economic Outlook Agricultural Committee.

Agriculture

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gains, there is little or no expectation of an increase in hog prices in 2008. Concerns for animal welfare have significantly slowed, and in many instances, curtailed the expansion of confinement production facilities. Cash receipts from sales of hogs in 2008 are expected to be on par with 2007, at about $189 million. Egg production and prices will remain steady and even rise slightly, with poultry and egg receipts for 2008 projected at $120 million. Similar to the hog industry, egg producers are also confronted with animal welfare concerns relating to cage sizes.

In 2007, wheat producers, after multiple years of drought, harvested one of the state's largest wheat crops since the late '90s, at an estimated 95 million bushels. Additionally, due to low global wheat stocks and poor growing conditions in other wheat-producing states and countries, Colorado's wheat producers were able to cash-in on record-high prices averaging $6.50 per bushel. With such high market prices, producers will sell an estimated 80% of this year's wheat crop in the '07 calendar year, pushing cash receipts to an estimated $577 million—more than three times the 2006 level of $184 million. When an average crop is achieved, producers traditionally market about half their crop in the same year that it was harvested. As a result, significantly less '07 crop will be marketed in 2008. This fact, coupled with lower yields and prices in the $4.50 per bushel range, will lower cash receipts for 2008 to an estimated $330 million.

Corn production is expected to rise by more than 15% in 2007, to 157 million bushels. Higher production levels, with average prices of $3.45 per bushel, will yield 2007 cash receipts at an estimated $450 million, more than a 50% increase from 2006. Acreage in 2008 will remain relatively stable compared to 2007 when significant acreage shifted from other crops to corn; however, producers will face considerable pressure to reduce irrigated acres in the face of tightening water restrictions. Dryland yields are anticipated to decrease slightly but with prices staying in the $3.40 to $3.50 per bushel vicinity, cash receipts for 2008 are projected at nearly $500 million.

Most Colorado agriculture program payments have historically been received by crop producers, especially wheat and corn producers. Due to higher market prices, those specific price support payments will be greatly reduced, if not eliminated, but payments for conservation programs are expected to increase. Overall, government program payments to Colorado producers are estimated at $240 million for 2007 and $290 million for 2008. The 2008 level is projected to increase, due in part to livestock disaster payments, but will still be 24% less than the $382 million in payments received by Colorado producers as recently as 2005.

In 2007, wheat producers, after multiple years of drought, harvested one of the state's largest wheat crops since the late '90s.

Hay remains Colorado's largest crop in terms of value ($634 million in 2007), but due to on-farm use, actual cash receipts are estimated at about one-half of that value. Production in 2007 will approach 4.7 million tons and average $140 per ton. Looking ahead to 2008, hay producers will continue to benefit from increasing demand for organic hay arising from Colorado's growing organic dairy industry, as well as demand for hay for supplemental feeding by livestock owners in nearby states. Prices for hay are expected to remain strong in 2008, at about $135 per ton, with total cash receipts coming in at $318 million. Alfalfa production uses an estimated 30% of all water used for irrigation in Colorado and as such, producers are facing pressures to curb water use, much like corn and potato producers.

Potato production in 2007 is estimated at 21.5 million hundredweight—roughly 10% below the 2006 production level, with the decline largely due to lower yields stemming from frost damage in the San Luis Valley and the continuing loss of acreage in northern Colorado. With prices in 2007 expected to be in the $8.00 per hundredweight range (4% lower than in 2006), cash receipts from the sale of potatoes are expected to fall to $174 million. Prices are likely to be slightly lower, but remain in the $8 per hundredweight range for 2008 and with production forecast at 23 million hundredweight, cash receipts will total $167 million.

Colorado's greenhouse and nursery industry will continue to expand in the near term but at a slower rate due to the drop-off in new home construction. Since the early 1990s this industry has been one of

Colorado's fastest-growing sectors, driven by growth in the turf grass and nursery segments. Still, cash receipts will grow 1%–2% annually in both 2007 and 2008, putting cash receipts at $320 million.

Sunflower production is estimated at 144 million pounds in 2007 and is climbing after falling by nearly 60% from 2005 to 2006. Demand for sunflower oil is currently strong because of its healthy attributes. Acreage is also increasing in southwest Colorado in order to supply a new crushing and biofuels facility scheduled to become operational in 2008. With prices in the range of 15 to 17 cents per pound, production is forecast to increase to 150 million pounds in 2008, with cash receipts pegged at $25 million.

Production of both barley and sorghum rose significantly in 2007, with barley climbing 50% and sorghum more than doubling. Key drivers to these gains were increased market premiums for malting quality barley and higher feed prices, making sorghum production more attractive. Cash receipts will increase in 2008, with barley reaching $28 million and sorghum $17 million.

Colorado's vegetable crops including cabbage, cantaloupe, lettuce, onions, and sweet corn are also expected to continue to do well in 2008, provided that the shortage of seasonal workers experienced in 2007 can be mitigated. Producers of these crops continue to develop innovative marketing programs with Colorado's retailers, and benefit from Colorado's expanding network of farmers markets and consumer preferences to "buy local." Sales of these crops are estimated at $100 million annually. Expect dry bean production to continue to slide as some acres are shifted to sunflower production in southwest Colorado. Similarly, production of sugar beets in both 2007 and 2008 will fall as producers confront increasing irrigation constraints. Although fruit production declined in 2007 due to early season frosts that reduced yields, the overall trend is for continuing growth in the industry as grape acres continue to expand to supply the state's growing wine industry.

Colorado's agriculture industry remains very diverse and its profitability is subject to influences beyond the state's borders. The opening and/or closing of export markets, global economic growth, and agricultural trade and policy decisions are just a few of the factors that have the potential to impact Colorado agriculture, both positively and negatively. Agricultural policy for much of 2007 has focused on developing a new federal farm bill that will direct significant resources to research and promotion of Colorado's $600 million specialty crops industry for the first time. Nonetheless, the fate of Colorado's agricultural complex will depend largely on local growing conditions, with the only constant being that every year will bring its own unique set of challenges and opportunities. ✥

Natural Resources and Mining

Colorado is an energy- and mineral-rich state. The U.S. Energy Information Agency (EIA) annually publishes a list of the top 100 natural gas and oil fields in the country. Colorado is home to all, or part of, seven of the largest natural gas fields in the nation and two of the largest oil fields. The state is one of the nation's largest coal producers, and the Henderson Mine is North America's largest producer of primary molybdenum.

Revenues generated by this supersector make it one of the most significant contributors to Colorado's GDP. Indications are that growth in production and value will continue in the near term.

Oil, Gas, and Carbon Dioxide

Colorado and the Rocky Mountain region continue to experience a boom in the petroleum sector, which is expected to extend through 2008. However, petroleum markets are anticipated to undergo greater volatility in commodity prices for the next year or two. The combination of price volatility, growing demand, tighter supplies, and insufficient take-away capacity in the region may adversely impact many business sectors in the state.

The total value of oil, gas, and carbon dioxide production in 2006 was $8.4 billion, a 14.2% decrease from the 2005 value of $9.7 billion. This drop in the realized value of production in Colorado resulted from a significant decline in natural gas prices. The value of oil, gas, and carbon dioxide production for 2007 is expected to fall an additional 2.6%, to $8.1 billion, because of the excess supply of natural gas in the region. Despite these decreases, total valuation is four times greater than it was six years ago. The value of oil, gas, and carbon dioxide production is forecast at $8.7 billion in 2008, assuming modest production growth, a return to more stable natural gas prices, and an increased take-away capacity resulting from completion of the Rockies Express Pipeline.

VALUE OF COLORADO NATURAL RESOURCES AND MINING
1999–2008
(In Millions of Dollars)

	Oil and Gas Extraction					Mining					
Year	Crude Oil	Natural Gas	Carbon Dioxide	Subtotal	Percentage Change	Coal	Minerals	Subtotal	Percentage Change	Total	Percentage Change
1999	$338	$1,567	$85	$1,990	16.1%	$359	$557	$916	-13.0%	$2,906	5.0%
2000	560	2,825	99	3,484	75.1	437	597	1,034	12.8	4,518	55.5
2001	479	3,155	122	3,756	7.8	502	540	1,042	0.8	4,798	6.2
2002	480	2,220	62	2,762	-26.5	616	629	1,245	19.5	4,007	-16.5
2003	610	4,555	99	5,264	90.6	703	702	1,405	12.9	6,670	66.4
2004	865	5,897	130	6,892	30.9	796	951	1,747	24.3	8,639	29.5
2005	1,235	8,264	242	9,741	41.3	813	1,789	2,602	48.9	12,343	42.9
2006	1,405	6,667	291	8,363	-14.2	974	1,762	2,736	5.1	11,099	-10.1
2007[a]	1,528	6,321	300	8,148	-2.6	947	1,961	2,908	6.3	11,056	-0.4
2008[b]	1,659	6,701	308	8,668	6.4	932	2,039	2,971	2.2	11,639	5.3

[a]Estimated.

[b]Forecast.

Source: Colorado Geological Survey Mineral and Mineral Fuel Activity Reports, Colorado Oil and Gas Conservation Commission, Department of Minerals and Geology, and Colorado Business Economic Outlook Committee.

Although 2007 oil prices have recently peaked at over $90 per barrel, EIA projects that monthly average oil prices nationally will remain in the $70–$80 per barrel range through 2008. Continued low surplus production capacity, weak petroleum inventories, and strong demand worldwide, particularly from the United States and China, are contributing factors to this comparatively high forecasted price. The Colorado Oil and Gas Conservation Commission reports that oil prices in Colorado averaged $60 per barrel for the first three quarters of 2007, continuing the pricing trend from 2006. The average oil price for Colorado is expected to be $65 per barrel by year-end and compete favorably with the national average of $70+ per barrel through 2008.

The Commerce City refinery will increasingly be processing oil from the Canadian oil sands. What impact this might have on price and volume for Colorado producers is currently unknown.

EIA reports that the Colorado average retail price of automotive gasoline has fallen from its May 2007 high of $3.31 per gallon to $2.75 per gallon in early October, which is about $0.50 per gallon higher than a year ago. The average price of gasoline for the first 10 months of 2007 is $2.75 per gallon, $0.12 per gallon higher than the average of $2.63 for the same period in 2006. Prices for the remainder of 2007 are expected to increase over $3.00 per gallon in response to recent peaks in the oil price. Gasoline prices should moderate somewhat by January 2008 before rising again in the summer. Colorado prices do not respond as quickly as the national price corrections primarily because of a lack of local refining capacity. Local prices will continue to vary seasonally as a result of mandated fuel requirements.

Nationwide, about 58% of all households depend on natural gas as their primary heating fuel; this number is nearly 80% for the Midwest. EIA predicts that the average household using natural gas for heating can expect to pay 10% more in the winter of 2007-08 than the previous winter. The Colorado Oil and Gas Conservation Commission reports that natural gas prices in Colorado averaged $5.11 per thousand cubic feet (Mcf) for the first 10 months of 2007. This is down from the $6.06 per Mcf average for the same period in 2006. The October 2007 price in Colorado fell to $3.21 per Mcf, which is less than half of the benchmark price for natural gas in the nation (that is, the Henry Hub price). This substantial differential in gas price results from the lack of adequate pipeline capacity to move Rockies gas to eastern markets. Natural gas prices in Colorado are expected to remain about $5.00 per Mcf for the 2007 and 2008 calendar years as pipeline capacity is fully developed.

As the growth in natural gas supply shifts to new sources, the Rocky Mountains are emerging as one of the nation's key regions. The limiting factor in exporting natural gas from Colorado, as well as other Rocky Mountain basins, is the lack of sufficient pipeline capacity. The Rockies exported 6.3 billion cubic feet (Bcf) per day of natural gas in 2004, and pipeline exports are forecast to increase to 9.3 Bcf per day by 2009 and 10.7 by 2014. If realized, this export capacity would correspond to an unprecedented 70% growth in a decade. Rockies Express Pipeline LLC is a $4.4 billion joint venture project between Kinder Morgan Energy Partners, Sempra Pipelines and Storage, and ConocoPhillips. Representing one of the largest natural gas pipelines envisioned for North America, the 1,678-mile pipeline will have a capacity of approximately 1.8 Bcf per day when completed and will link production from Colorado and other Rocky Mountain-producing states with midwestern and northeastern U.S. markets.

Beginning in gas-rich Colorado, the first 328-mile segment of the Rockies Express Pipeline runs from the Meeker Hub in Rio Blanco County, Colorado, to the Wamsutter Hub in Sweetwater County, Wyoming, and continues on to the Cheyenne Hub in Weld County, Colorado. This segment is in service and currently has a capacity of 500 billion British thermal units per day. Federal approval to extend the Rockies Express Pipeline from the Cheyenne Hub to an interconnection located in Audrain County, Missouri, was received mid-April 2007 for an in-service target date of January 1, 2008. Subject to regulatory approval for the final segment connecting Audrain County with Clarington, Ohio, interim pipeline service could commence as early as December 2008 and be fully operational by June 2009.

The Colorado Oil and Gas Conservation Commission reports that 5,904 drilling permits were approved in 2006, representing a nearly 35% increase over the 4,363 permits approved the previous year. The commission has already approved 4,680 permits in the first three quarters of 2007

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Natural Resources and Mining

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and expects to finish the year with 6,160 total permits approved, or a 4.3% increase over 2006. If this activity level continues, it is likely that about 6,500 permits will be processed in 2008, assuming oil and gas prices remain strong and the state economy continues to expand.

The weekly rig count in Colorado has exceeded 100 since the beginning of the year, running between 115 and 127 since early April 2007. This is in contrast to 2006 during which time the weekly rig count remained below 100 until December. The result of this intense drilling program is the highest active well count ever reported for Colorado. The Colorado Oil and Gas Conservation Commission reports 33,319 active wells as of early October 2007. Well operations and their associated supporting infrastructure create high-paying jobs, which are drawing labor away from other business sectors in Colorado.

The accelerated pace of energy development in Colorado brings into sharp focus the need to review, and in some cases revise, the guidelines the state and federal governments use to preserve and protect its public lands. In 2007, the Kremmling (Jackson, Grand, and Summit counties) and Glenwood Springs (Garfield, Eagle, and Pitkin counties) field offices of the Colorado Bureau of Land Management (BLM) started developing a resource management plan (RMP) for all the federal surface and mineral estates managed by their respective field office areas. As part of the RMP revision process, the field offices are preparing an environmental impact statement (EIS) to analyze the impacts of the plan's decisions. The affected lands are currently being managed according to the RMP plans that were developed in 1984; however, land use in Colorado has changed a great deal in the last 20+ years.

PHYSICAL OUTPUT OF FOSSIL FUELS
1998–2008
(Base Year: 1998=100)

Year	Coal Index	Coal (Millions of Short Tons)	Crude Oil Index	Crude Oil (Millions of Barrels)	Natural Gas Index	Natural Gas (Billions of Cubic Feet)	Carbon Dioxide Index	Carbon Dioxide (Billions of Cubic Feet)
1998	100.0	29.6	100.0	22.4	100.0	696.3	100.0	367.7
1999	101.4	30.0	87.1	19.5	103.2	718.6	82.8	304.6
2000	98.3	29.1	87.9	19.7	110.3	767.6	84.5	310.7
2001	112.8	33.4	89.3	20.0	116.5	811.1	82.8	304.4
2002	118.6	35.2	91.1	20.4	131.8	917.5	80.3	295.1
2003	120.9	35.8	95.5	21.4	144.1	1,003.4	83.8	308.2
2004	134.5	39.8	99.6	22.3	152.9	1,064.5	93.0	341.8
2005	127.7	37.8	102.2	22.9	160.6	1,118.3	98.3	361.5
2006	119.6	35.4	104.0	23.3	171.3	1,192.6	101.4	372.8
2007[a]	124.7	36.9	104.9	23.5	181.6	1,264.2	104.4	384.0
2008[b]	126.0	37.3	105.8	23.7	192.5	1,340.1	107.6	395.5

[a]Estimated.

[b]Forecast.

Source: Colorado Geological Survey Mineral and Minerals Fuel Activity Reports, Colorado Oil and Gas Conservation Commission, Department of Minerals and Geology, and Colorado Business Economic Outlook Committee.

In February 2007, the Little Snake Field Office in Moffat, Routt, and Rio Blanco counties released a draft of their revised RMP and EIS for public comment. The plan provides a framework to guide subsequent management decisions on approximately 1.3 million surface acres and 1.9 million subsurface acres in northwestern Colorado. The plan covers all aspects of BLM land and mineral management, including energy development, resource protection, travel management, wildlife habitat, special designations, grazing, and realty actions.

After nearly seven years of effort developing a RMP for the Roan Plateau, the BLM issued the first of two Records of Decision in June 2007. This first decision, which covers about 70% of the 73,602 acres in the Roan Plateau planning area, provides critical protections for fish and wildlife habitat, plants, special places, viewsheds, and traditional recreation and other uses of the plateau. The decision also allows for very restricted and limited energy development that would require using the latest directional drilling techniques. The second decision will address the 21,034 acres of planning area designated as "Areas of Critical Environmental Concern."

In addition to the thorough review of guidelines used to manage federal lands in Colorado, the legislature reconstituted the Colorado Oil and Gas Conservation Commission in July 2007. As outlined in House Bill 07-1341, the size of the commission was increased from seven to nine members in order to provide a greater diversity of expertise and broaden the panel's mission. The expanded commission is now tasked with considering impacts to the environment, public health, and wildlife when decisions are made about exploring and developing Colorado's oil and gas resources. In addition, the commission has increased the mill levy to 0.0007 of a mill per dollar value effective September 30, 2007, for levy payments assessed for the third quarter 2007.

COLORADO NATURAL RESOURCES AND MINING EMPLOYMENT 1998–2008 (In Thousands)

Year	Total Natural Resources and Mining Employment	Percentage Change
1998	13.4	1.5%
1999	12.3	-8.2
2000	12.2	-0.8
2001	12.9	5.7
2002	12.9	0.0
2003	13.2	2.3
2004	14.4	9.1
2005	17.2	19.4
2006	20.8	20.9
2007[a]	24.8	19.2
2008[b]	29.8	20.2

[a]Estimated.

[b]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Coal

After two years of declining coal production, Colorado increased its production in 2007. EIA reports that Colorado coal mines produced 27.7 million short tons of coal through the first three quarters of 2007, a 3% increase compared to the same period the prior year. Thus, Colorado ranks as the seventh-most productive coal mining state in 2007, just ahead of Illinois and Indiana. The Colorado Geological Survey estimates that total coal production for the year will be 36.9 million short tons, the third-best year on record. Ten coal mines operate in eight Colorado counties. In 2006, Delta was the state's top coal-producing county, with 9.2 million tons mined from the Bowie #3 and Elk Creek Mines. No significant mining difficulties or delays affected coal mining in 2007.

EIA tracks national spot coal prices by region. The average spot price for Colorado coal has decreased from a high of $37 per ton in May 2006 to just over $25 per ton in June 2007. Although most coal sold in the state has a long-term fixed-price contract, the spot price sets the tone for what short-term contracts yield. The average federal mineral lease rate ranged from $25.60 to $27.44 per ton of Colorado coal in 2006. The value of Colorado's coal production that same year was $974 million. Despite increased coal production in 2007, the figure for year-end is projected to be slightly lower in value, $947 million, due to a small decrease in coal price.

Increased demand for Colorado's compliance coal is reflected in higher employment figures. As of June 2007, a total of 2,121 coal miners were working at the state's 10 coal mines, the highest number of coal miners employed in Colorado since 1986. This increase of 61 miners is 3% more than the previous year, continuing a decade-long upward trend.

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Natural Resources and Mining

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The largest employer of coal miners in the state is Peabody Energy Company's Foidel Creek Mine in Routt County. The mine now employs 497 miners in its underground mine. Foidel Creek Mine operates a state-of-the-art longwall that can mine well over one million tons of coal per month. Foidel Creek is currently installing a new preparation plant that will be the largest in Colorado.

Colorado's 10 coal mines are all located on the Western Slope, but the customer base is mainly along the Front Range urban corridor and in states east of Colorado. Nearly 90% of the coal produced in Colorado is shipped by rail to 28 other states as far away as Massachusetts and Florida. Colorado coal is blended with higher sulfur coal from Appalachia and Illinois basins to reduce air pollution. The majority of Colorado coal exports are to power plants in Tennessee, Kentucky, Texas, Utah, Mississippi, and Wisconsin. In addition to steam coal, more than 3.1 million tons of coal are shipped annually to Texas, Michigan, Arkansas, and Iowa for cement manufacturing and other industrial uses. Four million tons are exported to electric utilities and industrial plants in Arizona, Nevada, Utah, and New Mexico.

Approximately 37.5 million megawatt-hours of gross electric power are generated by Colorado's coal-fired power plants annually. The state consumes about half (19 million tons average) as much as it produces (38 million tons average). But only one-third of the coal produced in-state is actually consumed in Colorado because Front Range power plants and industrial plants consume coal from both Colorado and Wyoming.

VALUE OF COLORADO NONFUEL MINERALS AND URANIUM PRODUCTION 1998–2008 (In Millions of Dollars)

Year	Nonfuel Minerals	Uranium	Total
1998	$604	$4.9	$608.9
1999	555	2.4	557.4
2000	596	0.5	596.5
2001	540	0.0	540.0
2002	629	0.0	629.0
2003	702	0.4	702.4
2004	949	2.0	951.0
2005	1,782	7.3	1,789.3
2006	1,762	0.0	1,762.0
2007[a]	1,961	0.0	1,961.0
2008[b]	2,033	6.3	2,039.3

[a]Estimated.
[b]Forecast.
Source: U.S. Geological Survey, Mineral Survey Reports.

The Colorado coal industry is forecast to continue averaging about 1% annual growth in output. The Colorado Geological Survey predicts that coal production will be around 37.3 million tons in 2008, valued at $932 million. New mine openings scheduled in 2008, including Northfield Coal in Fremont County, will increase production.

Minerals and Uranium

The minerals industry has been a positive sector for both the Colorado and the national economies for the last four years. Rising commodity prices have boosted Colorado producers of gold, molybdenum, and industrial minerals. In 2006, the Colorado Geological Survey estimated a total value of nonfuel mineral production in Colorado of $1.8 billion. Nonfuel mineral production and employment should remain stable in 2008 as competing forces affect the industries. Prices for metals and uranium remain high, but the slowdown in construction across the state will impact those industries supplying natural materials for construction, such as cement, aggregate, and gypsum. The total value of nonfuel mineral production is expected to top $1.96 billion in 2007 and $2.0 billion the following year, breaking the previous record of $1.78 billion set in 2005.

The price of molybdenum peaked in 2005, retracted in 2006, and reached a steady level, around $33 per pound, in 2007. Phelps Dodge Corporation, acquired by Freeport-McMoran Copper and Gold, Inc., operates the Henderson Mine in Clear Creek County—North America's largest primary producer of molybdenum. The mine and ore processing mill employs approximately 500 people. In 2006, the mine produced 37 million pounds of molybdenum, with a value of about $982 million. In 2007, Henderson is forecast to produce 40 million pounds, with an estimated value of $1.3 billion. It is anticipated that production in 2008 will remain at this level. Freeport-McMoran is studying the possibility of reopening the Climax Mine near Leadville by 2009, which would produce an additional 20 million pounds of molybdenum per year. Unless a worldwide recession affects other sectors of the economy, molybdenum prices should remain high as the metal is widely used in the energy and construction industries, and demand for molybdenum stainless steel continues to increase in China and India.

Gold prices continued to rise in 2007. Through October, the average 2007 price was $680 per ounce, with a peak of $750 per ounce. This compares to an average price in 2006 of $610 per ounce. Production remains steady at the Cripple Creek and Victor Mine in Teller County, the state's only major gold mine. The mine, which employs 320 people, produced 303,484 ounces of gold in 2006. Gold production is expected to decline slightly to the 280,000 ounce-per-year level in 2007 and 2008. Global Minerals, Ltd. has generated an additional 600 ounces of gold and 3,000 ounces of silver from the Cash Mine property in Boulder County.

Concern about global energy supply has brought about a renewed look worldwide at nuclear power. As a result, spot prices for uranium spiked at $135 per pound in 2007, then dropped back to what most consider a sustainable level of $90 per pound. After years of prices in the single digits, the change in market fundamentals has caused a new rush in Colorado uranium country. Many old mines are undergoing renovation, and thousands of claims have been staked in preparation for resumption of production of uranium and vanadium. As of late 2007, a bottleneck exists because of a lack of conventional mills to process uranium ore. Thus, despite the tremendous increase in activity, no revenue will be realized in 2007 and little in 2008 until the milling situation can be resolved. Once ore is flowing to the mills, significant contribution to the state's economy will be recognized from both uranium and vanadium, a ferrous metal that occurs commonly with uranium.

Construction aggregates include crushed stone, gravel, and sand. In 2006, aggregate mines in Colorado produced 63.6 million tons, with an estimated value of $388.7 million, a 5.3% increase from 2005. However, the slowdown in the construction industry has negatively impacted this sector, with production sliding 15% in 2007.

Centex Construction Products provides gypsum for wallboard and other products from its plant in Eagle County, and Holcim (U.S.), Inc., operates a two million ton per year Portland cement manufacturing plant near Florence. The operations at these plants reflect the activity in the regional construction sector. Therefore, the value of Colorado's cement and gypsum production is predicted to slip by 15% in 2007, with the decrease continuing in 2008. These industrial minerals sectors somewhat offset the increase in production value of the metals in both 2007 and 2008. ✤

Construction

It is an understatement to say that the big story in the construction industry in 2007 is the decline in home building. Given all the attention to the woes of the residential markets, the business community may be generally unfocused on the continuing strength of the nonresidential building. Nonresidential has once again enjoyed a strong year in 2007 and will see a significant increase in 2008. This forecast is based on the overall projection of a healthy economy, and the Construction Committee recognizes that sliding into even a weak and brief recession would postpone or cancel a large number of proposed new projects. Infrastructure work will be down slightly for 2007 but pick up modestly in 2008.

Construction permit and valuation data are recorded at the time projects are booked. As a result, many of the permits and valuation for multiyear projects, such as the Xcel power plant, are pulled in the first year (2006), and actual activity is understated in subsequent years (2007–10). Consequently, valuation data will be skewed while such large projects are being completed. There are currently about 1,300 construction employees working on the Xcel facility, and it is estimated that valuation is about $300 million for each of the first years of the project.

As a result of this statistical aberration, it is projected that the overall dollar volume work in 2007 was down, to just under $12 billion. The 2008 figures are expected to improve by 4.3%, to $12.5 billion, which represents a small recovery in real terms, especially since construction inflation will be muted. A smoothing average for number of workers employed pulls down the 2008 figure by a small amount. A slightly more notable decline will occur in 2007.

Residential Building

Single-Family Housing

Along with most of the United States, Colorado's new housing activity declined throughout 2007. The number of single-family residential permits has fallen across the state, down 24% in 2006 and 26% through Q3 2007. The committee projects a decline of 34% at year-end 2007. In comparison with the peak years of 2004 and 2005, when new housing growth reached a 20-year high of more than 40,000 single family permits, 2007 will see half that—only 20,000 permits—for single-family homes. The Western Slope, primarily the resort areas and Grand Junction, will be spared the sharp declines in single-family permit activity, and growth will remain essentially flat for the year. This will have minimal impact on the state growth rate because of the relatively small volumes in these areas.

In late 2007, supply in most U.S. housing markets exceeded demand as prospective homeowners faced higher interest rates on their adjustable-rate or interest-only mortgages, often forcing them into

VALUE OF CONSTRUCTION IN COLORADO BY TYPE
1998–2008
(In Millions of Dollars)

Year	Residential	Nonresidential	Total Building	Nonbuilding[a]	Total Construction
1998	$5,486.1	$2,879.7	$8,365.8	$1,490.9	$9,856.7
1999	6,229.1	3,782.9	10,012.0	1,590.3	11,602.3
2000	7,028.6	3,476.1	10,504.7	1,835.4	12,340.1
2001	6,593.3	3,500.0	10,093.3	1,686.6	11,779.9
2002	6,357.3	2,787.4	9,144.7	2,161.5	11,306.2
2003	6,258.2	2,712.9	8,971.1	1,731.8	10,702.9
2004	8,050.3	3,291.4	11,341.7	1,753.8	13,095.5
2005	8,803.4	4,221.2	13,024.6	1,787.8	14,812.4
2006	7,770.0	4,310.2	12,080.2	2,967.1	15,047.3
2007[b]	5,974.0	4,400.0	10,374.0	1,600.0	11,974.0
2008[c]	5,867.0	4,900.0	10,767.0	1,720.0	12,487.0

[a]Data reflect permit for construction of Xcel power plant in Pueblo, a $1.3B project over four years.

[b]Estimated.

[c]Forecast.

Source: Department of Census, F.W. Dodge Company, Division of McGraw-Hill, the Colorado Contractors Association, and Colorado Business Economic Outlook Committee.

default and foreclosure. These problems were exacerbated as the secondary mortgage markets tightened credit standards. With the soaring number of homes listed for sale, the high level of foreclosure activity is providing a significant drag on new and resale housing activity.

Although Colorado's new housing markets face foreclosure-related supply excesses, along with the rest of the country, the situation in this state is fundamentally different. Weak demand caused by the state's employment losses in 2002 and 2003 held home price appreciation to 2%–6% through 2007. With such comparatively low price appreciation, there was relatively little speculative activity. Meanwhile, many "hot" markets in other parts of the country experienced home price appreciation of 20%–30% from 2004 through 2006, and were heavily influenced by speculative activity, with new home construction outpacing true housing needs.

Although these price increases of existing homes have been modest in Colorado since 2001, a growing share of the new home construction continues to be for larger homes at higher prices. The more affluent baby boomers and others who were least affected by the poor economy of the early 2000s were also most confident in the region's recovery and returned to the market to purchase more expensive new homes, resulting in a sharp increase in single-family permit valuations in 2007. Most of this impact has now been realized, and this trend will moderate in 2008. Labor and material costs will continue to push average valuations somewhat higher in 2008.

While single-family permits in Grand Junction will post a healthy increase in 2007, and the state's resort counties will see little overall change, Front Range metropolitan areas and other parts of Colorado will be down significantly, by 20%–40%, from 2006 to 2007.

Colorado's Front Range homebuilders generally matched construction to new home sales in 2007, so inventory levels remain manageable and will not significantly suppress new permit activity in 2008. However, the high volume of resale homes on the market will continue to act as a drag on the market as move-up buyers will need more time to sell their homes before buying a new one.

The new single-family housing market, which helped sustain the Colorado economy following the massive job loss years 2002 and 2003, is experiencing an overdue correction. The benefits of economic and employment growth in nonhousing sectors will be offset by the continued high rate of foreclosures and an oversupply of existing homes on the market in most parts of the state. After the decline in 2007, the committee forecasts 19,000 single-family permits for 2008, for an additional 5% drop.

Multifamily

Total multifamily permit activity changed little in 2007 as a small increase in apartment construction was offset by a cutback in new condominium starts. The total for the year is expected to be about 8,000 units, virtually unchanged from the 7,978 multifamily permits issued in 2006. Activity in 2006 and 2007 was up considerably from the trough of multifamily construction during the 2003–05 period, but a major expansion was stalled by the deteriorating market for condominiums. A recovery in the apartment market gained some legs in 2007; however, the weakening of sales markets in most of the state caused builders to curtail expansion of for-sale multifamily product.

Rental markets throughout the state remained in recovery mode, although some striking differences became apparent in 2007. The Denver area vacancy rate is quickly decreasing, to 6%, and will likely finish the year below that level. Most Western Slope and mountain areas are back to crisis mode as vacancy rates have returned to very low levels. In contrast, the nascent recovery in northern Colorado has stalled, and ongoing troop deployments from Fort Carson have delayed a full recovery of the rental market in Colorado Springs.

While the cutback in for-sale multifamily construction during 2007 has not been as severe as that for single-family detached units, the condominium sector has definitely shared the pain of the "credit crunch" with the single-family detached sector. In the Denver area, new attached-home inventory is up 15% from 2006, representing more than five months of sales. Condominium production continued to prop up the multifamily construction industry during the past two years but the proportion of sales units in multifamily projects during 2006 and 2007 fell to about 75% in major markets, down from 90% in 2005. A continued contraction in condominium construction will likely drop this proportion further in 2008 and subsequent years.

Future gains in multifamily permit activity will increasingly rely on the strength of rental markets and the feasibility of developing apartments in major markets. Since a growing share of multifamily activity in the state is in the Metro Denver area, the sustained recovery in the rental market in that region is good news for multifamily construction. While most other rental markets are not ready for a major surge in apartment construction and continued cutbacks in for-sale multifamily product will

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Construction

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detract from a major surge in multifamily activity, this sector is poised for a modest increase in 2008. Renewed interest in apartment development, particularly in the Metro Denver area, coupled with continued development of new senior and low-income housing tax credit projects, will support construction of about 8,500 multifamily units in 2008, a 6% rise over 2007. This modest level of building will be accompanied by continued tightening of rental markets and higher rents throughout 2008, setting the stage for more growth in rental production in 2009. As apartment production accounts for an increasing share of multifamily production in future years, per unit values will drift downward from $120,000 in 2007 to $118,000 in 2008.

Nonresidential Building

The robust growth rate of recent years for construction of institutional, medical, commercial, retail, and industrial buildings continued during 2007. The outlook for 2008 is for yet another valuation increase, in the range of 10%.

Several large projects in the medical sector are wrapping up, including the $143 million Inpatient Pavilion at Fitzsimons and the relocated Children's Hospital. Other medical projects around the state are multiyear efforts, such as those in Grand Junction, Brighton, and Colorado Springs. A number of new projects will begin or are being planned statewide in 2008. Of particular note is St. Anthony Central's move from its facility in Denver to the Federal Center site in Lakewood. In addition, St. Joseph will redevelop the recently vacated Children's site, and the VA hospital will move to Fitzsimons.

Retail construction is expected to be flat, due to its direct link to new housing activity. No major new developments are in the works, although Buckingham Square in Aurora is in the early stages of a major redevelopment. By contrast, hotels and mountain resort work will increase, with significant projects in Vail, Snowmass, Aspen, Steamboat Springs, and Crested Butte. The total volume in redevelopment of the Vail Valley alone is calculated

RESIDENTIAL BUILDING PERMITS BY TYPE 1998–2008

Year	Single Family	Multifamily	Total Housing Units
1998	36,107	15,049	51,156
1999	38,410	10,903	49,313
2000	38,588	16,008	54,596
2001	36,437	18,570	55,007
2002	34,993	12,878	47,871
2003	33,837	5,732	39,569
2004	40,753	5,746	46,499
2005	40,140	5,751	45,891
2006	33,000	7,978	40,978
2007[a]	20,000	8,000	28,000
2008[b]	19,000	8,500	27,500

[a]Estimated.

[b]Forecast.

Source: Department of Census and Colorado Business Economic Outlook Committee.

CONSTRUCTION EMPLOYMENT, COLORADO AND STATE TOTAL, 1998–2008 (In Thousands) (Base Year: 1998=100)

	Construction			All Industries	
Year	Number	Index	Percentage Change	Index	Percentage Change
1998	134.6	100.0	11.7%	100.0	3.9%
1999	148.5	110.3	10.3	103.6	3.6
2000	163.6	121.5	10.2	107.6	3.8
2001	167.7	124.6	2.5	108.2	0.6
2002	160.4	119.2	-4.4	106.2	-1.9
2003	149.9	111.4	-6.5	104.6	-1.4
2004	151.3	112.4	0.9	105.9	1.2
2005	160.0	118.9	5.8	108.2	2.1
2006	167.7	124.6	4.8	110.8	2.4
2007[a]	165.5	123.0	-1.3	113.5	2.4
2008[b]	164.5	122.2	-0.6	115.6	1.9

[a]Estimated.

[b]Forecast.

Source: U.S. Department of Labor, Colorado Department of Labor and Employment, Bureau of Labor Statistics, and Colorado Business Economic Outlook Committee.

at about $1 billion, which will be spent over the next five years.

Even the speculative office market is reappearing after being moribund for years. Lease rates have returned to pre 9/11 numbers, and absorption allows a few new projects to pencil out. A large corporate office has just been completed in Golden, and the project at 1515 Wynkoop in downtown Denver is well underway.

Institutional work has been robust in past years, including the impressive push for new buildings at the University of Denver. That work is essentially complete and is being replaced by an array of other projects. Valor Christian High in Highlands Ranch was scheduled for completion in fall 2007. The CU-Boulder campus saw the completion of Koelbel Building, which is the new home of the Leeds School of Business. Ongoing work on the CSU campus will add significant activity for 2008.

An increase in state and municipal projects will include the relocation of the Colorado History Museum, the City of Denver jail and courthouse project, as well as the new state prison in Fremont County. Past bond issues have funded a significant number of schools, including those in New Castle, Commerce City, Falcon, and Parker. With the approval of Denver Initiatives A–I, a number of improvement projects will begin in 2008, as well. Expect a pause in all types of work, however, during the crucial weeks that the Democratic National Convention will be in Denver. City leaders will want to avoid traffic snarls caused by cone zones.

Nonbuilding

The nonbuilding sector covers infrastructure, such as roads, land development, dams, airports, and power plants. As mentioned earlier, the data for 2007 and 2008 likely understate true construction activity in the state owing to the methodology used to record permits. Actual industry data are also understated because work on federal properties, such as military bases, is exempt from permitting for reasons of national security. The committee is aware that Colorado companies were very active on the bases and believe that many tens of millions dollars of construction activity went on in 2007 but will not be apparent in the data sets used in this forecast. A similar situation will occur in 2008.

The flow of government spending at the state and local level in 2007 remained relatively stable in 2007. Federal funds for transportation were essentially unchanged in 2007 and are expected to remain comparatively flat in 2008. The state government is expected to release highway and bridge funds under the monikers of Senate Bill 1 and HB 1310 funds. The result is that CDOT's 2008 construction activity will increase approximately $100 million over 2007. Any legislative action related to the Governor's Transportation Finance and Implementation Panel would occur beyond the time horizon of this forecast.

The slowdown in housing has meant that contractors working on the private side experienced falling demand to develop housing subdivisions. A recovery in nonbuilding activity connected with home building is not anticipated in 2008, but neither are further declines.

The multibillion dollar tax increase for public transit, FasTracks, will finally break ground, initiating the West Line construction, with expenditures of approximately $75 million in 2008. Local ballot measures, including those in Denver and Boulder counties, if passed, will increase transportation funding in the out years. The Pikes Peak Regional Transportation Authority in El Paso County is expected to provide $75 million for transportation improvements in 2008.

The Corps of Engineers will, in all likelihood, issue the needed permits for the Rueter-Hess Reservoir expansion, which will contribute about $20 million to activity in 2008. Improvements at DIA are likely to be light, although a good chance exists that expansion of the interterminal trains will proceed, adding about $20 million–$25 million to 2008 activity.

In contrast to most economists' predictions, the committee's forecasted employment number is far less gloomy for the following reasons:

- Contractors performing nonresidential work hire craftsmen from homebuilders virtually as they leave the sites. Some of the reduction in employment activity is real but not tracked in the data.
- Colorado is now a state where illegal immigrant laborers have a difficult time finding work, and as a result, the number of immigrant job seekers has declined. Losses of employment that never showed up on the government reports in the first place are losses never recognized.
- It is believed that the true strength of construction economic activity is not captured because of the manner in which data are collected.

It is believed that 2007 will finish with a smoothed average of 165,500 total workers, and will slip just slightly in 2008, to 164,500. ✜

Manufacturing

Manufacturing in Colorado is a $15 billion industry, representing about 6.5% of the value of all goods and services produced in the state. Colorado was the home of about 6,000 manufacturing companies employing about 149,100 workers in 2006, which represented about 6.7% of the total employment base. Most of these manufacturing companies are small businesses. Indeed, nearly 80% of the manufacturing companies employ fewer than 20 workers, whereas only about 35 companies have 500 employees or more.

In addition, another 5,900 manufacturing businesses are classified as "nonemployer businesses," which are self-employed individuals. About one-quarter of these businesses fall into the miscellaneous manufacturing category, which includes a diverse range of products, including medical equipment and supplies, jewelry, sporting goods, toys, and office supplies. Fabricated metal manufacturing, apparel manufacturing, printing and related support activities, and wood product manufacturing round out the five largest nonemployer manufacturing categories. While these nonemployer businesses provide an important entrepreneurial base for the manufacturing industry in Colorado, it is important to note that the nonemployer businesses are not included in the employment statistics described in detail below.

Numerous indices that are compiled at the national and regional level attempt to forecast future manufacturing activity. Some of the most widely cited indices are put together by the Institute for Supply Management, including the Purchasing Managers Index (PMI) and about 10 other indices that focus on specific aspects of the manufacturing industry, such as new orders, production, inventories, exports, and imports. The PMI is the broad measure of manufacturing purchasing managers' expectations of business activity for the next 12 months. The nation's manufacturing sector saw its ninth consecutive month of expansion in October 2007, but at a slower pace. The Institute for Supply Management's Purchasing Managers Index registered 50.9 in October, down from its September reading of 52.0. A reading over 50 predicts economic expansion, so October's result suggests the nation's manufacturing sector maintains a positive, albeit downgraded, outlook. Analysts claim the slowdown in housing and transportation is affecting manufacturing, and many industry respondents believe the market has not recovered as quickly as they expected.

Several indices focus on manufacturing activity in Colorado and the Rocky Mountain region. These reveal a mixed outlook for Colorado manufacturers:

- The Denver Manufacturing PMI registered 52.8 in September 2007, up from 51 in August. Compiled by the College of Business at the University of Colorado Denver, the index points to improving conditions when it registers more than 50. The September reading forecasts a slight uptick in the growth of Metro Denver manufacturing, but index subcomponents suggest that labor availability is an ongoing challenge.
- The Creighton University Business Conditions Index for the Mountain States region saw a third consecutive decline when it dropped from 65.3 in May 2007 to 61.2 in June. A reading greater than 50 points to expansionary conditions, so June's result suggests that economic growth may continue at a reduced pace. Comments from some of the purchasing managers surveyed included concerns about rising fuel prices and the availability of skilled labor.
- The manufacturing survey by the Federal Reserve Bank of Kansas City that includes Colorado and six Midwestern states reveals that manufacturing output expanded modestly in October 2007, and producers remained largely positive about future activity. However, orders and employment indices were sluggish, and firms continued to trim inventories. Most price indices in the survey edged up slightly.

These indices point to continued challenges for Colorado's manufacturing industry. Although employment has slid each year starting in 2001, the rate of job loss in the industry has declined. Employment in the manufacturing industry fell an average of 3.6% per year from 2001 to 2006, representing a contraction of 30,500 jobs over the five-year period. In contrast, this forecast calls for job losses averaging 2.9% per year in 2007 and 2008, a decline of 8,400 jobs over the two years.

Nondurable Goods

About one-third of the employment in the manufacturing industry is found in the nondurable goods sector, which includes the production of goods that generally last for less than one year. The nondurable goods sector will employ about 47,400 people in 2008, representing an average decline in employment of 2.1% per year in 2007 and 2008.

The largest nondurable goods group is food manufacturing, of which about two-thirds of Colorado's food processing is in beef production. Following international concerns about the quality of U.S. beef in 2004 reduced national exports by 7%, to 323,000 metric tons, the USDA projects beef exports will rise, to 776,000 metric tons, by 2008. This is good news for the Colorado beef industry. While it varies by year, Colorado usually ranks no lower than 10th in domestic beef production. Beef exports could be significantly better if Japan and South Korea were to purchase U.S. beef at their pre-2004 levels. Currently, the two countries import approximately $154 million less Colorado beef than they did before the 2004 mad cow disease disruption in the market.

After a slight improvement in food manufacturing in 2006, competitive pressures and advances in production techniques are expected to reduce employment in 2007 by 200 workers. The downward trend is anticipated to continue in 2008 when the sector's employment is expected remain flat.

Colorado's beverage industry produces soft drinks/bottling (33 firms), bottled water (9 firms), beer (23 firms), and wine (28 firms). Boulder, Denver, and Mesa counties host 42% of the companies. Employment is concentrated among major breweries and soft drink bottlers. Large producers have yielded significant market share as consumer preferences shift away from mass-market goods, toward specialty beverages. This trend is prominent in the brewing sector, where small microbreweries and craft labels have seen strong growth despite stagnant sales in the mass market. A recent study identified Colorado as the nation's third-largest producer of craft beers. The same study ranked the state first overall in total beer production for 2006. Beer production uncertainties from the proposed Molson Coors and SABMiller merger could impact employment in the sector. Barring significant changes at Molson Coors in 2007 and 2008, growing employment among the microbreweries and boutique wineries is expected to offset modest losses among the larger employers for no change in employment in 2007. Increased competition and manufacturing efficiencies in the sector are expected to lead to a loss of 100 jobs in 2008.

The printing and publishing industry has continued to undergo revisions to its traditional business model. Two factors explain the sector's evolution. First, advances in the capabilities of software and laser printers have shifted traditional printing jobs to limited runs of customized materials to hard copy and electronic desktop publishing. Second, increased competition among commercial printers for the reduced number of print jobs accelerated the need for technical innovation and increased efficiency. These trends are expected to continue. Inefficient print shops will not be able to compete. Increased efficiencies will reduce the number of employees in the sector. The lack of strong growth in the economy will aggravate the sector's business environment. As a result, the sector is expected to lose 200 jobs in 2007 and 300 jobs in 2008.

The other nondurable goods sector includes textiles, apparel, and leather goods; paper manufacturing; petroleum and coal products; chemicals; and plastics and rubber products. With the exception of the latter two categories, these sectors have a small, yet stable, presence in Colorado. The textiles, apparel, and leather sector employs about 3,400 people, but the sector continues to face stiff overseas competition. The weak dollar may help exports in this sector. Roughly 2,100 people are employed in paper manufacturing in the state, including cardboard containers, packaging, and paper products. This sector has been contracting by more than 100 workers per year during the last five years. Another 900 people are employed in the petroleum and coal products sector, mainly within petroleum refining operations. This sector has

MANUFACTURING EMPLOYMENT, DURABLE AND NONDURABLE 1998–2008 (In Thousands) (Base Year: 1998=100)

	Durable		Nondurable	
Year	Employment	Index	Employment	Index
1998	129.6	100.0	61.8	100.0
1999	127.0	98.0	60.4	97.7
2000	128.8	99.4	60.1	97.2
2001	122.5	94.5	57.0	92.2
2002	109.9	84.8	53.9	87.2
2003	102.0	78.7	51.9	84.0
2004	101.0	77.9	50.8	82.2
2005	100.5	77.5	49.9	80.7
2006	99.3	76.6	49.8	80.6
2007[a]	96.4	74.4	48.3	78.2
2008[b]	93.3	72.0	47.4	76.7

[a]Estimated.

[b]Forecast.

Source: Colorado Department of Labor and Employment, Bureau of Labor Statistic and Colorado Business Economic Outlook Committee.

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Manufacturing

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COLORADO MANUFACTURING EMPLOYMENT BY INDUSTRY
1998–2008
(In Thousands)

Industry	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007[a]	2008[b]
Food	19.6	19.3	19.8	19.8	19.3	18.3	17.8	17.1	16.7	17.0	17.0
Beverage and Tobacco	6.3	5.9	5.9	6.0	5.9	5.8	5.9	5.7	5.8	5.7	5.6
Printing and Related	12.4	11.8	11.4	10.4	9.2	8.6	8.1	8.0	7.8	7.6	7.3
Other Nondurables	23.5	23.4	23.0	20.8	19.5	19.2	19.0	19.1	19.5	18.0	17.5
Subtotal, Nondurable Goods	61.8	60.4	60.1	57.0	53.9	51.9	50.8	49.9	49.8	48.3	47.4
Nonmetallic Minerals	9.7	10.3	10.8	10.4	9.8	9.1	9.1	9.5	9.8	9.4	9.1
Fabricated Metals	17.9	17.6	18.3	17.2	15.8	15.1	15.4	14.9	14.9	15.0	14.9
Computer and Electronics	45.3	44.3	46.0	45.2	38.1	33.6	31.6	30.1	28.3	25.8	23.9
Transportation Equipment	13.9	13.2	12.3	11.3	10.4	9.7	10.0	10.7	10.3	10.3	10.0
Other Durables	42.8	41.6	41.4	38.4	35.8	34.5	34.9	35.3	36.0	35.9	35.4
Subtotal, Durable Goods	129.6	127.0	128.8	122.5	109.9	102.0	101.0	100.5	99.3	96.4	93.3
Total, All Manufacturing	191.4	187.4	188.9	179.5	163.8	153.9	151.8	150.4	149.1	144.7	140.7

[a]Estimated.

[b]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

remained relatively stable during the past year in response to rising energy costs.

Chemical manufacturing and plastics/rubber production are the largest other nondurable goods sectors, providing two-thirds of all employment in the other nondurable goods category. Exports in both sectors have more than doubled since 2001 and increased approximately 70% since 2004. The chemical manufacturing sector includes petrochemical manufacturing, industrial gases, biotechnology, pharmaceuticals, household chemicals, and related industries. This is a very volatile sector, with wide swings in individual company employment resulting from the success or failure of medical clinical trials and changes in the price of oil. Biotechnology is an important emerging sector that has been targeted in state economic development efforts. The former Fitzsimons Army Medical Center is being converted into a state-of-the-art, integrated life sciences community. The 578-acre site in Aurora is undergoing a $4.3-billion transformation into one square mile dedicated to excellence in patient care, education, basic science, and applied research, as well as bioscience research and development. Chemical manufacturing employs roughly 7,000 Colorado workers.

The plastics and rubber products sector includes companies producing plastic film, plastic foam products, and other miscellaneous products. Rubber companies have a limited presence in Colorado, while the plastics industry has continued to grow. This sector includes injection-molding companies, which are closely tied to the biotech and electronics industries. Employment in the rubber and plastics sector will decline slightly from its current level of 5,400 workers due to weakness in the electronics industries.

The other nondurable goods sector is expected to decrease by about 1,500 positions in 2007 and lose another 500 jobs in 2008 due to the volatility of the sectors tied to the energy, bioscience, and electronics industries. This brings the total nondurable goods employment forecast to 48,300 positions in 2007, a decrease of 1,500 positions from 2006. Total employment in nondurable goods will continue to contract in 2008, dropping by another 900 jobs to 47,400.

Durable Goods

About 99,300 people were employed in the durable goods industry in 2006. Challenges continue for many of the durable goods sectors, especially those that are tied to the construction and computer manufacturing industries.

There is great product diversity in the nonmetallic minerals sector, but outputs from the sector are closely tied to construction activity of all types—residential, commercial, and industrial, and heavy construction. This sector includes everything from pottery, plumbing fixtures, and glass products to brick and tile to concrete and stone products, as well as high-tech porcelain electrical products. Due to its strong ties to the construction industry, this sector contracted by about 400 jobs in 2007 and ended the year with average employment of 9,400. An additional 300 jobs are expected to be lost in 2008.

Output from the fabricated metals sector provides materials for many other sectors, everything from steel beams for construction to component parts for a myriad of other products—virtually anything with metal content. Employment in this sector fluctuates with demand from other industries. Many of the firms in this category are small suppliers to producers of industrial machinery. Employment in this sector held steady in 2007, with a projected average employment of 15,000 at year-end. Higher demand for fabricated metal products from industries such as energy exploration and production and aerospace drove the need for more equipment. Nevertheless, this is a sector where productivity advancements has allowed manufacturers to use less labor per unit of output in the production process. Substitution of capital for labor will allow output to increase with fewer workers. This sector will likely see a minimal loss of 100 jobs in 2008, for a total of 14,900 positions.

The largest durable goods sector in Colorado is computer and electronics products. After peaking at 46,000 workers in 2000, this manufacturing sector has dwindled to 28,300 positions in 2006, representing a loss of 17,700 jobs. While the computer and electronics sector has declined throughout the United States over the last few years, Colorado has experienced even faster declines. As computer hardware comes down in price and becomes more of a commodity, production has shifted to less expensive off-shore locations. Furthermore, consumers no longer feel the need to buy the latest and greatest computer and electronic devices, further hampering domestic production. While the mainstay of the U.S. computer and electronics sector remains in research and development, even these operations have not been immune to job losses. Overall, the high-tech markets are in transition as most segments mature into modest, but stable growth patterns. Companies in this sector are investing to be more competitive globally by focusing on faster product introduction times, more efficient sales channels, and tighter supplier partnerships. Still, expect Colorado employment to decline by 2,500 workers in 2007 and another 1,900 in 2008.

The transportation sector includes the manufacture of everything from aircraft parts to missiles and satellites to mountain bike frames. Increased defense and aerospace spending since late 2001 have provided the state's six prime contractors (Lockheed Martin, Boeing, Raytheon, Northrop Grumman, ITT Industries, and Ball Aerospace) with new clients and new contracts. A new player in this sector is United Launch Alliance (ULA), a joint venture of Lockheed Martin and Boeing, headquartered in Metro Denver. ULA will build the next generation of launch vehicles combining the Atlas and Delta rocket operations. The new facility has already brought more than 1,500 new aerospace jobs to Colorado, although assembly operations will be located in Decatur, Alabama. Colorado also has a small niche in personal jet aircraft manufacturing, with several models having recently won FAA approval. In spite of growth in some areas within this group, employment in 2007 held its own, at 10,300. With continued productivity gains and shifting of manufacturing operation locations, this sector is projected to lose 300 jobs in 2008.

The other durable goods sector includes wood products, primary metals, machinery, electrical equipment and appliances, furniture, and miscellaneous manufacturing. This diverse group of sectors is faced with varying demand issues, ranging from the decline in new home construction to the growing demands of the healthcare industry.

Employment in the wood products and furniture sectors has increased steadily during the last couple of years. This contraction will continue in 2007 and 2008 as home construction declines and consumer spending levels remain more conservative.

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Manufacturing

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Roughly 2,100 people work in the primary metals sector, which includes steel and aluminum refining, as well as the manufacture of metal alloys and superalloys. Output from the primary metals sector provides materials for many other sectors, especially the fabricated metal sector. Another 9,100 people are employed in machinery manufacturing. Due to the overall sluggishness of the manufacturing industry, the primary metals and machinery sectors are expected to contract slightly in 2007 and 2008.

The miscellaneous manufacturing sector is quite broad and includes industries such as medical and dental equipment and supplies, surgical instruments and appliances, and sporting goods production. Most of the growth in the other durable goods sector is expected to occur within the miscellaneous category. Miscellaneous manufacturing employment is expected to increase slightly in both 2007 and 2008.

COLORADO EMPLOYMENT IN MANUFACTURING AND STATE TOTAL
1998–2008
(In Thousands)
(Base Year: 1998=100)

	Manufacturing			All Industries	
Year	Number	Index	Percentage Change	Index	Percentage Change
1998	191.4	100.0	2.4%	100.0	3.9%
1999	187.4	97.9	-2.1	103.6	3.6
2000	188.9	98.7	0.8	107.6	3.8
2001	179.5	93.8	-5.0	108.2	0.6
2002	163.8	85.6	-8.7	106.2	-1.9
2003	153.9	80.4	-6.0	104.6	-1.4
2004	151.8	79.3	-1.4	105.9	1.2
2005	150.4	78.6	-0.9	108.2	2.1
2006	149.1	77.9	-0.9	110.8	2.4
2007[a]	144.7	75.6	-3.0	113.5	2.4
2008[b]	140.7	73.5	-2.8	115.6	1.9

[a]Estimated.

[b]Forecast.

Source: U.S. Department of Labor, Colorado Department of Labor and Employment, Bureau of Labor Statistics, and Colorado Business Economic Outlook Committee.

The net result of the various issues faced by the other durable goods sectors is a loss of 100 jobs in 2007, followed by an additional 500 in 2008. Average employment is expected to total about 35,400 in 2008. This will bring total durable goods manufacturing employment in Colorado to 96,400 in 2007 and 93,300 in 2008.

Summary

The 6,000 manufacturing establishments in Colorado are expected to employ 144,700 workers in 2007. Manufacturing employment will continue to shrink in 2008, falling to 140,700 positions. This is consistent with the trend across the country. Still, Colorado's manufacturing job losses have been more severe than those of the nation, with Colorado employment declining by 3.6% per year from 2001 to 2006, compared to the national decline of 2.9% per year. On a positive note, manufacturing productivity has consistently outpaced productivity growth in other sectors. Between 1987 and 2005, manufacturing productivity grew by 94%, about 2.5 times the 38% increase in productivity in the rest of the business sectors. Moreover, companies that place contract labor in manufacturing industries have been quite busy. Workers employed through these contract agencies are counted in the professional services category, an industry group that has increased rapidly in the state. Therefore, it is quite likely that at least some of the employment losses in Colorado and across the country are due to productivity increases and the more widespread use of contract manufacturing labor.

Trade, Transportation, and Utilities

The Trade, Transportation, and Utilities Supersector is the largest provider of jobs in Colorado. In 2007, the strongest job growth occurred in the wholesale and retail sales sector, driving total supersector employment to 430,600, an increase of 2.6%. Slower sales should post lower gains in 2008, pushing employment up by 1.3%, to 436,000.

Trade

Wholesale

Colorado's wholesale trade subsector employs nearly 100,000 workers at a relatively high average wage. Average weekly earnings per wholesale worker in 2006 were more than 40% above that for all private-sector workers. Colorado wholesale trade is dominated by merchant wholesalers, that is, firms that sell to retail outlets. These firms provide 90% of all wholesale jobs. The subset of firms selling durable goods, particularly computers, peripherals, and electronic equipment, account for 60% of merchant wholesaler employers.

The largest number of jobs among nondurable wholesalers is with businesses selling groceries and related products. The remaining wholesale jobs are with business-to-business sellers, electronic marketers, and agents and brokers.

Historically, wholesale employment in Colorado has been cyclical. The number of jobs in this subsector fell sharply in 2002 and 2003 but has since rebounded with the state and national economic recoveries. A gain of 2,600 jobs is expected in 2007. With slower growth in both the Colorado and U.S. economies, only 1,000 new jobs are forecast in 2008, an increase of 1%.

WHOLESALE TRADE EMPLOYMENT
1998–2008
(In Thousands)

Year	Wholesale Trade Durable Goods	Wholesale Trade Nondurable Goods	Other Wholesale	Total	Percentage Change
1998	53.6	32.4	6.5	92.5	3.1%
1999	55.9	33.1	5.5	94.5	2.2
2000	60.0	33.8	5.6	99.4	5.2
2001	60.4	33.9	5.5	99.8	0.4
2002	56.0	33.3	5.8	95.1	-4.7
2003	52.7	32.3	7.1	92.1	-3.2
2004	51.5	31.9	8.5	91.9	-0.2
2005	52.4	32.0	9.1	93.5	1.7
2006	53.5	32.7	10.2	96.4	3.1
2007[a]	54.5	33.6	10.9	99.0	2.7
2008[b]	55.0	34.0	11.0	100.0	1.0

[a]Estimated.
[b]Forecast.
Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Retail

Retail trade employs more people than any other subsector of the Colorado economy; over one-tenth of the state workforce or roughly one-quarter million workers hold jobs with retail firms. Three of the state's largest private-sector employers are retailers. Overall, wages in the retail sector are relatively low, with average weekly earnings less than 60% of those for all private-sector workers. Many of the state's retail jobs are part-time.

Employment in the retail subsector rebounded as the state economy recovered. However, job gains have fallen short of those achieved during the strong growth years of the 1990s. Between 1993 and 2000, the sector averaged more than 10,000 net new jobs per year, while only 15,000 total jobs have been added between 2003 and 2007. A portion of the pattern of slower job growth can be explained by more moderate overall economic growth and smaller sales gains. However, it also reflects faster productivity gains, that is, fewer workers per dollar of sales due to such changes as increased use of labor-saving technology and management practices and a trend toward more self-service. The

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Trade, Transportation, and Utilities

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RETAIL TRADE EMPLOYMENT
1998–2008
(In Thousands)

Year	Motor Vehicle and Parts Dealers	Bldg. Material and Garden Eqpt. and Supplies Dealers	Food and Beverage Stores	General Merchandise Stores	Other Retail	Total	Percentage Change
1998	29.2	19.1	44.4	39.2	98.9	230.8	3.3%
1999	30.5	20.7	45.1	40.8	102.2	239.3	3.7
2000	31.9	21.3	44.7	42.6	104.7	245.2	2.5
2001	32.7	21.6	44.2	43.4	103.8	245.7	0.2
2002	33.0	22.2	42.7	44.0	100.8	242.7	-1.2
2003	32.4	21.5	42.2	44.2	99.2	239.5	-1.3
2004	32.4	22.4	42.4	45.0	99.1	241.3	0.8
2005	32.0	23.1	43.9	46.7	100.1	245.8	1.9
2006	31.5	23.8	44.2	46.9	101.9	248.3	1.0
2007[a]	31.7	24.1	44.2	51.6	103.0	254.6	2.5
2008[b]	31.7	24.1	44.4	53.1	104.3	257.6	1.2

[a]Estimated.

[b]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

state minimum-wage measure that took effect in January 2007 may have discouraged hiring in the retail sector. Slower sales growth and a reasonably tight labor market will translate into only modest job gains through 2008. Some 6,300 new retail jobs are expected in 2007, with another 3,000 added to the Colorado economy in 2008.

Sales by Colorado retailers will approach $65 billion in 2007. Sales by auto dealers account for more than 21% of the total retail sales in Colorado. Auto sales in the state have been surprisingly strong in 2007, with a gain of 7% in the first seven months versus the corresponding timeframe in 2006. This compares to a 2.5% increase nationally for the same period. Possible explanations include replacement demand resulting from weak sales over the previous four years and from the need to replace damaged vehicles after the severe 2006–07 winter. General merchandise stores, which include department stores, discount stores, warehouse clubs, and superstores, account for 17% of all sales. This category climbed 4.7% in the first seven months of 2007 over the same period in 2006, although this figure is inflated by a shift of last Christmas's sales into January. Food and beverage stores reported 18% of total retail sales. The final category, building materials stores and nurseries, make up more than 9% of sales. Sales in this area have fallen more than 5% in this period due to the drop in home construction.

Retail sales for 2007 should increase around 5%, which is similar to that recorded in 2006. The 2007 figure presents an overly optimistic picture of the market as it is inflated by the effect the two blizzards that hit the state in late December 2006. These storms caused many shoppers to postpone purchases from December to January.

The outlook in 2007 for holiday sales for both the state and nation is cloudy. Consumers' concerns about the credit crunch and rising fuel prices have led the National Retail Federation to project the smallest gain in holiday retail sales since 2002. Wal-Mart Stores announced large price cuts on its best-selling toys 12 weeks before Christmas and signaled more reductions are coming. This move will pressure other retailers to make similar discounts. Although Colorado consumers are confronted with these same problems, sales over the holiday period should show a reasonably healthy year-to-year gain because of the effects of last December's blizzard. This statistical anomaly, however, will provide little help to retailers' balance sheets.

In 2008, Colorado's consumers will be adversely affected by several factors, including a depressed housing market; overstretched budgets; higher borrowing costs; and the rising cost of food, gasoline, and home heating fuel. Housing prices in the state are less likely to experience sharp declines than those in many other parts of the nation. However, mortgage rate resets for many homeowners will cut into funds available for discretionary spending. Job and income growth is likely to slow somewhat further, depressing spending. Sales for 2008 are forecast to grow by 3.6%, although the growth rate presents an excessively dismal picture as it is distorted by the unusually strong sales in January 2007. Auto sales are unlikely to sustain the brisk growth of 2007. Building materials will see further weakness, while the dollar value of food store sales will record robust gains due to higher prices.

RETAIL SALES
1998–2008
(In Billions of Dollars)

Year	Motor Vehicle and Parts	General Merchandise	Other Retail	Total Retail Trade Sales[a]	Percentage Change
1998	$10.0	$6.2	$26.9	$43.1	6.7%
1999	11.8	6.9	28.7	47.4	10.0
2000	13.0	7.6	31.6	52.2	10.1
2001	13.9	7.9	31.1	52.9	1.3
2002	13.5	8.2	31.2	52.9	0.0
2003	13.7	8.5	30.6	52.8	-0.2
2004	14.0	9.1	32.7	55.8	5.7
2005	13.6	9.8	35.3	58.7	5.2
2006	13.3	10.3	38.1	61.7	5.1
2007[b]	14.1	10.8	39.8	64.7	4.9
2008[c]	14.5	11.1	41.4	67.0	3.6

[a]The total does not include food services.

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Revenue and Colorado Business Economic Outlook Committee.

Front Range retail real estate markets have slowed due to the large amount of new space that has come on the market in recent years. In Metro Denver, some 6 million square feet is currently under construction, with an increasing share of new facilities in downtown redevelopment projects rather than in the suburbs. Major new openings include the Nordstrom store in Cherry Creek.

Transportation and Warehousing

The transportation and warehousing sector includes air, railroad, and water transportation; trucking; taxi service; urban transit; couriers; warehousing; and pipeline companies. These industries are expected to contribute 68,700 jobs in 2007 and 69,900 in 2008. Gains in air and truck transportation boosted hiring in this sector in 2007. Slower growth is expected in 2008, with continued high fuel prices.

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Trade, Transportation, and Utilities

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National Air Transportation

The national aviation economy primarily centers on the activity of air carriers and the hub airports that serve them. In 2007, air carriers continued to focus on costs and revenues as related to revenue passenger miles (RPM). The Air Transport Association Cost Index is a metric that tracks quarterly and annual trends of the expense of inputs to airline production. Key ratios from the Airline Cost Index identify the largest expenses as fuel (25.4%), labor (23.6%), and transport-related costs (13.7%).

Year-over-year highlights include:

- The composite cost index is estimated to rise to 185.7 in 2007, up 2.9% from 2006.
- The 2007 fuel cost component is expected to decline to 25.4% from 25.5% in 2006.
- The 2007 labor cost component is expected to decrease to 23.6% from 23.8% in 2006.
- Cents per RPM for domestic travel year-to-date 2007 dipped slightly below 2006 levels, at 12.87¢ per mile, while Atlantic, Latin America, and Pacific travel increased substantially over 2006, with yields at 12.71¢ per mile, 13.60¢ per mile, and 11.78¢ per mile, respectively.
- Airline operating revenues for 2006 were $163.8 billion, up 8.3% from $151.3 billion the previous year.

In 2006, air carrier passenger boardings grew to 716.8 million from 690.2 million in 2005 (3.9%). This trend is expected to last through 2007 and into 2008. However, the air transportation system is experiencing substantial flight delays, and no immediate improvements can be expected. It is yet to be determined at what point the "hassle factor" will deter people from flying. An overhaul of the air traffic control system and increased airport capacity, which the air carriers claim is the root of the problem, may be on the horizon within the next three to five years.

TRANSPORTATION AND WAREHOUSING EMPLOYMENT
1998–2008
(In Thousands)

Year	Truck Transportation	Couriers and Messengers	Warehousing and Storage	Air Transportation	Other Transportation	Total	Percentage Change
1998	17.3	9.9	7.8	14.1	11.6	60.7	1.8%
1999	17.2	10.0	8.2	15.5	11.9	62.8	3.5
2000	17.7	10.5	8.9	17.0	12.2	66.3	5.6
2001	17.3	10.4	9.0	16.1	16.7	69.5	4.8
2002	16.9	9.7	8.7	14.2	16.7	66.2	-4.7
2003	16.5	9.7	8.0	13.7	17.1	65.0	-1.8
2004	16.9	9.4	7.4	14.1	17.7	65.5	0.8
2005	17.8	9.3	7.0	13.6	18.0	65.7	0.3
2006	18.3	9.5	7.2	13.3	18.4	66.7	1.5
2007[a]	18.7	9.8	7.0	14.3	18.9	68.7	3.0
2008[b]	18.9	10.1	6.8	14.8	19.3	69.9	1.7

[a]Estimated.

[b]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

COLORADO AIRPORT STATISTICS
2000–2008
(In Millions)

Airport Activity	2000	2001	2002	2003	2004	2005	2006	2007[b]	2008[c]
Passengers (In Thousands)[a]									
Denver Internatinal Airport (DIA)	38,751.7	36,092.8	35,651.9	37,505.1	42,393.8	43,387.4	47,325.0	49,302.3	51,088.5
Colorado Springs Airport (COS)	2,424.7	2,131.8	2,136.4	2,023.3	2,069.5	2,061.7	2,034.0	1,906.0	1,786.0
Walker Field Airport (Grand Junction) (GJT)	273.2	240.1	250.9	255.2	288.1	319.4	320.6	326.1	331.8
Eagle County Regional Airport (EGE)	369.1	331.3	339.5	336.7	388.3	426.5	434.1	445.0	456.2
Aspen/Pitkin County Airport (ASE)	430.2	375.7	376.7	379.8	368.5	387.9	403.3	399.7	396.1
Yampa Valley Regional Airport (HDN)	229.5	201.5	214.0	204.8	240.6	259.5	262.9	268.4	273.9
Durango-La Plata County Airport (DRO)	182.6	182.8	204.4	172.4	194.2	203.5	227.0	234.9	243.1
Montrose Regional Airport (MTJ)	134.5	137.5	141.6	138.8	144.9	157.3	164.6	169.9	175.3
Gunnison-Crested Butte Regional Airport (GUC)	110.3	88.5	81.9	75.4	76.8	89.7	96.1	94.4	92.7
Fort Collins-Loveland Municipal Airport (FNL)	na	na	na	20.6	63.9	69.3	65.7	87.6	116.8
Telluride Regional Airport (TEX)	34.2	38.4	35.0	30.8	37.0	36.3	32.9	32.7	32.5
Cortez Municipal Airport (CEZ)	na	16.5	12.3	13.5	15.7	16.4	18.5	18.9	19.4
San Luis Valley Regional/Bergman Field (ALS)	na	9.4	7.8	7.7	10.4	10.9	10.9	11.2	11.6
Pueblo Memorial Airport (PUB)	na	8.4	7.0	7.8	9.0	8.1	9.9	10.3	10.7
Total Passengers	42,940.0	39,854.5	39,459.4	41,171.7	46,300.7	47,433.9	51,405.6	53,307.5	55,034.6
Cargo, Freight, and Air Mail (In Millions)									
DIA Freight and Express	676.3	563.6	636.3	610.1	621.0	615.6	580.2	577.3	574.4
DIA Air Mail	363.4	227.2	95.6	107.4	78.8	67.6	41.4	35.0	29.6
DIA Total	1,039.7	790.8	731.9	717.5	699.8	683.2	621.6	612.3	604.0
Colorado Springs Freight and Cargo	39.5	39.7	40.6	36.3	35.5	33.1	32.6	31.6	30.6
Colorado Springs Air Mail	4.4	4.4	3.0	1.1	1.0	0.3	0.0	0.0	0.0
Colorado Springs Total	44.0	44.1	43.6	37.4	36.5	33.5	32.6	31.6	30.6

[a]Passengers include enplanements and deplanements.

[b]Estimated.

[c]Forecast.

Sources: Denver International Airport, Colorado Springs Municipal Airport, Grand Junction Walker Field, Federal Aviation Administration, and the Colorado Business Economic Outlook Committee.

Colorado Air Transportation

Air transportation in Colorado is a major contributor to the state's economy, both in terms of direct employment and transportation infrastructure.

In 2006, Denver International Airport's (DIA) enplanements grew to 23.7 million from 21.7 million, an increase of 9.1%. The facility now enplanes approximately 3.3% of total national boardings. Airline economic efficiency has been substantially improved in 2007 through greatly improved on-time performance.

Colorado Springs Municipal Airport's enplanements and deplanements slid 1.3% in 2006, but the airport moved from the nation's 90th busiest airport to 88th, according to FAA statistics.

In 2006, Grand Junction Walker Field's enplanements increased by 0.4%. The facility moved up one place in the ranking of U.S. airports, from 194th to 193rd.

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Trade, Transportation, and Utilities

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The major ski resort airports, such as Eagle County, Aspen/Pitkin County, and Yampa Valley, rank 165th, 175th, and 206th, respectively, in the number of boardings.

Denver International Airport

DIA is owned and operated by the City and County of Denver. Approximately 1,000 people are employed by the city's Department of Aviation.

In 2006, DIA served more than 47.3 million passengers, finishing the year as the 5th-busiest airport in the United States and the 10th-busiest in the world. The facility appears headed for a fourth straight record in 2007, with nearly 38 million passengers through September.

DIA's major carrier, United Airlines, accounts for approximately 51% of the airport's total passenger traffic. United provides nonstop service to more than 100 destinations from Denver, the second-largest hub in the carrier's network. Frontier Airlines, which serves more than 50 destinations nonstop from Denver, is the second-largest carrier at DIA, handling about 24% of the airport's passengers. Southwest Airlines, which returned to the Denver market in January 2006, is DIA's third-busiest carrier, with just under 6% of the total passenger traffic.

Nearly 30 other airlines, including regional carriers, also serve DIA. In addition to Frontier and Southwest, other low-cost carriers (LCCs) in Denver include AirTran, America West/US Airways, and JetBlue. The growth of LCCs in Denver continues to put downward pressure on fares and increase airline choices for travelers.

DIA has completed several capital improvements projects in recent months, including a new regional jet facility on the east end of Concourse B, and a new aircraft deicing pad to serve the 16/34 runway complex.

In addition, a number of projects are underway, some of which will be completed in the near future:

- Construction of 10 new jet gates on the east end of Concourse C (to be finished within three years)
- Mod 4 West parking structure (1,700 spaces, complete in late 2007)
- Phase 1 of Landscape Master Plan
- First phase of commercial-use development program at Peña and Gun Club Road, which will provide retail and services to passengers and employees

DIA has been profitable every year since it opened, and revenue is shared with the airport's signatory carriers. Moreover, DIA continues to receive awards for efficiency and overall customer experience. In 2005 and 2006, *Business Traveller Magazine* rated DIA as the "Best Airport in North America."

Motor Freight Transportation and Warehousing

Nationwide, the trucking industry is comprised primarily of small carriers. American Trucking Trends estimated that 87% of trucking firms operate six or fewer trucks, and data show the 10 largest public transportation companies represent less than 5% of the market. This is primarily due to the low barriers to entry, making it relatively easy for individuals to become over-the-road drivers—all they basically need is a commercial driver's license, a truck, and insurance. Although demand is driving the market, there is a shortage of drivers. In addition, rising fuel, capital (truck), maintenance, and insurance costs are forcing many of the smaller operators out of the market in Colorado.

Why the driver shortage? Assume that a driver receives $0.40 per mile. The individual must drive 120,000 miles per year to earn $48,000. Driving 60 miles per hour translates into 2,000 hours of work before loading time and down time. Increased regulation capping the allowable hours driven, coupled with empty hauls and soaring fuel prices, only add greater challenges to the business. Nationally, diesel prices have increased more than 6% from September 2006 to September 2007, and more than 109% from 2002 to 2007. No wonder large carriers reported 116% employee turnover, and small carriers noted 90% turnover in the second quarter of 2006. One owner of a large freight company commented, "Turnover rates in our drivers is a very real problem across the industry in Colorado; quite frankly it is out of control, we have been lucky to keep 73% of our drivers, most others have it worse off than we do. We are about equal in pay scale but we find the additional benefits (health, dental, life), flexible scheduling, and hiring bonuses paid out over 3–5 year periods, has been the key to our relative stability."

Colorado carriers have one additional compounding factor—more freight is coming into the state than going out. Colorado's low manufacturing base and strong high-tech base results in fewer goods being shipped out of Colorado, and hence lower prices on outbound goods. A discount on outbound goods is caused by carriers' need to fill trucks. Polling a few of the major Colorado trucking firms found that the average outbound price in Colorado is $1.05 per mile compared to inbound at $1.95. At first glance, the low cost on out-bound shipments may spark interest for luring manufacturers to the state; however, the inbound cost of raw materials is higher than average. Therefore, locating near to suppliers or customers is a strategy for industry competitiveness. As one trucking company CEO explained, "We are getting paid nearly double for an inbound load vs. an outbound load, sometimes you just feel lucky if you even get an outbound load."

In Colorado, retail fuel prices have increased nearly 7% over 2006 (September to September), and more than 98% since 2002. To an extent, costs are being passed along to the customer, but prices charged do not react as quickly as fuel prices, which depend on the market and can change daily. In fact, in some cases fuel surcharges can be a profit center for larger companies that can buy fuel with volume discounts. Ironically, it is also the same fuel charges that are driving out the smaller "mom and pop" businesses because they cannot compete on volume, and if they pass on charges to the customer, they lose out to larger competitors.

With the first half of 2007 pointing to a strong year for Colorado's trucking industry employment, the year is expected to finish 2.2% higher than in 2006. Employment should grow in 2008, but at a slower rate, approximately 1%. Transportation company expansion plans range from 2% to 9%. The head of one of Colorado's largest trucking firms commented, "It's not that we are not growing, it's that we can't find enough drivers to meet that growth." Watch the retail trade and wholesale trade activity in Colorado as an indicator of the trucking industry, given the correlation between the sectors (0.81 and 0.66, respectively).

TRADE, TRANSPORTATION, AND UTILITIES EMPLOYMENT
1998–2008
(In Thousands)

Year	Wholesale Trade	Retail Trade	Total Trade	Transportation and Warehousing	Utilities	Total TTU	Percentage Change
1998	92.5	230.8	323.3	60.7	8.4	392.4	2.9%
1999	94.5	239.3	333.8	62.8	8.2	404.9	3.2
2000	99.4	245.2	344.6	66.3	8.0	418.9	3.5
2001	99.8	245.7	345.5	69.5	8.0	423.0	1.0
2002	95.1	242.7	337.8	66.2	8.1	412.1	-2.6
2003	92.1	239.5	331.6	65.0	7.9	404.5	-1.8
2004	91.9	241.3	333.2	65.5	7.9	406.6	0.5
2005	93.5	245.8	339.3	65.7	8.0	413.0	1.6
2006	96.4	248.3	344.7	66.7	8.1	419.5	1.6
2007[a]	99.0	254.6	353.6	68.7	8.3	430.6	2.6
2008[b]	100.0	257.6	357.6	69.9	8.5	436.0	1.3

[a]Estimated.
[b]Forecast.
Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Utilities

Colorado's utilities are a key component of the state's plan to reduce carbon emissions and address environmental issues. Demand for electricity and natural gas continues to grow, however, driving demand for new production and more conservation efforts.

In 2007, the Colorado legislature increased the renewable energy standard from 10% by 2015 to 20% by 2020 and established energy-savings and peak-reduction goals for utility energy efficiency and demand-side management programs. At the same time, the governor proposed the Colorado Climate Action Plan that calls for a 20% reduction in carbon emissions by 2020.

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Trade, Transportation, and Utilities

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Xcel Energy, Colorado's largest utility, is determined to be a utility industry leader in providing solutions to concerns about global climate change and regional environmental issues. As a result, the company has proposed a resource plan built around significant renewable energy and demand-side management additions that go above and beyond the levels required to meet the minimum goals of the legislature and governor. The utility plans to achieve these reductions through a combination of additional coal plant retirements, increased levels of conservation, and more carbon-free generating resources to serve customer growth.

Colorado's natural gas producers have outpaced new pipeline additions, keeping prices much lower in the state when compared to national levels. Wholesale natural gas prices averaged $3.85 in Colorado in the first 10 months of 2007, compared to $6.94 nationally. Lower wholesale natural gas prices have held down both retail natural gas prices and electricity prices in the state. However, Colorado's relatively cheap natural gas prices are expected to move toward market levels as new pipeline capacity comes online starting in early 2008.

Electricity consumption has continued to increase with population and economic growth. Electric consumption in Colorado grew from 49,734 million Kwh in 2006 to an estimated 51,502 million Kwh in 2007, and is expected to climb to 52,633 million Kwh in 2008. The state's rate of electricity consumption growth rose from 2.9% in 2006 to 3.6% in 2007.

Natural gas consumption has also continued to grow along with the economy and increased demand from gas-fired combustion turbines. The rate of growth is anticipated to slip, with more coal-fired and renewable generation coming online in 2008 and 2009. ✥

COLORADO NATURAL GAS CONSUMPTION
1998–2008
(In Billions of Cubic Feet)

Year	Total Gas Consumption	Percentage Change
1998	330.2	5.0%
1999	333.1	0.9
2000	367.9	10.4
2001	463.7	26.0
2002	459.4	-0.9
2003	436.3	-5.0
2004	439.6	0.8
2005	470.7	7.1
2006	442.8	-5.9
2007[a]	462.9	4.5
2008[b]	466.1	0.7

[a]Estimated.

[b]Forecast.

Source: Colorado Business Economic Outlook Committee.

COLORADO ELECTRIC POWER CONSUMPTION
1998–2008
(In Millions of Kilowatt Hours)

Year	Nonresidential	Residential	Total	Percentage Change
1998	26,922	12,652	39,574	4.0%
1999	27,440	13,131	40,571	2.5
2000	28,991	14,029	43,020	6.0
2001	29,766	14,470	44,236	2.8
2002	30,512	15,425	45,937	3.8
2003	30,770	15,725	46,495	1.2
2004	31,192	15,532	46,724	0.5
2005	31,917	16,436	48,353	3.5
2006	32,782	16,952	49,734	2.9
2007[a]	33,871	17,631	51,502	3.6
2008[b]	34,681	17,952	52,633	2.2

[a]Estimated.

[b]Forecast.

Source: *Edison Electrical Institute Statistical Yearbook*, Xcel Energy, and Colorado Business Economic Outlook Committee.

Information

Overview

Information infiltrates our daily lives and work routines through newspapers, Internet, television, cell phones, movies, and radio. Comprised of a diverse assemblage of Colorado companies, the Information Supersector is involved in the compilation, transmission, and distribution of information and cultural products, including data and communications. This includes publishing, motion picture, broadcasting, telecommunications, and data processing, hosting, and related services.

After years of industry contraction, impacted by industry consolidation and advances in productivity, the Information Supersector has shown convincing signs of stability, with employment expected to remain nearly flat for 2007 and increase marginally in 2008. Information employment, which peaked at 108,400 in 2000, bottomed at 75,600 in 2006.

Information's contribution to Colorado's GDP, which was 10.6% in 2000, held steady at 8.5% in 2005 and 2006. Most impressive are industry wages, which grew more than 11% from 2005–06, compared to 4.6% for all industries in Colorado.

In 2006, Colorado had a greater concentration of Information jobs than the national economy, 3.4% compared to 2.3%, respectively. Additionally, the supersector represented 1.6% of all establishments, 3.5% of earnings, and 4.4% of GDP of the national economy, while it accounted for 2.6% of establishments, 5.9% of earnings, and 8.5% of GDP in Colorado. Roughly 66% of GDP earned in Colorado's Information Supersector is earned in the telecommunications and broadcasting industries, 27% in the publishing industry, 6% in the information and data processing industries, and 1% in the motion picture and sound recording industries.

Publishing

As the second-largest Information subsector, publishing employed nearly 28,600 people in 1,227 establishments during 2006. The publishing industry includes any firm that issues print or electronic copies of original works for which they own a copyright. Products include newspapers, periodicals, books, directories, databases, calendars, greeting cards, software, and Internet material. The industry is increasingly producing material in formats other than traditional print, such as audio, downloadable files, and CD-ROM.

Publishing has undergone substantial increases in efficiencies over the last seven years. While the number of publishing jobs in Colorado, excluding Internet, fell by 19.2% between 2000 and 2005, the

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COLORADO GROSS DOMESTIC PRODUCT: CONTRIBUTION OF INFORMATION SUPERSECTOR
1998–2006
(In Millions of Current Dollars)

Sector	1998	1999	2000	2001	2002	2003	2004	2005	2006
Information Sector Total	$12,971	$15,845	$18,222	$17,737	$17,547	$17,408	$17,896	$18,164	$19,534
Publishing	2,866	3,474	3,777	3,793	3,835	3,959	4,330	4,867	n/a
Motion Picture/Sound Recording	184	353	637	763	256	230	190	196	n/a
Broadcasting/Telecommunications	9,546	11,533	12,937	12,261	12,491	12,247	12,356	11,986	n/a
Information/Data Processing Services	375	485	870	920	965	972	1,020	1,115	n/a
Colorado Total GSP (All Industries)	$143,160	$156,284	$171,862	$178,078	$182,154	$187,397	$198,407	$214,337	$230,478
Information as Percentage of Colorado Total	9.1%	10.1%	10.6%	10.0%	9.6%	9.3%	9.0%	8.5%	8.5%

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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industry's contribution to the state's real GDP increased 67%, to $5.1 billion. Employment in traditional publishing industries has continued to decline in 2007, though at much slower rates. Publishing firms are facing the challenge of new competitors, both locally and globally, entering the fray in every part of the industry owing to the low entrance barriers presented by the Internet. Employment is expected to decrease 0.9% in 2007 and rise slightly in 2008.

Newspaper Publishers

Newspapers in Colorado and nationwide are facing a marketing dilemma. While many readers continue to demand a print edition, circulation of the print editions and local advertising revenue are gradually diminishing each year as people increasingly turn to the Internet for news and to post and respond to classified advertisements. Colorado newspapers have responded by providing free web sites with partial coverage and selling subscriptions to online versions of their print editions.

The Denver Newspaper Agency has addressed this predicament by developing YourHub.com, a truly innovative community-level platform that provides specialized web sites to 44 Colorado communities and publishes 15 print editions on a weekly basis. The large majority of the work published on YourHub.com is written by individuals in the community. Not only has the site allowed the Denver Newspaper Agency to generate additional revenue from individuals and businesses that otherwise may not have advertised in the print editions of the *Denver Post* and the *Rocky Mountain News,* the Denver Newspaper Agency generates revenue from the platform by licensing it to other newspaper publishers.

While many readers continue to demand a print edition, circulation of the print editions and local advertising revenue are gradually diminishing each year as people increasingly turn to the Internet for news and to post and respond to classified advertisements.

Newspapers in Colorado employed close to 7,000 employees in 2006 in 191 establishments. Newspaper employment decreased 2% in 2006, and is expected to continue to slide in 2007 and remain flat in 2008.

Book Publishers

The U.S. book publishing industry is dominated by a handful of large firms, most of which are headquartered in New York City. Book publishers in Colorado tend to be fairly small firms that specialize in certain subjects. The number of book publishing establishments in the state has increased from 115 establishments in 2001 to 126 in 2006. Meanwhile, employment in these firms has fallen every year since 2001, from 1,439 jobs in 2001 to 1,188 in 2006. Jobs in these firms tend to include editors, marketers, production staff, and general administrators; most authors are freelance workers and are classified in the services industry. Authors who publish their own books have an ever-increasing presence in Colorado, and are not represented in the establishment figures above. Employment in Colorado's book publishing industry is expected to continue to decrease in 2007 and 2008.

Periodical Publishers

Colorado's periodical publishers employed 2,874 people in 280 establishments during 2006. After falling steadily between 2001 and 2004, employment in Colorado's periodical publishing industry stabilized in 2005 and grew slightly in 2006. Employment in this sector is expected to continue to increase at rates lower than 1% in 2007 and 2008.

Directory Publishers

Colorado's directory publishers are thriving. These firms, which include DexMedia, one of the largest directory publishers in the nation, are enjoying strong growth in advertising revenue. Indeed, DexMedia sold a record 1,365 pages of advertising in its 2007 directory, up 14.3% from the 2006 directory. Directory and mailing list publishers employed 2,318 people in 64 establishments in Colorado during 2006; it is the only sector in Colorado's publishing industry in which more people were employed in 2006 than in 2001. Employment in the industry has risen each year since 2002, and is expected to continue that trend in 2007 and 2008.

Software Publishers

Software publishing companies design, provide documentation, install, offer support services, and distribute software. The U.S. Bureau of Labor Statistics is projecting the software publishing industry to be the third-fastest growing industry in the U.S. economy, with a 68% increase between 2004 and 2014, almost five times the growth rate projected for all industries. Nationwide, employment in the software publishing industry has been growing at modest rates since mid-2005 as technology continues to drive efficiencies. In Colorado, however, employment in the software publishing industry decreased through 2006. The software publishing sector, the largest sector in Colorado's publishing industry, employed 12,672 people in 539 firms in 2006. Employment in this sector is expected to stabilize in 2007 and 2008.

Telecommunications

Since 2001, employment in the telecommunications sector in Colorado has been sliding. However, given increased capital investment and industry growth in niche areas, the sector should see a reversal, showing modest job growth of 0.5% in 2008. On the national level, the convergence of technology continues, along with the trend toward consolidation of companies and assets within the telecom sector. Regulation and competition will also continue to affect companies and customers, with additional impacts deriving from infrastructure development, federal contracts, and private equity investment.

Fiber

Level 3 Communications benefited from industry consolidation by acquiring additional miles of fiber, as well as connections to office buildings due to the required AT&T divestiture following the merger with SBC. The Broomfield-based company's aggressive growth strategy has led it to acquire seven companies since 2005. Its latest acquisition is Texas-based Broadwing Corp., which could reduce Level 3's Colorado workforce by 100–200 employees. The company is expected to profit from the coming bandwidth boom, especially with expanded use of the Internet for transferring and downloading video files that will likely boost demand for its services.

A new Colorado-based entrant in the "last mile of fiber" market began operations in 2007. Zayo Broadband, based in Louisville, Colorado, provides high-speed Internet access and related services to businesses in the Northeast and Midwest. The company has 8,400 miles of fiber and 830 connected office buildings. It currently has 20 employees at its Louisville headquarters, and plans to expand that number to 300.

The convergence of technology continues, along with the trend toward consolidation of companies and assets within the telecom sector.

Federal Contracts

Nationally, the Government Services Administration has named Qwest, Verizon, and AT&T as the finalists in the federal government's Networx Universal program, which is intended to revamp and completely upgrade the government's voice, data, video, satellite, IP, and wireless capabilities. These three companies will compete for a series of contracts, currently valued between $20 billion and $48 billion, to provide telecom service to 135 out of 184 federal agencies globally over the next 10 years. In addition, both Qwest and Level 3 have qualified to participate in the federal government's Networx Enterprise contract program, a group of upgrade projects worth a combined $20 billion over the next 10 years.

Telephone

Two companies this year filed letters of intent with the Colorado Public Utilities Commission (PUC) to provide local exchange service in rural parts of the state, and a third has sought expanded access to federal and state high-cost funds in order to extend its reach within rural Colorado. The commission has granted an application by 360networks (USA), Inc. to provide local exchange service throughout the service areas of CenturyTel of Colorado and CenturyTel of Eagle. Sprint Communications has filed for similar authority; its application is still pending. As well, N.E. Colorado Cellular, Inc., doing business as Viaero, has applied to expand its current eligibility for state and federal high-cost

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funds to include additional areas in southern and eastern Colorado.

In 2007, Qwest marked its sixth consecutive quarter of profitability, largely credited to the company's cost-cutting moves and sales of bundled services. The fact that Qwest has turned the corner financially, coupled with large inflows of private equity investment, has fueled rumors that the company could be a take-over target by a private equity firm. Qwest is currently the only Regional Bell Operating Company that has not embarked on a major overhaul of its plant. At year-end, the company still has nearly $15 billion in debt on its books, and this, in turn, has led some analysts to conclude that any new investment by the company will be slow and targeted to those markets in which Qwest is already feeling competitive pressure, such as Phoenix and Omaha. Qwest laid off 100 information technology workers in 2007—roughly 10% of its IT staff in Colorado. The firm now employs about 38,000, with 9,400 of those in Colorado.

Television

A major legislative battle is brewing in 2008 over the concept of statewide video franchises. Complexity arises from county and municipal governments at risk of losing their traditional authority, cable companies defending existing franchises, and competition from new entrants, such as telephone providers.

In December 2006, the FCC voted to preempt local video franchise restrictions for AT&T, Verizon, and other cable competitors. The new FCC regulations require localities to consider franchise applications within 90 days and prohibit implementation of "build-out" requirements by cities. Such requirements could potentially require new entrants to make their services available to all citizens in a given franchise area.

In the wake of that order, cities such as Arvada, Glendale, Wheat Ridge, Northglenn, and Brighton have passed emergency rules requiring franchise applicants to supply additional information beyond what has been considered normal and reasonable in evaluating a franchise application, including the time tables, locations, and specifications for the applicant's build-out plans. Qwest is expected to push for a new law in Colorado that would move franchising authority from the cities to a state agency, most likely the PUC.

The struggle over franchising authority has brought additional uncertainty to the industry, and will likely have a restraining effect on employment and economic development.

Video distributors are also faced with a February 2009 deadline for converting analog signals to digital. The federal government has envisioned a system of vouchers in order to assist viewers in making that transition, but so far the program has been plagued by disorganization and a lack of public awareness.

Executives say the reason Comcast is doing so well is due, in part, to the fact that it has been able to enter the telephone market faster than telephone companies such as Verizon and AT&T have been able to enter the video market.

Simultaneously, the federal government is also attempting to transition cable providers from existing, pre-programmed set-top boxes to units that accommodate external circuit cards with security features to block certain channels and prevent programming theft. The rules are intended to allow consumers to buy a standard box off the shelf and use it with any cable service, instead of renting a box from the cable company.

Speculation exists about the consolidation in the satellite sector between DirecTV and Echostar. This has been tempered, however, by the realization that a merger between the two companies would leave rural customers of each carrier without a competitive choice. In 2007, Denver-based WildBlue activated its own satellite, a move that will greatly expand its customer capacity, increasing its subscriber numbers from about 130,000 to approximately 750,000.

Cable provider Comcast grew significantly in 2007, reporting a 31% increase in revenue in the first half of the year relative to the same period in 2006. The company will boost its capital spending in 2008 by nearly 24%. Executives say the reason Comcast is doing so well is due, in part, to the fact that it has been able to enter the telephone market faster than telephone companies such as Verizon and AT&T have been able to enter the video market. In the second quarter of 2007 Comcast added 671,000 new telephone subscribers, for a total of 3.0 million. Its high-speed Internet business grew by an additional 330,000 subscribers, to 12.4 million.

VoIP

The introduction of VoIP service by independent companies has been fraught with difficulties ranging from patent infringement lawsuits to technological problems. However, Golden-based New Global Telecom (NGT) introduced a Private Label VoIP Service in 2007, which includes core VoIP packages among other products and services. The company reports Private Label is targeted at providers who prefer to focus on selling services rather than managing the operational complexities of being a telecom provider.

Call Centers

Several companies opened new call centers in the state in 2007. AT&T dedicated a new call center in Pueblo, initially employing about 400 and slated to increase that number to 500 by year-end 2007. The City of Pueblo gave tax incentives of $5.6 million to attract the center, which will provide customer assistance to wireless service subscribers. AT&T also plans to launch a new high-speed wireless network in Colorado in 2007.

Comcast opened a new business services customer support center in Centennial, employing about 100 workers at the time of start-up. The firm intends to double that by the end of 2007 and eventually hire an additional 150, bringing the center's total to 350 workers. Comcast has about 4,000 employees in Colorado.

Nippon Telephone and Telegraph (NTT) opened a consulting business office in Douglas County that reportedly will employ 200 workers when fully staffed. The facility will serve as headquarters for NTT subsidiary The Revere Group, a business and technology consulting firm now based in Chicago.

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2006 INFORMATION EMPLOYMENT, WAGES, AND ESTABLISHMENTS

Category	Percentage of Total Info Employees	Percentage of Total Info Firms[a]	2005 Average Annual Wages	2006 Average Annual Wages	Percentage Change in Wages
Telecommunications	36.8%	22.6%	$77,163	$91,947	19.2%
Publishing Industries, except Internet	37.7	34.4	67,373	72,879	8.2
ISPs, Search Portals, and Data Processing	9.4	17.1	77,074	79,686	3.4
Broadcasting, except Internet	8.7	5.7	55,344	57,149	3.3
Motion Picture and Sound Recording	5.8	14.1	22,294	23,719	6.4
Internet Publishing and Broadcasting	1.4	5.2	70,015	71,776	2.5
Other Information Services	0.2	1.0	49,135	53,458	8.8
Total Information	100.0%	100.0%	$68,641	$76,267	11.1%
Information in Denver Metro Area	63.1%	51.6%	$73,847	$83,638	13.3%
Information in Rest of State	36.9%	48.4%	$59,954	$63,673	6.2%
Total All Industries			$41,600	$43,506	4.6%

[a]Due to rounding, the sum of the individual items may not equal the total.

Note: Differences occur between ES202 data and CES data series.

Source: Colorado Employment and Wages (ES202) and Colorado Business Economic Outlook Committee.

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The group is developing a customer base by targeting U.S. subsidiaries of Japanese corporations.

Other call center highlights include the opening in 2007 of a Denver office by the Internet domain registration and web-hosting firm GoDaddy.com. The office employs about 16 software engineers. On the other hand, the Safe Auto Insurance Company closed its call center in Sterling, leaving 60 employees without jobs.

Federal Regulations

This year the FCC established a new, lighter regulatory framework to govern the provision of in-region, long-distance services by the Bell Operating Companies (BOCs) and their independent incumbent local exchange carrier (incumbent LEC) affiliates. The old framework included requirements that the BOCs separate their local telephone and long-distance operations, which is at odds with a market environment where local and long-distance services are increasingly provided and marketed on a bundled basis. The new framework replaces those more burdensome regulations with less intrusive measures that, according to the agency, "protect important customer interests while allowing the BOCs and their independent incumbent LEC affiliates to respond to marketplace demands efficiently and effectively."

However, an important issue that remains unaddressed is how to foster and encourage broadband deployment in a more ubiquitous manner. In the main, lawmakers agree that the United States lags far behind other developed nations in the number of high-speed Internet subscribers, service affordability, and download speeds, and that the federal government still lacks a solid plan to change that situation. A solution remains unclear.

Furthermore, a great deal of uncertainty exists on how to reform and reinvigorate the federal universal service fund that provides assistance to companies serving rural and insular areas of the country.

Wireless

Colorado Wireless Communities is a consortium of 10 cities, including Arvada, Boulder, Broomfield, Golden, Thornton, and Wheat Ridge, that plans to construct a wireless broadband network covering 200 square miles. The service will cover more than 600,000 people.

A joint privately funded wireless broadband project by Sprint Nextel, and Clearwire, using WiMax technology was scrapped in November 2007. The Denver network would have been part of a $5 billion push by Sprint to complete a nationwide wireless broadband network. Separately, Qwest is also partnering with Sprint Nextel to provide a mobile broadband service.

As of the fourth quarter of 2007, WisperTel has almost completed expansion of its wireless broadband network to include Breckenridge, Dillon, Frisco, Keystone, and Silverthorne.

COLORADO INFORMATION TECHNOLOGY LABOR MARKET BY OCCUPATIONAL TITLE, 2006

Occupational Title	Employment Estimates	Average Hourly Wage
Computer and information scientists, research	450	$42.45
Computer and information systems managers	4,460	52.29
Computer hardware engineers	3,140	48.81
Computer programmers	6,010	35.07
Computer science teachers, postsecondary	640	NA
Computer software engineers, applications	13,590	41.14
Computer software engineers, systems software	10,640	41.07
Computer specialists, all other	5,710	33.47
Computer support specialists	14,040	23.37
Computer systems analysts	11,360	35.5
Database administrators	2,370	33.74
Network and computer systems administrators	7,100	33.96
Total	79,510	NA

Source: Colorado Department of Labor and Employment.

Internet

In January 2008, a spectrum auction of the 700 MHz range will be held, with companies, including AT&T and Google, trying to establish a nationwide wireless broadband network (a third pipe into homes).

Internet service providers have also been concerned about the issue of maintaining a tax-free Internet. The issue languished for much of 2007, with lawmakers unable to agree on whether to continue the temporary ban on Internet taxation or implement a permanent ban. As of late October 2007, it appeared the issue would be settled by compromise when the U.S. House Judiciary Committee voted to extend the tax moratorium on Internet purchases for another four years, until November 2011, but declined to impose a permanent ban on Internet taxes. Similar legislation has stalled in the Senate. Congress first passed the Internet tax moratorium in 1998.

INFORMATION EMPLOYMENT
1998–2008
(In Thousands)

Year	Publishing	Telecommunications	Other	Total[c]
1998	28.5	38.5	19.4	86.4
1999	32.5	42.9	21.6	97.0
2000	35.9	46.0	26.5	108.4
2001	34.8	46.8	25.7	107.3
2002	31.1	39.1	22.7	92.9
2003	30.3	34.5	19.8	84.6
2004	29.7	32.5	19.0	81.2
2005	29.0	29.3	18.7	76.9
2006	28.6	27.6	19.3	75.6
2007[a]	28.4	27.6	19.6	75.7
2008[b]	28.5	27.8	20.3	76.6

[a]Estimated.

[b]Forecast.

[c]Due to rounding, the sum of the individual items may not equal the total.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Information Technology

Industry consolidations and productivity improvements have added to the information technology (IT) employment contraction since 2000; however, as one of the most pervasive business technologies, IT has a diversified customer base that continually upgrades and adopts new technology. Consolidations and productivity have direct impacts on the IT industry, while company budgets and business environments affect IT silos in other industries, thus impacting IT occupations. Occupationally, Colorado has a higher concentration of IT-related employees earning higher than national average wages. According to data from the Colorado Department of Labor and Employment, IT-related occupations totaled 80,938 in 2006, and are expected to increase to 87,740 two years later, in 2008.

The Colorado Software and Internet Association (CSIA) is optimistic going into 2008, with 75% of IT companies surveyed by the association reporting plans to add jobs over the coming year. According to the association, 80% of Colorado's IT companies' customers reside outside Colorado, buffering the sector from regionally specific business cycles.

The Information Supersector includes three segments of IT: (1) software publishers; (2) Internet publishing and broadcasting; and (3) data processing, hosting, and related services. These sectors represented 28% of Information Supersector employment and nearly $1.9 million in compensation in 2006. While employment gains were marginal (less than 1%), the important signal is that the sector has stabilized. These segments are expected to add growth to state GDP in 2008.

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Information

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Other

Motion Picture and Television Industry

The motion picture, television, and commercial production industry is evolving as a global industry. Locally, the industry has recently experienced modest growth, which should continue through 2008.

The Colorado Film Commission has emerged as a stabilizing influence in the statewide production community, leading the way to better communication to communities about production opportunities and other resources about potential production prospects across the state. Moreover, it is once again marketing Colorado as a production destination. The film commission is creating a more proactive response to feature television and commercial producers, which is resulting productions being filmed in Colorado. For example, about $3.25 million was spent in Denver in fall 2007 by a production company filming a small segment of a major film to a be released in 2008. In addition, Colorado Springs will be the principle location for a feature film that takes place on the Air Force Academy during the late spring of 2008. Colorado is seeing continued interest as a location for commercials and an increase in feature films.

In addition, after almost a decade of proposals to create a film incentive in Colorado, the Colorado Legislature passed Colorado's first-ever film incentive legislation in 2006 and expanded it in 2007. An on-going conversation is taking place about expanding the incentive program again in 2008, and if this occurs, Colorado could see a significant increase in feature film production and the potential to generate local jobs across a wide spectrum of industries. This incentive program is resulting in production companies looking at Colorado as a film destination again, especially for low- to mid-budget productions. Film production incentives are one of the leading reasons production companies decide where to film their movies. The continued growth of cable and satellite television production and related services will also lead to additional job growth.

Internet Publishing

Companies in the Internet publishing sector produce corporate web sites, blogs, online periodicals, online directories, electronic books, and digital audio and video productions. U.S. employment in this industry has been growing at a brisk pace since early 2005, culminating in double-digit rates since late 2006. Employment in Colorado's Internet publishing sector grew 12.1% in 2005 and 2.7% the following year. The number of establishments increased from 95 in 2001 to 185 in 2006. Internet publishing employed 1,078 people in Colorado in 2006, and is expected to grow at moderate rates in 2007 and 2008.

Summary

After nearly flat employment in 2007, the Information Supersector is expected to add 900 jobs in 2008. Growth in software publishing, Internet publishing, telecommunications, and motion pictures will reverse a multiyear industry contraction, driven in part by consolidations and productivity gains. Colorado's Information Supersector concentration makes the state an exporter of related products and services. With higher than average wages and a strong employment base, stability in this industry is good for Colorado. ✜

Financial Activities

The Financial Activities Supersector is comprised of two sectors: (1) Finance and Insurance and (2) Real Estate and Rental and Leasing.

About 47% of the employees in the Finance and Insurance Sector work at credit intermediaries, such as banks, credit unions, and other consumer savings and lending organizations. Approximately 36% of the workers in this sector are employed at insurance carriers. The remainder work at securities or investment firms or other miscellaneous finance-related firms.

The Real Estate and Rental and Leasing Sector includes real estate-related payroll jobs and companies that lease anything from real estate to equipment to formal wear.

Between 1997 and 2006, the Financial Activities Supersector grew at an annualized rate of 1.9% compared to 1.6% for the state. Employment in the Insurance and Securities Sectors increased at an average rate of 1.9%. Real estate and rental and leasing employment grew at a 2% annualized rate.

In 2007, the Finance and Insurance Sector is expected to add approximately 800 jobs, while the Real Estate and Rental and Leasing Sector should gain 400 positions. In 2008, employment in the Finance and Insurance Sector will remain flat, while the Real Estate and Rental and Leasing Sector should add roughly 400 jobs.

Finance and Insurance

Commercial Banking

The commercial banking sector was certainly challenged in 2007, with the subprime mortgage crisis severely impacting bank balance sheets and profitability. Large banks typically hold more than one-third of their assets in residential mortgage securities. On the whole, mortgage portfolios at commercial banks tend to be more highly rated, so these institutions largely avoid the solvency troubles that have beset subprime lenders such as Countrywide Financial and New Century Financial. However, the broader shocks of the subsequent credit crunch were inescapable, and many commercial banks were forced to substantially increase their provisions for loan losses. Combined, the world's largest banks and securities firms announced more than $30 billion of third quarter charges. Citigroup, for example, announced that third quarter 2007 earnings fell 57%, largely a result of fixed income writedowns and losses.

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FINANCIAL ACTIVITIES EMPLOYMENT
1998–2008
(In Thousands)

Year	Finance and Insurance	Real Estate and Rental and Leasing	Total[a]
1998	100.2	42.6	142.8
1999	103.1	44.3	147.4
2000	101.9	45.1	147.0
2001	102.3	46.0	148.3
2002	103.5	46.1	149.5
2003	107.1	47.1	154.1
2004	107.3	47.3	154.6
2005	110.3	48.3	158.5
2006	111.5	49.2	160.7
2007[b]	112.3	49.6	161.9
2008[c]	112.3	50.0	162.3

[a]Due to rounding, the sum of the individual items may not equal the total.

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Financial Activities

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The subprime mortgage collapse also spawned illiquidity in markets for asset-backed commercial paper, further affecting balance sheets at commercial banks. Unable to reissue commercial paper, companies increasingly turned to banks for credit. As a result, the volume of commercial and industrial loans has surged by nearly $100 billion since late July 2007.

While the October 2007 interest rate cuts by the Fed should help to alleviate immediate credit concerns, widened credit spreads—reflecting a more realistic pricing of risk throughout the economy—will have contractionary impacts in the near term. With housing prices remaining depressed and an enormous number of adjustable rate mortgage loans facing the first payment reset over the next two quarters, financial woes are expected to persist for commercial banks well into 2008. Diminished profitability will certainly inhibit bank expansion initiatives and could potentially result in labor cutbacks.

FINANCE AND INSURANCE EMPLOYMENT
1998–2008
(In Thousands)

Year	Credit Intermediation and Related Activities	Securities, Commodities, and Other Activities	Insurance Carriers and Related Activities	Other Finance and Insurance Activities	Total
1998	44.1	13.9	38.7	3.5	100.2
1999	45.3	15.3	40.2	2.3	103.1
2000	43.5	17.9	38.9	1.6	101.9
2001	45.0	17.4	39.0	0.9	102.3
2002	47.4	15.1	39.3	1.7	103.5
2003	50.7	13.9	39.5	3.0	107.1
2004	51.5	13.4	39.5	2.9	107.3
2005	53.3	13.7	40.2	3.1	110.3
2006	53.7	14.6	40.0	3.2	111.5
2007[a]	53.1	15.2	40.2	3.8	112.3
2008[b]	52.7	15.2	40.3	4.1	112.3

[a]Estimated.
[b]Forecast.
Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

In the longer term, the commercial banking landscape continues to be dramatically transformed by consolidation stemming from the industry deregulation that took place during the late 1980s and early 1990s. For the foreseeable future, the number of commercial banks in the United States is anticipated to continue declining. Moreover, technology developments remain an important influence on commercial banking operations. With services such as online banking, direct deposit, remote deposit capture, and automatic bill pay, the business of banking has become truly "on-demand," and questions about the future of traditional "brick and mortar" banking have begun to surface.

Savings and Loans

After the savings and loan (S&L) industry crisis in the late 1980s, and the extensive consolidation that followed during the 1990s, the number of S&Ls in the country, and their relative importance to the overall economy, has been dramatically diminished. Depository credit intermediation firms total about 28,000 in Colorado. For the sake of comparison, about 1,500 are S&Ls, 4,400 are credit unions, and 22,000 are commercial banks.

In 2007, S&Ls have struggled mightily against mortgage market malaise. Washington Mutual, the largest U.S. S&L, recently announced a 72% decline in third quarter 2007 net income and plans to increase reserves as high as $1.3 billion to cover anticipated loan losses in the fourth quarter. Similar to commercial banking, poor financial performance at S&Ls is expected to impede expansion and job growth in the sector.

Credit Unions

As anticipated, consolidations in credit unions continued in 2007. This trend is primarily driven by tight interest margins, increasing costs, and the need to create sustainable economies of scale. These pressures are not expected to ease much in 2008.

Intense competition and easy access for consumers to rate shop means that tight interest margins are here to stay. Like many small businesses, higher costs are felt in technology and personnel. Providing and maintaining secure electronic access to products and services is essential in today's marketplace. Although demand for, and usage of, electronic delivery is high, the need to maintain conveniently located brick and mortar has not dropped.

Providing health insurance benefits to employees has been a challenge for credit unions. Many have experienced annual double-digit increases, leading them to continually investigate affordable options. Another expense burden credit unions face today is the cost of complying with stricter regulatory requirements.

Fortunately for members, these pressures have led credit unions to look closely at their current and potential membership for opportunities to develop niche financial solutions. Successfully filling a void in members' financial needs, as well as providing small businesses affordable financial alternatives, leaves Colorado credit unions healthy. The not-for-profit, financial cooperative structure of credit unions remains well-capitalized.

Financial Markets

The classic central banker axiom that the punch bowl of easy monetary policy needs to be removed just when the party has gotten started is prescient now. The Federal Reserve drove the fed funds target rate up from 1% in 2004 to 5.25% in 2006.

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FINANCIAL MARKETS: STOCKS
1997–2006
(Year-End Close)

	Value				Index (1997=100)			
Year	S&P 500	Dow Jones	NASDAQ	Bloomberg Colorado Index	S&P 500	Dow Jones	NASDAQ	Bloomberg Colorado Index
1997	970.4	7,908.3	1,570.4	148.0	100.0	100.0	100.0	100.0
1998	1,229.2	9,181.4	2,192.7	143.7	126.7	116.1	139.6	97.1
1999	1,469.3	11,497.1	4,069.3	230.6	151.4	145.4	259.1	155.9
2000	1,320.3	10,788.0	2,470.5	228.2	136.1	136.4	157.3	154.3
2001	1,148.8	10,021.6	1,950.4	204.4	118.4	126.7	124.2	138.1
2002	879.8	8,341.6	1,335.5	167.2	90.7	105.5	85.0	113.0
2003	1,111.9	10,453.9	2,003.4	237.0	114.6	132.2	127.6	160.2
2004	1,211.9	10,783.0	2,175.4	278.9	124.9	136.4	138.5	188.5
2005	1,248.3	10,717.5	2,205.3	326.0	128.6	135.5	140.4	220.4
2006	1,418.3	12,463.2	2,415.3	382.5	146.2	157.6	153.8	258.5

Source: Free Lunch (Economy.com), Bloomberg, and Colorado Business Economic Outlook Committee.

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FINANCIAL MARKETS: INTEREST RATES
2000–2008

Month End	3-Month Treasury (Monthly Rates)	10-Year Treasury (Monthly Rates)	Spread[a]
December 2000	6.00%	5.24%	-.76%
June 2000	3.57	5.28	1.71
December 2001	1.72	5.09	3.37
June 2002	1.73	4.93	3.20
December 2002	1.21	4.04	2.83
June 2003	0.94	3.33	2.39
December 2003	0.91	4.27	3.36
June 2004	1.29	4.73	3.44
December 2004	2.22	4.23	2.01
June 2005	3.04	4.00	0.96
December 2005	3.97	4.47	0.50
June 2006	4.92	5.11	0.19
December 2006	5.00	4.60	-0.40
June 2007	4.75	4.35	-0.40
December 2007[b]	4.10	4.70	0.60
June 2008[b]	4.20	4.70	0.50
December 2008[b]	4.30	4.90	0.60

[a]Spread=10-year rate minus 3-month rate.

[b]Forecast.

Source: Federal Reserve Board, Consensus Forecasts, and Colorado Business Economic Outlook Committee.

From June 29, 2006, through most of 2007, monetary policy was left unchanged. Exuberant party goers began to sober up and notice that the punch bowl was gone, and some of them had a throbbing headache. At the September 18, 2007, Federal Open Markets Committee (FOMC) meeting, the fed funds target rate was cut 50 basis points, from 5.25% to 4.75%. This rate was cut another 25 basis points, to 4.50%, at the October 31, 2007, FOMC meeting.

When money is too cheap it is deployed inefficiently, and sometimes risks are ignored or mispriced. The signs were there, just as they were there when stocks ran up in the late 90s. In the late 90s one could surf the channels on television and find any number of programs touting the quick path to wealth was via the stock market. Seven years later the NASDAQ has yet to revisit the lofty levels it traded at in 2000.

More recently, one could surf television channels and find any number of programs touting the quick path to wealth was in the residential real estate market. It seemed as if anybody could get a mortgage. The percentage of homeowners in the United States surged to record highs. Many seemed to believe that home price appreciation would always be positive and as long as it was, subprime lending, minimally documented loans, teaser rates, and negative amortization seemed to make sense (cents?).

An alphabet soup of financial wizardry was created to fund the insatiable demand for what now appears to be poorly underwritten mortgages. Asset-backed commercial paper (ABCP) conduits purchased mortgages and funded those acquisitions by issuing short-term, 270 days or less, obligations—a classic long-term/short-term mismatch. As investors realized that some of the collateral backing these ABCPs was performing poorly, they refrained from purchasing ABCP in general. This action forced some conduits into default.

Collateralized debt obligations, or CDOs, purchased a host of debt instruments, including subprime mortgage collateral. Similar to collateralized mortgage obligations, CDOs carve up the collateral cash flows to create securities with different risk and duration profiles. The leverage inherent in these CDO transactions has amplified the impact of poorly performing loans.

As residential loan delinquencies and foreclosure rates have reached record levels, the securities created by the related cash flows have dropped in value. Numerous originators of subprime mortgages have gone into bankruptcy. Wall Street has reported multibillion dollar write-downs, several Wall Street CEOs have lost their jobs, and numerous hedge funds have had to wind down.

All of which leads to a discussion of liquidity issues within the capital markets, economic imbalances, contagion, and systemic risk. The housing sector has many touch points within the economy. Increased foreclosure rates have resulted in a noticeable decrease in tax revenues for some municipalities; foreclosures reduce property values, degrade the balances sheets of consumers, and reveal the double-edged sword of leverage, be it in the securities derived from home mortgages or the 100% financing at the consumer level.

Leverage is the aphrodisiac of capitalism and bull markets. When prices are appreciating, leverage is a wonderful thing as it amplifies returns. Conversely, when prices depreciate, those falling returns are multiplied. As the current credit cycle unfolds, we are discovering how broadly leverage was applied—from your next door neighbor's use of 100% financing to purchase a home, or those who used a 125% home equity credit line to purchase the latest and greatest gadgets and toys, to the hedge fund or CDO that purchased some securitized version of that same loan on margin. As long as home prices kept appreciating, everyone was happy and the system continued to function.

Like any financial bubble, price appreciation is fueled by cheap money. The Fed gradually tightened monetary policy, but those drinking deeply from the punch bowl were too focused on the punch and oblivious to the signs the party was winding down. Some institutions found it difficult to finance themselves, prompting the Fed to reassure the markets by easing policy.

Leverage is the aphrodisiac of capitalism and bull markets. When prices are appreciating, leverage is a wonderful thing as it amplifies returns. Conversely, when prices depreciate, those falling returns are multiplied.

How much financial stress can the U.S. consumer withstand? Falling home values, tighter lending standards, and oil prices approaching $100 per barrel would seem to be sufficient to stress the consumer's balance sheet. Will that be sufficient to restrain consumer spending? If that is the case, then a significant economic slowing would be the result.

The national unemployment rate, while trending higher, is still considered low. The unemployment rate of 4.7% is up from its 2007 low of 4.4%, but the labor market is still generally viewed as tight, a clear concern of the FOMC. Will there be a shedding of jobs that will further impact the psyche, as well as the wallets of consumers?

The economic headwinds we are facing today were evident at this time last year. The process of inflating an economic bubble built on real estate is slow to occur, and the process of its deflation is slow to occur as well. The concern of the Federal Reserve is the orderly functioning of the capital markets. If there is a perceived threat to the broader economy that can be mitigated through an ease in monetary policy, the Fed has said it will respond. However, if risk has been mispriced by the market, then throwing more money at it by way of easier monetary policy will not resolve the problem. Sometimes there isn't an easy fix.

Locally things look brighter. Through November 15, 2007, the Bloomberg Colorado Index was up more than 16%. In contrast, the Dow was up more than 5% and the S&P was up more than 2%. Colorado may not be able to totally shake off the effects should the national economy have a greater than expected slowdown, but perhaps Colorado will be an economic high point.

Insurance

Most insurance buyers and brokers expect property and casualty premiums to remain at or below current levels. Premiums have been falling for some time now, a reflection of the adequacy of reserve levels and investment returns. Most risk managers are willing to maintain or increase retention levels, despite the availability of cheaper coverage. The Terrorism Risk Insurance Act, which created a federal program to share risk between the public and private sector for insured losses resulting from acts of terrorism, is due to expire at the end of 2007. According to a recent survey of risk managers,

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fewer than 20% consider terrorism coverage to be highly important. Climate-based exposures, such as emission-reduction protection, and exposures relating to offshore outsourcing are also less important. Greater interest exists in covering exposure related to corporate governance and supply chain and trade disruption, and protecting intellectual property.

Most corporate buyers do not believe that their firms have benefited from the fact that major brokers stopped accepting contingency fees following probes by former New York attorney general Eliot Spitzer. They believe that insurers are retaining the money saved rather than passing it along in the form of lower premiums. Losses related to natural disasters, such as the recent fires in southern California, are pooled across the country. Fire is typically an insured loss, and when claims reach multibillion dollar levels, re-insurance pools are tapped and will need to be replenished. While the cost of coverage is important, risk managers are concerned with breadth of coverage, financial strength/health of the insurer, and service. Risk mitigation and loss control are integral to the services insurance agents and brokers provide to their clients.

This concept has traction on the benefits side as well. Employers are increasingly interested in promoting wellness and providing disease management services for employees with ongoing medical conditions. Improving the health of a group translates to fewer sick days, better productivity, happier employees, and lower claims. More employers are structuring benefits to encourage employees to make "better" choices regarding their healthcare, such as using ER facilities appropriately, establishing a relationship with a primary care physician, and asking for generic drugs. This is generally accomplished by shifting additional financial risk to the patient at point of service. Employers are also looking for ways to assist employees in paying for future healthcare expenses. A variety of tools are used for this purpose, including flexible spending accounts, health reimbursement arrangements, and health-saving accounts (HSA). The ability to make better decisions is based on better information, so resources continue to be allocated at the carrier level toward providing transparency for medical costs and hospital outcomes, and online access to personal benefits and claims information. Insurance agents and brokers are working harder to assist employers in effectively communicating benefits to employees. Services include individual meetings with employees, bilingual materials, and personalized benefit statements. A real need exists for bilingual enrollers with a good understanding of insurance programs.

Most corporate buyers do not believe that their firms have benefited from the fact that major brokers stopped accepting contingency fees following probes by former New York attorney general Eliot Spitzer.

Legislation continues to impact the health insurance market. Balance billing for services received during an in-network hospital stay from out-of-network physicians, like radiologists and anesthesiologists, is now banned in Colorado. Unmarried children who financially depend on their parents can be covered under their parent's plan until the age of 25, regardless of whether or not they are full-time students. The rating bands currently in place for small group (fewer than 50 employees) medical plans are being dismantled over the next two years. In 2008, small groups can not be charged more than standard rates, although discounts will still be permitted for healthier groups. The discounts will disappear in 2009, and Colorado will return to rating based on age, dependent status, and geographic location only. The majority of small groups currently enjoy discounted rates; they can expect higher renewals.

A Blue Ribbon Commission for Health Care Reform was created to study current coverage and solicit and evaluate reform models, and to return a recommendation to the General Assembly in January 2008. The goal is to increase coverage, especially for the uninsured and underinsured, and decrease healthcare costs for all Colorado residents. For more information on this commission, see the Educational and Health Services section.

Real Estate and Rental and Leasing

Real Estate

Commercial Real Estate

Colorado's commercial real estate (CRE) industry is benefiting from several robust economic sectors in the state, such as mining and healthcare, that attract significant external investment. Regionally, Colorado is experiencing strong levels of population and economic growth. New development has been constrained to keep pace with demand but the pressures of a declining residential market will inevitably slow demand for commercial space.

In general, the first half of 2007 for Metro Denver CRE was very strong; however, activity in the second half slowed tremendously. This has been attributed to the performance of the overall economy and the "credit crunch." According to Ross Research and Bitzer Real Estate Partners, the office market segment of the CRE industry has rebounded nicely, and speculative construction has begun in some markets. Overall, office vacancy fell to 15.8% in Q3 2007 from 17% at year-end 2006. The metro retail market has cooled from 2006, shifting from new construction to negative absorption. Overall, retail vacancy ticked up, to 6.4% from 5.7%, during Q3 2006. A large amount of new retail space is under construction through 2009, and absorption will strongly depend on the economy, the real estate cycle, and consumer demand. The metro industrial market activity has been robust, even though absorption levels are on pace to eclipse 4 million square feet, the highest level in the past seven years.

VACANCY RATES IN COLORADO COMMERCIAL REAL ESTATE MARKETS

	2006[a]	2007[a]
Fort Collins		
Industrial	4.9%	4.5%
Retail	5.9	7.2
Office	12.5	11.8
Greeley		
Industrial	9.1	8.1
Retail	6.0	9.3
Office	13.0	17.1
Loveland		
Industrial	3.7	4.3
Retail	3.2	7.1
Office	6.4	8.0

[a]As of Q3.

Source: Ross Research, Sierra Commercial Real Estate, Realtec, and Colorado Business Economic Outlook Committee.

Vacancy has remained relatively unchanged, at 7.6% from 7.9% at midyear 2006. Continued absorption of commercial space in 2008 will hinge greatly on a healthy consumer economy.

Many magazines and polls rank northern Colorado as one of the top areas in the country in which to live and work, which has caught the attention of many national and international employers, retailers, and investors. New construction has been centered on I-25 and US Hwy 34 (Loveland/Greeley). As a result, growth and development is filling in the surrounding area. Realtec notes that industrial, retail, and office vacancy rates have increased year over year 2007 versus 2006. Fort Collins, Loveland, and Greeley remain the dominant players, but smaller communities are becoming the beneficiaries of changing development patterns.

Strong growth in housing and jobs has helped the southern Colorado, mainly Colorado Springs, economy for the past three years. The oversupply of commercial space that once plagued Colorado Springs has been absorbed. In general, Sierra Commercial Real Estate notes that tight supplies of all commercial product and continued demand for space should keep vacancy rates low and lease rates rising. This has proved to be favorable, especially for retailers, given the pressures of a declining housing market. Office vacancies rose slightly, to 11.3% from just under 8% at year-end 2006. Industrial vacancy rates improved, to 8.9%, as a result of impressive absorption and no new construction. Retail vacancy rose slightly, to 9.7%, but lease rates have reached an all-time high, currently averaging $13.81 per square foot NNN (triple net lease), because of high demand for new generation space. New jobs and housing should continue to slow in 2008, which will have a similar trickle down effect on CRE activity.

The western Colorado economy continues to boom as a result of increased mining activity. Western Slope population, employment, retail sales, and housing are experiencing remarkable growth due to the price and demand for Colorado's energy and mineral resources. However, as First American Heritage Title Company reports, real estate secured loans (residential and commercial) decreased by 11%, to 3,962 in Q3 2007, from the

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previous year. This is primarily attributable to a lack of available land and the tightening of credit standards. First American notes that residential foreclosures in 2007 are mostly flat compared to 2006. Mesa County foreclosure rates are among the lowest in the state, according to the Mesa County Public Trustee. So long as the high demand for gas, oil, and molybdenum continues, the Western Slope real estate industry will remain commercially active.

Since 2002 CRE activity has trended upward, demonstrated by a new generation of commercial space, recovering vacancy rates, rising rental rates, and positive absorption. However, commercial activity will begin to slow through 2010, until the pace of residential absorption increases and foreclosures reach average levels.

Residential Real Estate

The existing and new residential markets in Colorado remain sluggish due, in part, to a relentless foreclosure problem primarily along the Front Range. On the other hand, the Metro Denver rental market relished its lowest quarterly vacancy rate in more than six years in Q3 2007. Overall, the pull back in single-family construction has tempered the recent market lolls, while the slowdown in home price appreciation is another problematic indicator.

For-Sale Existing Homes

U.S. existing homes sales in September 2007 were 19.1% lower versus the comparable period in 2006, according to the National Association of Realtors. Home price depreciation reflects the overall slowdown, with a 4.2% decline in the national median home price from September 2006 to September 2007. In the Western United States, existing home sales in September 2007 were 27.8% below September 2006 sales, while the median home price posted an 8.8% drop.

Existing home sales in Colorado slowed 8.6% from first quarter to second quarter 2007 (preliminary figures), and second quarter 2007 home sales were 4.8% lower relative to the same period in 2006. Colorado posted a modest 0.6% gain in existing home sales during the first half of 2007. On a positive note, Colorado's increase was the 12th largest gain in the United States and considerably stronger than negative 8.9% national average. Furthermore, median sales price appreciation has slowed in recent periods. From Q2 2006 to Q2 2007, the Denver-Aurora MSA saw flat prices compared to a 2.3% gain in the Boulder-Longmont MSA. Appreciation in both regions is weaker than the 2005 and 2006 annual gains.

New Home Sales

The drop-off in Colorado's new home market is similar to the existing market slowdown. New home sales in Metro Denver and northern Colorado fell 33% during the first half of 2007, following a 21% annual decline in 2006, according to the Genesis Group. Developers have responded to weaker demand by pulling back on construction. Building permits for residential units in Colorado during the first three quarters of 2007 were 26% below the same period in 2006. Comparatively, Metro Denver construction activity through July 2007 has decreased by double-digits in all product types except for apartment units, which saw historically low activity in 2005 and 2006. Year-to-date apartment construction is up 154.9% in Metro Denver as of July 2007.

So long as the high demand for gas, oil, and molybdenum continues, the Western Slope real estate industry will remain commercially active.

Foreclosures

Foreclosures in Colorado continue to be a drag on the for-sale residential real estate market because of high inventory levels and price reductions. Foreclosures in the state reached 28,435 in 2006, a 30.5% increase over 2005. The latest report from the Colorado Division of Housing reveals that foreclosures through the first half of 2007 represent 68.4% of 2006 figures, suggesting that 2007 will be another year of record foreclosures.

The Front Range continues to lead the state in foreclosure activity with Adams, Denver, Weld, Arapahoe, and Pueblo counties reporting the five highest rates of foreclosure in the first half of 2007. On a year-to-date basis, foreclosures in the seven-county Metro Denver region are up about 43% through August. High foreclosure activity is likely to remain a thorn in the state's residential market over the next couple years given the collapse of the

REAL ESTATE AND RENTAL AND LEASING EMPLOYMENT
1998–2008
(In Thousands)

Year	Real Estate	Rental and Leasing	Total
1998	27.9	14.7	42.6
1999	28.8	15.5	44.3
2000	29.7	15.4	45.1
2001	32.0	14.0	46.0
2002	32.2	13.9	46.1
2003	32.9	14.2	47.1
2004	33.3	14.0	47.3
2005	34.4	13.9	48.3
2006	35.2	14.0	49.2
2007[a]	35.5	14.1	49.6
2008[b]	35.8	14.2	50.0

[a]Estimated.

[b]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

subprime mortgage market and higher mortgage payments due to adjustable-rate mortgages.

Rental Market

The rental market continues to benefit from rising foreclosures in Colorado and population and job growth. In addition, apartment construction in Metro Denver prompted the third quarter apartment vacancy rate to fall from 6.7% in 2006 to 5.3% in 2007, the lowest quarterly vacancy rate in the region since Q1 2001. Fewer than 20,000 apartment units are expected to be added to the seven-county market in 2007. A new statewide vacancy rate survey that excludes Metro Denver pegs the overall apartment vacancy rate at 8.8% in Q2 2007, up from 7.5% in Q1 2007.

Real Estate Employment

Overall employment in the real estate sector will reach 35,800 jobs in 2008, reflecting an addition of 300 jobs. Strong growth in the residential market will occur along the Western Slope as a result of low and relatively stable interest rates. In spite of the housing slump and credit crunch, some employment growth will be necessary to deal with transactions related to record level foreclosures over the past year.

Rental and Leasing

Rental and Leasing is one of the more diverse sectors in the NAICS structure. Because NAICS categories are defined by process, it includes an array of companies tied together by their renting/leasing function, but otherwise unrelated. The sector is consumer-driven and tends to mirror general economic and population growth trends. Companies classified within the sector include companies that rent or lease equipment, videos, cars, and formal wear. The sector is expected to add roughly 100 jobs in 2008.

Professional and Business Services

Overview of Service Industries

The Professional and Business Services (PBS) Supersector has been one of the state's most consistent generators of new, high-paying jobs, with continued strength expected through 2008. An agglomeration of three sectors—Professional, Scientific, and Technical Services (PST); Management of Companies and Enterprises (MEC); and Administrative and Support and Waste Management and Remediation Services—PBS added an average of 14,000 jobs per year from 1991 through 2000. From 2001 through 2003, a total of 27,000 jobs were shed, or 8.4%. Since 2004, the supersector has increased at a 4.3% compound annual growth rate, and is expected to add 19,000 jobs in 2007 and 15,500 jobs in 2008. Average annual wages in this supersector reached more $56,460 in 2006, nearly 30% above the average for Colorado.

It is instructive to take a closer look at the employment decline. In August 2000, employment in this supersector peaked at 328,200 workers; after August, the employment numbers began to fall. This decline preceded the beginning of Colorado's dip in employment by 10 months. Nearly two and half years later, in January 2003, supersector employment bottomed out, with a total of 282,600 employees, a contraction of 45,600 jobs. This coincided with the decline in total employment in Colorado. After January 2003, PBS employment began to rebound, returning to its August 2000 high in May 2006. This is also the same month that total employment in Colorado returned to its June 2001 high.

The PBS Committee expects this recent growth trend to continue. In spite of downside risks to the national and state economies, a return to a more sustainable level of growth is anticipated.

Strengths and Challenges

The strengths in the PBS Supersector come from several interrelated sources: the continual advancement of technology, the seemingly insatiable demand for information, the favorable economics of contracting for professional and business services, and the high level of education of Colorado workers. The continual change in technology and the demand for information services compels businesses to maintain flexibility in a rapidly changing market context. Colorado's highly educated workforce makes it a hub of these services. Contracting for research and management services makes sense in this environment. In many ways, this sector represents the quintessential benefits of outsourcing, supported by such subsectors as computer facilities management services, management consulting services, environmental

2006 PROFESSIONAL AND BUSINESS SERVICES SUPERSECTOR EMPLOYMENT AND WAGES

Subsector	Firm Percentage of Supersector	Employment Percentage of Supersector	Average Employees Per Firm	Total Wages (in Billions)	Wage Percentage of Supersector	Average Wages
Professional, Scientific, and Technical	70.3%	49.1%	6	$11,662	62.2%	$71,536
Management of Companies and Enterprises	3.9	8.1	19	2,747	14.7	101,794
Admin & Support and Waste Management	25.9	42.7	14	4,328	23.1	30,515
Total PBS Supersector[a]	100.0%	100.0%	9	$18,738	100.0%	$56,464
Total State (Private)			11	$82,553		$43,664
PBS as Percentage of State Total	22.1%	17.6%		22.7%		

[a]Sum may not equal total due to rounding.

Source: Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages.

consulting services, and telephone call centers—as long as the jobs stay in the local economy.

Yet, the sector has several challenges. The outsourcing of services to other states, or to other countries (offshoring), remains a difficulty for the PBS Supersector and for Colorado's economy. Technological advancements often make it economically appealing to outsource work to other countries, where labor is comparatively cheaper and government regulation is softer. For instance, the very technology that made the outsourcing of call centers in Colorado viable also made the offshoring of call centers to India viable. Offshoring is far from limited to call centers, and includes highly skilled jobs, such as architects and engineers.

The retiring baby boomers will strain PBS with a shortage of knowledgeable, skilled employees. Some experts say the number of employees eligible for retirement may be as high as one in four in parts of the sector. Companies will have to be creative and flexible in order to develop new talent in the field and retain current workers. The strength of Colorado's colleges and universities will benefit the sector.

In addition to workforce challenges, PBS is subject to copyright infringement challenges. Intellectual property rights are especially vulnerable for computer software. Patent infringement is costly to fight, and it is difficult to track down international culprits.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES SECTOR EMPLOYMENT 1998–2008 (In Thousands)

Year	Legal Services	Architectural and Engineering Services	Computer Systems Design Services	Other Professional, Scientific, and Technical Services	Total[a]	Percentage Change
1998	14.6	31.0	33.1	55.5	134.2	4.9%
1999	14.8	33.2	39.0	58.0	145.0	8.0
2000	15.1	34.3	45.4	59.0	153.8	6.1
2001	15.5	37.5	42.7	58.3	154.0	0.1
2002	15.8	36.0	35.9	56.8	144.5	-6.2
2003	16.3	35.4	33.1	57.0	141.8	-1.9
2004	16.6	36.8	34.1	60.6	148.1	4.4
2005	17.2	39.0	35.7	64.1	156.0	5.3
2006	17.4	41.4	36.9	67.2	162.9	4.4
2007[b]	17.8	43.5	38.2	74.9	174.4	7.1
2008[c]	18.2	44.4	39.5	81.1	183.2	5.0

[a]Due to rounding, the sum of the individual items may not equal the total.

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Professional, Scientific, and Technical Services

The Professional, Scientific, and Technical Services (PST) Sector accounted for more than 49% of supersector employment in 2006. Roughly 25% of PST is architectural and engineering services, and computer systems design services accounted for 23%. Between 1990 and 2006 architectural services grew at an annualized rate of 4.4%, compared to 5.7% for computer systems design. State employment expanded at a rate of 2.6% during this period.

The PST Sector has a positive impact on Colorado, with high-skill, high-wage jobs averaging $71,536 in 2006, more than 64% above the Colorado average. In addition, many of the sectors have close ties to the high-tech clusters in the state, with growth partly a function of research and tech transfer from the state's universities and federal labs. To draw attention to the importance of this linkage, the Boulder Economic Council and the State of Colorado established CO-LABS to educate the public

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Professional and Business Services

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about the value of the labs to the state and to provide a forum to help facilitate collaboration between federally funded research facilities in Colorado and the private sector. It commissioned a report to be completed in the first half of 2008 that defines the impact of the federal research labs on Colorado.

Growth is expected to continue in this sector, with an additional 11,500 jobs at year-end 2007, and 8,800 additional jobs in 2008.

The remainder of this section examines the emerging technologies of photonics, nanotechnology, biology, as well as aerospace. In addition, sustainable technologies and architectural services will be briefly discussed.

Emerging Technologies

During the 1980s the Colorado Advanced Technology Institute identified a series of technologies that were considered crucial to the development of the Colorado economy. As a result, clusters have developed in the areas of photonics, nanotechnology, biotech, software, environmental sciences, and aerospace. These high-tech clusters cross various NAICS categories but are mentioned in this section because of their ties to the research and development companies included in the services sector. (A brief discussion of software is included in the Information Sector.) These and other important high-tech clusters are supported and marketed by strong trade associations.

The photonics, nanotechnology, and biotech clusters include a total of about 600 companies in Colorado, which are concentrated primarily along the Front Range. Boulder County has the highest percentage of high-tech workers in the state. All three clusters are interdependent and rely on research conducted at CU, CSU, and the Colorado School of Mines to further their growth. For example, more than 20 companies were spawned out of the CU-CSU Optoelectronic Computing Systems Center and a half-dozen nanotechnology companies are the product of the University of Colorado Technology Transfer group.

The Colorado Photonics Industry Association (CPIA) reported a 14.5% increase in the optoelectronics markets worldwide in 2006. Estimates are that this market will double in size in the next 10 years. Also, Colorado companies play a key role in the design and/or manufacturing of components and products related to LCD displays, solar, computing/processing, and consumer displays/television. All of these areas are projected to experience large growth.

The optical components market is currently showing a temporary decline as inventories adjust with changing product demand. In the long term, this market, which is served by approximately 30 companies in Colorado, is expected to see slow but steady growth.

Colorado companies play a key role in the design and/or manufacturing of components and products related to LCD displays, solar, computing/processing, and consumer displays/television.

In recent years the environmental cluster has expanded its base to include "sustainable" companies. This is proving more than a passing trend as an increasing number of schools, businesses, and governmental agencies are addressing economic, social, and environmental issues as they serve the needs of their customers and community.

Aerospace

Aerospace companies that provide information, research, or management services are counted in the PBS Supersector. Companies predominately engaged in aerospace manufacturing are included in the Manufacturing Supersector rather than PBS. Although high-technology companies often provide both manufactured products and research and development services, they are categorized by NAICS according to their predominant line of business.

The aerospace industry in Colorado has a long history of industry-university collaboration. The United Launch Alliance is based in Colorado. Lockheed Martin won the Space Exploration Vehicle contract in 2007. Lt. Gov. Barbara O'Brien co-chairs the Colorado Space Coalition. Colorado School of Mines created the Eighth Continent Project ("space" being another continent), and the University of Colorado continues to receive the most NASA grants of any U.S. university. At the National Space Symposium held in Colorado Springs, attendees could step from a satellite, to a rocket engine, to a space suit. With government facilities, large defense contractors, and engineering firms all located in the state, Colorado continues to be a major force in the aerospace industry.

Architectural, Engineering, and Related Services

The Architectural, Engineering, and Related Services Sector, represented by such heavy hitters as CH2M Hill, Raytheon, and Lockheed Martin, is expected to experience another healthy increase in employment in 2007, adding 2,100 jobs, a gain of 5.1%. It is anticipated to rise another 2.1%—900 jobs—in 2008. Englewood-based CH2M Hill, a firm that specializes in construction, environmental planning, and engineering and architectural design, is a prime example of growth in the sector. In mid-2007, CH2M Hill announced plans to acquire the oil and gas firm Alaska-based Veco in order to diversify the company's portfolio of engineering expertise.

Demand for engineering and design services continues to grow in both the public and private sectors. However, the availability of experienced personnel has become tight again, mirroring conditions encountered in 1999 and 2000.

The offshoring of work in this sector continues. A recent survey by Harvard University and the American Institute of Architects found that 20% of U.S. firms report they are offshoring, while an additional 30% are considering doing so. According to Science & Engineering Indicators 2006, a report published by the National Science Board, the total number of science and engineering degrees earned from 1980 to 2000 grew at an annual rate of 1.4%, far below the 4.2% increase in the number of science and engineering jobs. Additionally, nearly 30% of all science and engineering degree holders currently in the labor force are age 50 or older.

ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT SERVICES SECTOR
1998–2008
(In Thousands)

Year	Employment Services	Services to Buildings and Dwellings	Other Adm. Services and Waste Mgmt.	Total	Percentage Change
1998	48.2	29.3	55.3	132.8	2.1%
1999	51.2	31.4	57.1	139.7	5.2
2000	54.5	33.0	58.4	145.9	4.4
2001	46.9	34.4	57.2	138.5	-5.1
2002	39.0	34.1	57.7	130.8	-5.6
2003	36.2	35.0	56.4	127.6	-2.4
2004	38.5	36.9	56.2	131.6	3.1
2005	40.2	37.9	57.4	135.5	3.0
2006	42.4	39.2	60.2	141.8	4.6
2007[a]	44.5	40.6	62.2	147.3	3.9
2008[b]	46.5	41.8	64.2	152.5	3.5

[a]Estimated.
[b]Forecast.
Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

The passage of Referendum C in November 2005 provided a boost to the construction of state highway and bridge projects. However, this funding is still not adequate to make up for road and bridge projects delayed during the 2002–2004 economic slowdown. During that period, the condition of roads, highways, and bridges deteriorated significantly due to increased use by Colorado's growing population. Costs to renew the state's infrastructure have climbed considerably due to rising global demand for construction materials.

Moving forward, demand for architectural services will remain strong due to the aging of Colorado's infrastructure. Interstate 70 is a case in point.

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Professional and Business Services

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The highway was constructed during President Eisenhower's term. Approximately 40% of the state's roads are rated as poor, and more than 100 bridges are regarded as structurally deficient. The infamous I-70 viaduct in Denver near the stockyards has been rated structurally deficient for the past 15 years.

While demand is strong for infrastructure repair, Colorado's tax structure and its reliance on federal road building does not bode well for needed improvements. However, the recent passage of Denver Initiatives A-I in November 2007, which included a $550 million infrastructure bond and tax increase, will address infrastructure priorities, including streets, libraries, city buildings, police and fire stations, and other maintenance needs.

The design of residential structures and office buildings is an important part of engineering and architectural business. New residential construction activity continues to decline. Medical facilities other than hospitals are being built or remodeled. Design of new biofuels plants remains steady. New mining facilities are being planned due to the rising demand for natural resources. Increased spending on military facilities in Colorado continues, including expanding existing buildings and upgrading living quarters and offices. However, construction of new commercial office buildings is anticipated to remain slow due to abundant capacity in many regions of the state.

An extremely strong correlation exists between growth in architecture and construction. This relationship can be measured by the Pearson product

TOTAL PROFESSIONAL AND BUSINESS SERVICES SUPERSECTOR EMPLOYMENT
1998–2008
(In Thousands)

Year	Professional, Scientific, and Technical Services	Management of Companies and Enterprises	Administrative and Support and Waste Management Services	Total[a]	Percentage Change
1998	134.2	16.2	132.8	283.1	3.6%
1999	145.0	17.7	139.7	302.4	6.8
2000	153.8	19.1	145.9	318.8	5.4
2001	154.0	19.8	138.5	312.3	-2.0
2002	144.5	20.9	130.8	296.2	-5.2
2003	141.8	22.5	127.6	292.0	-1.4
2004	148.1	24.5	131.6	304.1	4.1
2005	156.0	25.3	135.5	316.8	4.2
2006	162.9	27.1	141.8	331.8	4.7
2007[b]	174.4	29.1	147.3	350.8	5.7
2008[c]	183.2	30.6	152.5	366.3	4.4

[a]Due to rounding, the sum of the individual items may not equal the total.

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

moment, which ranges from 0 to 1. The value is 0.92, which means that about 92% of the change in construction employment can be explained by change in employment in the architectural services. As a result, architectural services is thought to be a harbinger of growth in construction employment.

Management of Companies and Enterprises

Management of Companies and Enterprises (MCE) represents company headquarters or regional company offices that either finance, oversee, or manage companies from a strategic, organizational, and operational front. Many of the companies represented in this sector put Colorado on the national and even global business map, with such high-profile firms as the recently acquired Wild Oats, Ball Aerospace, Newmont Mining Corporation, Sports Authority, and Rock Bottom Restaurants. Colorado is known as a highly educated, entrepreneurial state, with a desirable quality of life. The state is on the radar for angel investors and venture capitalists, and is known for firm creation. Geographically, Colorado provides easy access to the rest of the nation and world, facilitated by Denver International Airport and the large national and international carriers that use the facility. MCE's major benefit to Colorado rests in the companies with operations outside the state, effectively making them service exporters.

Accounting for approximately 8% of the Professional and Business Services Supersector, MCE has been growing at a 6% compound annual growth rate since 2000, outpacing both supersector and total Colorado employment. MCE wages are among the highest in the state, with average employee earnings topping $100,000 annually. The sector's workforce is expected to climb by more than 7% in 2007, ending the year with 29,100 employees. MCE employment gains will be brisk again in 2008, albeit at a slower pace than in 2007, ending the year with 30,600 employees.

Administrative Support and Waste Management and Remediation Services

Accounting for approximately 43% of the PBS Supersector employment, Administrative Support and Waste Management and Remediation Services includes companies that provide services to other businesses. This sector employed 141,800 in 2006, with average wages estimated at $30,515. These activities include everything from waste management and cleaning services to temporary agencies and call centers.

Of particular interest is the employment services subsector because of its strong correlation with overall employment. Recent trends in this category support projections for moderate growth in overall state employment.

Looking Forward

Businesses and government will continue to outsource professional and business services. So far, higher energy prices have not rippled through the economy as much as expected. However, with energy prices continuing to climb, negative effects on employment for this sector may appear early in 2008 if prices do not fall.

The increasing cost of employer-provided health insurance is affecting the mobility of the labor force. This makes employers reluctant to hire and workers hesitant to leave current employment. In spite of this, increasing fuel costs may lead workers to shift to companies located closer to their residences. Use of newer technologies that provide efficient telecommuting will also be used more by service firms.

The current issue of immigration control affects the way Colorado companies conduct business. It may be more difficult to attract people from overseas to work for service companies in the United States. The universities in Eastern Europe, Asia, and Mexico are approaching the point of graduating more professionals than their local industries can absorb. It remains to be seen how state and national immigration policies will address this aspect of migration in the future. ✜

Educational and Health Services

The Educational and Health Services (EHS) NAICS supersector includes private educational services and healthcare companies and organizations. Total employment growth will increase 3.3%—or by 8,000 workers—for a total of 248,000 employees in 2008.

Healthcare and Social Assistance Services

The healthcare sector comprises four subsectors: ambulatory care, hospitals, nursing care, and social assistance.

The ambulatory care subsector includes approximately 75% of healthcare companies and 41% of employees. About two-thirds of the ambulatory care employees are medical professionals, or work in physician offices, dental offices, or in home-health agencies. The remainder of this subsector includes such medical services as specialists, medical labs, blood banks, and dialysis centers.

Approximately 84 hospitals, including psychiatric and specialty hospitals, are located in Colorado. These represent less than 1% of the companies in the healthcare sector, but about 25% of the sector's employees.

Approximately 17% of the employees are included in the nursing care subsector, which includes nursing homes and other residential care facilities. The final subsector is social assistance, which encompasses community food and housing groups, and child care centers, accounting for 16% of the total workers in the healthcare sector.

Health Insurance Premiums and Coverage

According to a 2007 report by the Kaiser Family Foundation and the Health Research and Education Trust, the national average annual premium for employer-sponsored health insurance is $4,479 for single coverage and has now topped $12,000 for a family policy. Premiums increased 6.1% in 2007, the lowest rate of increase since 1999. Nevertheless, health insurance premiums rose 78%, about four times the increases in wages and consumer prices between 2002 and 2007. Despite the moderation in premium increases, the average worker contribution continues to increase, averaging $694 for single coverage and $3,281 for family coverage. The study found that 60% of companies offer health benefits to at least some of their workers, a decrease from 69% in 2000. While virtually all firms with 200 or more employees offer health insurance, only 59% of small firms (fewer than 200 employees) do. The average worker contribution is less in small firms than large firms—$561 versus $759 for single coverage. The opposite is true for family coverage, where workers in small firms contribute $4,236 compared to $2,831 for employees in large firms.

A 2007 Mountain States Employers Council (MSEC) survey of members found average healthcare premium rates in Colorado similar to the national levels reported by Kaiser ($4,488 for single coverage and $13,152 for family coverage). MSEC respondents report somewhat slower recent premium growth than the Kaiser report: from 2003 to 2007 premiums increased 31% for single coverage and 43% for families. As with the national figures reported by Kaiser, Colorado premium costs are expected to continue to outpace all other economic indicators such as inflation and growth of the overall economy. For 2008, MSEC estimates that premiums will increase by around 8%, which is below historic levels.

Frequently cited cost drivers include increased utilization of services, the aging population, cost of new technology, hospital and pharmacy reimbursement rate increases, and the cost of litigation and "defensive medicine." Additionally, as the ranks of the uninsured and underinsured swell, and government reimbursements for Medicaid and Medicare fall short of costs, these uncompensated costs will continue to be shifted to privately insured employers and their employees. According to a Families USA study in 2005, treatment costs for uninsured adults increase private health insurance premium rates by an average of 8.5%. Lastly, expansion of ambulatory surgical centers and inpatient capacity in new and expanded hospitals creates additional supply, which fulfills increased demand and drives spending for services.

The rate of Coloradans without health insurance has remained fairly constant since 2003-04, at 17%. According to the Colorado Health Institute's (CHI) analysis of the Census Bureau's Current Population Survey in 2003-05, roughly 14% of children and 20% of adults were without any form of health insurance. A recent study conducted by the Lewin Group for the Blue Ribbon Commission for Healthcare Reform found that 70% of the uninsured were in families with at least one person employed. Colorado currently ranks 38th among states in the percentage of adults without insurance coverage. While uninsurance rates have been relatively stable for the last few years, the absolute number of uninsured has grown along with population growth.

Types of Coverage

Individuals and businesses increasingly switch to either the "high-deductible" plans (usually preferred provider organizations, or PPOs) or the consumer-driven health plans that allow for moderation of premium cost, while exposing individuals to greater risk of out-of-pocket expenses. The steady increase nationally in PPO coverage since the early 1990s has mirrored the increases in overall healthcare benefit costs. Research by HealthLeaders–InterStudy suggests that HMOs lost some of their gains in 2006 from the prior year. Nationally, 71 million people are in traditional HMOs compared to 74 million in 2006 and 68 million people in 2005, when traditional HMOs had 23% of the market. In 2006, HMO penetration in Colorado was 28% (1.3 million members), an increase of some 200,000 over 2005 but below the high point 1.5 million members in 2002. HMO enrollment as of mid-2007 stood at just over 1 million members.

High-deductible health plans, paired with flexible spending accounts, have sparked the interest of employers nationally, yet introduction by employers and adoption by employees remains low. According to the 2007 Kaiser Family Foundation, 10% of firms are offering high-deductible health plans with a savings option (HDHP/SO) in 2007 but the difference from the 7% reported in 2006 is not statistically significant. About 4 million covered workers are now enrolled in HDHP/SO plans. A total of 73% of firms with 200 or more workers offer HDHP/SO, while only 20% of small firms (3–199 workers) provide this option.

Insurance carriers are also rewarding employees who take responsibility for their own health status. United HealthCare recently introduced to the Colorado market healthcare plans designed to allow employees to offset portions of their deductible by rewarding individuals for health results in lifestyle categories such as tobacco use, body mass index, LDL cholesterol and blood pressure levels, and health assessment participation. Colorado insurers are also rolling out specific benefit healthcare plans with creative design options targeting small business, part-time workers, and the uninsured population. These include hospital-only plans, preventative benefit-only plans, and so-called "schedule of benefits' plans" that reimburse the patient a flat amount per doctor visit or per hospital day.

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COLORADO EDUCATIONAL AND HEALTHCARE SERVICES EMPLOYMENT
1998–2008
(In Thousands)

Year	Educational Services	Healthcare Services	Total[a]	Percentage Change
1998	20.4	162.6	182.9	2.7%
1999	21.3	165.6	186.9	2.2
2000	22.7	170.1	192.8	3.2
2001	23.7	177.2	200.8	4.1
2002	24.6	183.9	208.5	3.8
2003	25.0	188.0	213.0	2.2
2004	26.1	192.4	218.5	2.6
2005	27.5	197.1	224.6	2.8
2006	28.5	202.4	230.9	2.8
2007[b]	29.9	210.1	240.0	3.9
2008[c]	31.1	216.9	248.0	3.3

[a]Due to rounding, the sum of the individual items may not equal the total.

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Educational and Health Services

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One critique is that many of these plans with fewer benefits or higher cost-sharing expose individuals to greater financial risk. Studies indicate that over half the personal bankruptcies in the United States are caused by "healthcare costs," especially if catastrophic illness or injury strikes. Yet many of these individuals have or did have some level of health insurance. Colorado healthcare providers are also concerned. Colorado hospital respondents report a 50% increase in bad debt expense from 2003 to 2006, some of which may be attributable to new "affordable" plan designs. These plans are forcing hospitals and physicians to invest resources to collect directly from patients, increasing healthcare overhead costs.

Colorado Small Group Coverage

The impact of rising healthcare costs on small group firms (50 or fewer employees) is especially challenging. The 2007 Colorado Division of Insurance's survey shows that the small group market stabilized in 2006 after five years of continuous decline. This market experienced a 0.4% loss (1,600 lives) in 2006 as opposed to the 4% (15,000 lives) decline the prior year. Kaiser Permanente (84,000), United Healthcare (76,000), and Anthem/Wellpoint (57,000) dominate the small-carrier market, with 61% of total covered lives. From 2000 to year-end 2006, the Division of Insurance reported a 34% decline in covered lives in the small-group market, from nearly 538,000 to 357,000. Less than 40% of Colorado businesses with 50 or fewer employees are offering health insurance. The small businesses in Colorado that do offer healthcare coverage typically have more than 10 employees and have a larger proportion of full-time workers. They also occupy higher income industry segments that must compete with large businesses for employees.

At the end of 2006, a total of 21 small group carriers were actively engaged in the Colorado market. Small group carriers indicated increases of more than 8% in both "business group-of-one" and small group plans from 2005. Carriers operating in the small group market reported 48,288 groups covered, up from the 46,368 groups reported the previous year. The number of "business group-of-one" policies continues to climb for the second consecutive year, with 13,942 policies as of December 31, 2006, but that total is still in sharp contrast to the 28,805 policies in 2000. Colorado remains one of the few states to offer limited guaranteed issue to business groups-of-one.

The small group marketplace continues to migrate toward lower benefited deductible and catastrophic products. The market perception of low-cost products has shifted. Once HMOs dominated the low price segment; however, carriers have built larger product portfolios to offer plans at much lower price points, and these plans have become extremely popular. In Colorado, HMO and indemnity plan types continue to decline, whereas PPO plan types have increased. Health savings accounts (HSAs) continue to grow, with 15 carriers offering HSA-compliant plans covering more than 33,000 individuals, a 28% increase from 2005.

Colorado hospital respondents report a 50% increase in bad debt expense from 2003 to 2006, some of which may be attributable to new "affordable" plan designs.

Even though the small group market is subject to legislative rate regulations, the Bell Policy Center concluded in their 2007 Issue Brief that Colorado's rate regulations did not have a unique impact on a total average premium cost in the small group market. Rather, Colorado's experience mirrored that of other states and the nation as a whole through the 1990s and 2000s. Many in the small group market are continuing to look at the Colorado legislature and the Blue Ribbon Commission on Health Care Reform to provide the needed relief for the small group market and the Colorado healthcare system.

Legislative Initiatives

The 2006 General Assembly created a Blue Ribbon Commission for Health Care Reform. While signed into law by former Governor Owens, Governor Ritter supported the Commission and added 3 members to the existing 24 commissioners. The purpose of the commission is to study and establish healthcare reform models to expand healthcare coverage and to decrease healthcare costs for Colorado residents. "Previous models for health care reform fail to sufficiently involve the citizens who pay for and are dependent on the health care system," said bill sponsor Representative Anne McGihon. "The Blue Ribbon Commission shifts course and aims to lower and contain health care costs by consulting consumers, businesses and other members of the community." The committee requested input from Coloradans and received 31 proposals. Commission members selected four proposals to model. The Lewin Group, the modeling contractor, has estimated the increase (or decrease) in the number of persons covered, the overall costs, and where the burden of the costs would fall according to each plan. The commission has also constructed a fifth proposal that combines many of the elements in the other proposals, and this will also be modeled. Six proposals call for a "single payer" and "universal access" approach. Nearly all proposals suggested expansion of Colorado's Medicaid and ChildrenHealth Plan Plus (CHP+) programs, noting that Colorado's programs are leaner than those of most other states. Public input in all seven Congressional Districts occurred in October 2007. The committee's recommendations to the legislature are due January 2008. Full proposal details and cost impacts can be accessed at www.colorado.gov/208commission.

In 2007, the General Assembly passed HB-07-1355, which ends a practice of insurance rating flexibility that includes health status in the premium calculation for small group insurance. All other band rates, that is, the use of age, geography, industry, tobacco use, and family composition, remain. According to the insurance industry, health status rating creates an environment where business incentives are aligned with healthy behaviors, and 60% of small groups experienced premium discounts of up to 25%. Advocates for the bill supported a "more fair" community rating basis, pointing out that small businesses should not be penalized for hiring persons with medical conditions and cited a Division of Insurance fact that many of the small groups that received the larger discounts had seen their rates go up the following year. The immediate impact will be on businesses that were taking advantge of rating discounts. They will experience both the erosion of discounts and normal premium increases. Both sides dispute the ultimate impact on the number of lives that the small group market will cover and whether the number of carriers who offer small group policies will change.

Another 2007 bill, SB-07-79, was passed as a second-year effort supported by the Colorado Medical Society to clarify contracting "rules of the road" between physicians and health plans. Some of these provisions include the rights of physicians to receive timely notice of material changes to reimbursements and to refuse to be included in other networks or other health plan products without penalty. Similar legislation is being proposed in the Ohio legislature in 2007.

By 2020, the pharmaceutical industry is projecting a shortage of 157,000 pharmacists nationwide.

For 2008, the General Assembly will see a number of bills that emanate from the recommendations of the Blue Ribbon Commission. The most likely topics are expansions of public programs, support of a single-payer system, and efforts for increased efficiencies to restrain the cost spiral.

Employment and Workforce Issues

Employment in the health industry continues to be limited by a national desperation for healthcare workers, including physicians, nurses, and other allied health professionals. By 2020, the pharmaceutical industry is projecting a shortage of 157,000 pharmacists nationwide. Major factors behind the increasing demand for healthcare workers include population growth, the aging of the population and the nursing workforce, increased per capita demand for healthcare services, and new construction of hospitals.

Registered nurses (RNs) account for 25% of the entire healthcare workforce, but only 7% are age 30 or younger. According to the Colorado Center for Nursing Excellence, two-thirds of the practicing registered nurses in Colorado are older than 45, and of those, about 27% plan to leave nursing in the next 10 years. The federal government projects that Colorado will have 17% fewer nurses than it needs by 2010. By 2014, available RN positions are expected to total more than 47,120, compared to the 32,371 positions reported in 2004. Approximately 2,200 new positions will be created in the next two years to serve the aging population.

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A large number of qualified applicants for nursing schools are turned away every year as the number and size of nursing programs are inadequate. In addition, nursing faculty positions are difficult to fill. Nursing schools are expensive to operate, receive no federal funding, and usually lose money. In Colorado, the annual number of nursing graduates has increased to approximately 1,600 per year. However, the four-year nursing schools still report a 15% shortage in faculty members.

The turnover rate for licensed nurses is high across the industry, but its peak is in the first two years of employment. When surveyed, nurses cite increased administrative requirements, increased workload due to the acuity of the patient mix, inadequate staffing and compensation, and disrespectful physician behavior as the reason for the high turnover. The global economy is responding to this need. While Colorado-specific data were not available, a recent study by the PricewaterhouseCoopers Health Institute reports that 13% of newly licensed nurses in the United States graduate from international nursing programs.

A major shortage of physicians is also predicted. In the United States, the number of medical school graduates has remained relatively stable throughout the past 25 years. However, demand is growing as the population ages. The Association of American Medical Colleges has called for a 30% increase in graduates to meet the demand by 2020, and has responded with plans to open a number of new medical schools in the next few years.

Medicare and Medicaid patients often face difficulty in finding a physician practice that is accepting new patients.

According to the Colorado Health Institute, 35% of the physicians in the state of Colorado are over the age of 55, and will reach retirement age within 10 years. Medicare and Medicaid patients often face difficulty in finding a physician practice that is accepting new patients.

Compounding the problem is a shortage of new physicians that are choosing to practice in primary care specialties. More primary care physicians are needed throughout the state, especially in rural areas. However, newly graduated MDs are often deeply in debt with student loans, and thus choose higher paying specialties than primary care.

The shortage of primary care physicians has already precipitated some market response. An appointment with a physician extender (nurse practitioner or physician assistant) is becoming a mainstream alternative to a primary care physician visit. A number of retail outlet stores, most notably Wal-Mart, have introduced "retail clinics" in their stores. Consumers can choose to see a nurse practitioner in one of these retail locations to meet their needs for basic medical care. (For additional information on this topic, see page 70.)

The trend has also led to an influx of foreign medical professionals who received their training in other countries. A recent study by the PricewaterhouseCoopers Health Institute reports that 26% of the physicians entering residency programs in the United States in 2005 were graduates of international medical programs. The 6,500 foreign physicians entering residency programs in the United States in 2005 accounted for 42% of the internal medicine positions, 37% of family medicine positions, and 25% of pediatric positions.

Colorado is expanding capacity to help meet this provider shortage. There are plans to open a new school for doctors of osteopathy, the Rocky Vista University College of Osteopathic Medicine, in Parker. The school proposes to admit 150 students for the first academic class, beginning fall 2008. Also admitting its first class for the fall semester of 2008 is Regis University's new school of pharmacy, located in the Rueckert-Hartman School for Health Professions.

There is positive news in the dental education area. CU's School of Dental Medicine has increased capacity and is now training more than 300 students a year as a result of its relocation to the Fitzsimons campus. It currently has four classes of 50 students each in the dental school and capacity for 25 students in each of two dental hygiene programs. Additionally, it has added an International Student Program for foreign dentists and periodontal and orthodontics residency programs.

Healthcare Drives Spending in Construction and Information Technology

Construction of new hospitals and renovation of existing institutions continues apace, including new construction, renovations, and replacement facilities. An informal sampling of projects includes 16 new facilities and 11 renovations completed within the last four years and 15 facilities under construction or in the planning stage.

Facilities in the planning stages or under construction include new hospitals in Pagosa Springs, Castle Rock, Lakewood, Colorado Springs, and Telluride. Replacement facilities are in the planning or construction phase in many communities. Hospital-, medical-, and biotechnology-related capital construction continues at Fitzsimons in Aurora, where two hospitals have recently moved—the University of Colorado Hospital Anschutz campus and The Children's Hospital—and the Veterans Administration Hospital is in the planning stage of moving to Fitzsimons.

Construction is driven by two major forces: the growth in Colorado's population and the need to upgrade facilities and technology to provide increasingly sophisticated medical and healthcare services. According to Thomas R. Prince, Professor of Accounting and Information Systems at Northwestern University, one way to measure the financial health of a hospital is to consider the average age of the hospital's physical plant and equipment. Of 37 Colorado hospitals reporting, 17 are classified as being at the point where strategic planning for updated medical technology and facilities is needed.

Hospital construction is a boon for the Colorado economy in two ways. First, the construction puts millions of dollars into the economy, both directly and indirectly, with an economic multiplier effect of greater than two times the actual cost of construction. Second, as hospitals rebuild and new hospitals are opened, additional employment opportunities become available. Many of the jobs created are high-paying positions with benefits, averaging $60,000 per year. The multiplier effect from employment is 2.26 for salary and benefits, and each position supports itself and 1.46 other positions (multiplier of 2.46) in the community.

Unlike the hospital facility sector, the Colorado Department of Public Health and Environment reports continued flat to very low rates of new licenses for long-term care facilities (nursing homes) and assisted living facilities.

Federal, state, and local agencies are driving numerous health information exchange (HIE) initiatives related to a broad agenda to "transform" healthcare through improved efficiency, better quality of care, and more information ("transparency") for consumers. Through executive branch actions, legislative mandates, and other public-private partnerships, states are increasingly active in establishing targets for healthcare information technology (HIT) adoption, setting up leadership and oversight entities, and, in some cases, providing resources and incentives for HIT and HIE adoption.

Construction of medical facilities is driven by the growth in Colorado's population and the need to upgrade facilities and technology to provide increasingly sophisticated medical and healthcare services.

Colorado's efforts to develop statewide interoperability continue through numerous avenues. These include the $5 million Agency for Healthcare Research and Quality-funded Colorado Health Information Exchange project (COHIE) that is developing technical architecture. There are numerous local HIE "nodes," including healthcare providers in Mesa County, El Paso County, and Weld County. A multistakeholder coalition called the Colorado Regional Health Information Organization (CORHIO) incorporated in March 2007 as a 501(c) nonprofit organization. Working to build Colorado's capacity for a statewide health information exchange based on a federated, web-based model, CORHIO will lead the development and be responsible for the ongoing operation of this network linking an array of providers, organizations, and networks throughout the state and eventually bridging other state's networks. CORHIO is the recipient of a subcontract from the University of Colorado Denver (an extension of the AHRQ contract terms) to operate the exchange on behalf of the community.

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This federated model is neither a data repository nor a comprehensive medical electronic record. Data will reside at the source and be shared through a CORHIO hub by a secure and confidential process when needed. CORHIO provides the initial patient search, a master patient index, and the transfer mechanism, including the ability to aggregate the data into meaningful information for point of care decision making. The initial data exchange will allow clinical users to query and display medical history for a single patient when a patient presents for treatment. The first release will display laboratory results, medication history, radiology text reports, and a simple "problem list" by mid-2008. Subsequent versions will include the ability to send imaging, and future functionality may include clinical messaging, population health services, and public health measures and surveillance.

For Coloradans, the ability to exchange health information electronically is expected to improve patient safety by decreasing medical errors, increase efficiency by avoiding redundant or unnecessary treatments or actions, and enhance public health by monitoring potential health hazards.

Consumerism and Consumer Engagement in Healthcare

Many industry watchers claim that consumers have been insulated too long from the actual costs and utility of visits, procedures, and medicines, leading to inappropriate utilization. "Consumerism" is viewed as a potential solution to the healthcare cost predicament, and employers are introducing a range of plan designs to promote this type of behavior. It is hoped that high-deductible plans, health savings accounts, and changes to rollover provisions of flexible spending accounts may compel individuals to look for comparative cost and quality among providers of services. Studies indicate that before an aggressive consumer attitude takes hold, access to information is necessary, along with motivation and education. However, information to enable this level of informed decision making is not necessarily readily available.

Convenient care clinics (CCCs), sometimes referred to as retail clinics are an emerging trend for healthcare consumers who are assuming all or some of their healthcare costs. Defined by the industry trade group Convenience Care Association as "small health facilities located in convenient settings accessible to the public, these clinics provide non-emergency care services to walk-in patients, regardless of insurance coverage status, at affordable prices, seven days a week." These clinics have the ability to provide consumers with affordable, accessible, and quality healthcare in a retail host setting (typically grocery, pharmacy, and mass merchandise chain stores). Staffed primarily by nurse practitioners with remote physician oversight, services provided on a walk-in basis include diagnosis and treatment of common acute health problems, including sore throats, immunizations, and preventive care. Clinics follow evidence-based guidelines when treating conditions.

Retail clinics are an emerging trend for healthcare consumers who are assuming all or some of their healthcare costs.

Minneapolis-St. Paul was the location of the first CCC in 2000, and it is estimated that there are currently approximately 700 across the country, including 15 in Colorado, all in the Denver/Boulder area. Expansion of CCCs is expected to triple across the country within the next few years. Even though a small percentage of the population use CCCs at this time, it is reported that the majority of users were "very satisfied" with their experience. CCCs offer expanded geographical access, increased available hours, and reduced wait times. Concerns have been raised that CCCs may undermine a patient's quality, continuity, and coordination of care with their primary care physician. Others believe CCCs fill a gap for consumers seeking alternative healthcare pathways that encourage them to receive early care that may prevent use of emergency departments for nonemergent care and prevent lengthy absences from work. Many physicians have partnered and collaborated with CCCs by their inclusion in the CCC's referral network.

It is too early to understand the impact CCCs will have on medical visit and prescription utilization. Demand most likely will continue to increase as consumers become aware, accept, and use this model and payers provide incentives to direct patients to receive basic health services in a lower cost setting. CCCs also have the potential to provide affordable basic quality healthcare services to the underinsured and uninsured populations.

However, it remains uncertain if CCCs represent a viable business model, and their overall impact on healthcare cost drivers is yet to be determined.

In 2005, Colorado hospitals released quality indicators to the public through the Colorado Hospital Association Performance and Quality Group, whose members represent healthcare, business, and governmental organizations. Colorado consumers now have available 11 risk-adjusted mortality indicators and 4 volume indicators to gauge Colorado full-service hospitals. More information will be available in November 2007 due to enacted Colorado legislation requiring a "hospital report card," and in 2008 with the publication of hospital infection rate reports. A Presidential Executive Order issued in 2006 requires the federal government to release hospital and physician data from Medicare, Department of Defense, and the Federal Employee Benefits programs on costs and quality of care. Over the past three years, Medicare has required participating hospitals, nursing homes, renal dialysis centers, and home health agencies to post quality of care data on the Web through reimbursement penalties for failing to report. Looking to the future, Medicare is planning on reducing reimbursement for eight selected conditions, such as certain types of surgical errors or hospital acquired infections if they are acquired in the hospital care setting, beginning in October 2008.

Other efforts, dubbed "Pay for Performance," adopted by Medicare, private purchasers, and payers, will pay financial rewards to hospitals and physicians whose data reflect that they are improving quality through improved performance on process and outcome metrics related to patient care. The premise is that improved quality of care, combined with publicly disclosed performance data, will result in better care and lower costs. The Medicare Premier Project, which has both financial rewards and penalties at stake for participating hospitals, is now demonstrating dramatic quality of care improvements, while other projects are still in evaluation phases.

It is estimated that lifestyle behaviors contribute up to 50% of an individual's health status. For example, the epidemic of obesity leads to diabetes, and smoking leads to heart disease. While Colorado boasts the lowest rate of obesity in the nation, ballooning from less than 10% of the state in 1990 to a rate of 15%-20% in 2002. By 2002, none of the 50 states were reporting obesity rates of less than 10%.

Ways to creatively improve the health of the population will be one of the only options to combat the costs and complications of early or avoidable chronic diseases. Companies are more serious about improving the health of their workers by offering prevention and wellness programs targeted to specific populations for behavior modification that can change employers medical cost trends. Additionally, more employers are providing onsite vaccinations, weight-loss programs, and gym membership subsidies to combat the problems. Large corporations are also empowering their employees by paying for the availability of patient advocates who navigate the intricate healthcare system, identifying specialists, translating "doctorese," and negotiating insurance claims for patients.

Disease management programs are considered to be a "very effective" or "somewhat effective" tactic to reduce costs, according to 82% of benefit managers in the 2006 Kaiser Family Foundation study. These programs seek to provide patient education, coordinate between patients and physicians, and coach for adherence to recommended treatment goals such as control of blood pressure and cholesterol. Disease management programs do not offer quick and substantial savings, especially when poorly implemented, but will be attractive to employers who seek to manage their human capital and get in front of healthcare costs by managing direct healthcare expenditures, long- and short-term disability, productivity, and absenteeism.

Healthcare and Social Assistance Employment

It is possible to track employment data back to 1990 using the current NAICS categories. Between 1990 and 2007, healthcare and social assistance employment expanded at an annualized rate of 3.6%. Job growth has occurred every year, even during recessionary cycles. As a point of reference, total state employment expanded at an annualized rate of 2.5% and included jobs losses on two occasions.

During 1990-2007 ambulatory healthcare increased by 3.5%, and hospital employment rose by 3.6%. The smaller subsectors also grew faster than the state average as nursing care employment increased 3.0% and social assistance employment climbed 4.4%.

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**HEALTHCARE SERVICES EMPLOYMENT
1998–2008
(In Thousands)**

Year	Ambulatory Care	Hospitals	Nursing Care	Social Assistance	Total[a]	Percentage Change
1998	66.1	41.2	30.0	25.3	162.6	2.4%
1999	66.1	42.4	30.6	26.6	165.6	1.8
2000	68.4	42.6	31.5	27.6	170.1	2.7
2001	71.0	44.4	32.6	29.1	177.2	4.2
2002	74.7	45.4	33.8	30.0	183.9	3.8
2003	77.4	46.4	33.9	30.3	188.0	2.2
2004	78.7	48.1	34.3	31.3	192.4	2.3
2005	80.7	49.1	35.1	32.3	197.1	2.4
2006	82.8	50.2	35.6	33.8	202.4	2.7
2007[b]	85.7	52.7	36.3	35.4	210.1	3.8
2008[c]	88.2	55.0	36.9	36.8	216.9	3.2

[a]Due to rounding, the sum of the individual items may not equal the total.

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Healthcare and social assistance employment will grow by 3.2%, or 6,800 jobs, in 2008. The impressive growth of this subsector over the past 18 years has been a driver of the state economy, and it has created an infrastructure that has allowed Colorado to maintain a healthy population. It must be noted that not all of the employment growth in the sector has been for medically trained workers. Much of the growth has been for IT workers to develop and manage computer networks and insure network security, office staff to collect bills and reduce bad debts, and food service and maintenance personnel.

Educational Services (Private)

The private education sector includes about 2,100 organizations that will employ approximately 30,000 employees in 2008. As a point of reference, about 177,000 public sector education employees are recorded in the state and local government sections. (Elementary and secondary educators are included in local government, while higher education is included in state government.)

The top employers include the University of Denver, Regis University, Colorado College, the University of Phoenix, Naropa Institute, and Colorado Christian University. Other organizations include companies that provide instruction in a variety of areas, including, for example, tennis and volleyball camps, horseback riding academies, and driver training institutes.

The growth in private education has most likely been a direct result of increased state population. In addition, as the general economy and the various industries go through their normal business cycles, higher demand for training occurs during expansionary cycles, and outsourcing for educational programs may occur during recessionary cycles. Growth in the sector has been driven by both business demand for continuing education programs and consumer demand for training that improves quality of life. Approximately 1,200 jobs will be added in private education in both 2008. ✜

Leisure and Hospitality

Overview

This NAICS supersector includes performing arts, spectator sports, and related industries; museums, historical sites, and similar institutions; amusement, gambling, and recreation industries; accommodations; and food services and drinking places. Thus, the Leisure and Hospitality Supersector of the Colorado economy encompasses a broad spectrum of businesses and activities. It includes not only the recreational and entertainment activities of both Colorado residents and the tourists who visit the state, but also the effects of business travel to and within Colorado. Moreover, much of Colorado's leisure and hospitality businesses exist and depend on the natural environment that is such a central part of our state's image and lifestyle.

One of the economic contributions of the leisure and hospitality industry is its central role in attracting businesses and residents to Colorado. Each year companies from all economic sectors move to the state because of the environment. Indeed, recreational opportunities and quality of life offered by the state enticed several major outdoor recreational equipment and clothing manufacturers to establish their headquarters here. Finally, it is easy to forget that shopping is by far the most popular tourist activity; numerous Colorado shopping and outlet store malls depend heavily on tourism.

Good things happened to the Leisure and Hospitality Supersector in 2007:

- The Colorado Tourism Office continued to receive funding to promote tourism. This $19 million+ investment will enable the state to be competitive with other states.
- The Colorado Rockies won the National League Pennant and went to the World Series!
- The Museum of Contemporary Art opened in its new building.
- The Colorado ski industry posted its second straight record season with 12.56 million skier visits in 2006–07.
- Lufthansa launched nonstop service between Denver and Munich, Germany.
- DIA continued to set air traffic records, and is now the fourth busiest airport in the nation.
- It was announced that the 2008 Democratic National Convention will be held in Denver, putting the world spotlight on Colorado.
- Colorado's ski and snowboard season opened October 10, 2007.

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LEISURE AND HOSPITALITY EMPLOYMENT
1998–2008
(In Thousands)

Year	Arts, Entertainment, and Recreation	Accommodations	Food Service	Total Accommodations and Food Service[a]	Total Leisure and Hospitality[a]
1998	38.5	40.1	152.5	192.6	231.0
1999	40.4	41.1	157.1	198.2	238.5
2000	42.5	41.6	161.9	203.5	246.0
2001	42.1	40.4	164.8	205.1	247.2
2002	41.1	39.8	166.2	205.9	247.0
2003	40.5	39.3	165.8	205.1	245.6
2004	42.2	39.1	170.0	209.1	251.3
2005	43.3	39.8	174.4	214.2	257.5
2006	44.3	41.1	179.6	220.7	265.0
2007[b]	47.0	41.0	185.5	226.5	273.5
2008[c]	47.9	42.0	189.6	231.6	279.5

[a]Due to rounding, the sum of the individual items may not equal the total.
[b]Estimated.
[c]Forecast.
Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

Leisure and Hospitality

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Data presented at the Travel Industry Association of America's (TIA) Travel Marketing Outlook Forum in Charlotte, North Carolina, in late October 2007 indicate that the annual rate of growth in travel spending has been declining, reflecting more stabilization in prices, softer demand, and a general slowdown in consumer spending. Travel expenditures in the United States rose 7.8% in 2006, and are expected to slow to 5.7% in 2007 and increase 5.2% in 2008 when spending reaches $778 billion.

Leisure travel continues to be the bright spot in the travel picture. Overall growth of 1.5% in U.S. domestic travel is forecast for 2007, with leisure travel again taking the lead with a gain of 2.5%, while business travel declines modestly again. The forecast for 2008 is for a modest recovery in business travel and stability in leisure travel, leading to an overall increase of 1.6%.

The Office of Travel and Tourism Industries projects international travel to the United States will rise 5% in 2007, to 53.6 million visitors, and will reach 61.4 million by 2011.

The airline sector has returned to profitability and airlines are posting record passenger levels. The Air Transport Association is projecting continued slow growth in domestic and international airline traffic for 2008.

It is a great time to be in the lodging business. Room demand, occupancy, and rates are up, while room supply increases are low. Aggressive pricing is taking place with the average daily rate (ADR) up 6% in 2007, producing revenue per available room (RevPAR) gains of 6.2%. These trends will continue in 2008. Supply will rise 2% and demand will climb 2%, resulting in relatively flat occupancy gains. Room rates are forecast to be up 5.2%, producing RevPAR gains of 5.2% in 2008. Lodging will continue to enjoy increased profitability in 2008.

In summary, TIA expects to see modest growth in travel during 2008 as the economy slows and consumers become more cautious with their spending. Leisure person trips are expected to grow only 0.4%.

The outlook for Colorado leisure tourism activity in 2008 is bright. During 2006, the state experienced record growth in the tourism economic sectors. So far in 2007, the state leisure tourism industry is on pace to exceed 2006.

The state's aggressive advertising and marketing program will stimulate additional consumer interest in visiting Colorado. However, extreme shifts in certain external factors can affect consumer decisions on where to vacation. In Colorado, those factors can be consumer confidence in the economy, economic conditions, climate conditions, travel cost, and consumer debt.

The impact of the weak dollar makes Colorado an increasingly attractive destination for international travelers, especially Canadians and Europeans, and provides an incentive for Americans to view a U.S. holiday as more economically favorable.

Under normal conditions, the leisure travel market in Colorado will continue to grow in 2008, but at a slower rate than in the previous two years. With slower national economic growth and a more cautious consumer, visitation is expected to increase modestly, while receipts will grow by 5.2%. Growth will be led by the lodging, transportation, and food and beverage sectors.

Colorado's projected leisure tourism growth in 2008 will affect the seven state tourism regions differently. The Denver Metro, Front Range, and Northwest regions will experience the strongest growth. The South Central, Southwest, Southeast, and Northeast regions should expect moderate growth over 2007.

The following paragraphs focus on specific areas in the sector and are followed by a discussion of challenges facing the leisure and hospitality industry.

Employment

Since 2003 the Leisure and Hospitality Supersector has recorded strong performances with consistent growth. A total of about 19,400 jobs were added between 2004 and 2006. Continued growth will occur in 2007 as the sector is expected to increase by 8,500 jobs, followed by a 2.1% rise in 2008, or 6,000 jobs.

Food service dominates the employment picture for this supersector. While the number of food service employees will increase by 4,100, the percentage increase is relatively small, due to the large base in this area.

Accommodations

According to the *Rocky Mountain Lodging Report,* statewide lodging occupancies are up 1.6 percentage points from 2006 (66.6% compared to 65%),

COLORADO LODGING AND HOSPITALITY FORECASTS

	2007			2008		
	Occupancy	Average Daily Rate	Revenue per Available Room	Occupancy	Average Daily Rate	Revenue per Available Room
Denver Metro Area						
South and SE	65%	$103.00	$67.00	66%	$107.00	$70.62
Midtown	63	82.00	51.66	65	85.00	55.25
Downtown	70	154.00	107.80	69	168.00	115.92
Northeast	73	97.00	59.08	71	102.00	72.42
West	65	93.50	60.78	67	96.00	64.32
North	60	77.00	46.20	61	81.00	49.41
Hwy 36 Corridor	69	107.00	73.83	71	115.00	81.65
Boulder	68	115.00	78.20	69	124.00	85.56
Subtotal	67	108.00	72.36	69	115.00	79.35
Colorado Springs	60	92.00	55.20	62	99.00	61.38
Resort Areas						
Vail	57	280.00	159.60	59	299.00	176.41
Aspen	65	385.00	250.25	69	410.00	282.90
Steamboat	60	154.00	92.40	61	165.00	100.65
Winter Park	36	145.00	52.20	35	152.00	53.20
Other resorts	53	243.00	128.79	54	260.00	140.40
Subtotal	55	238.00	130.90	59	253.00	149.27
Other Colorado Cities						
Durango	70	106.00	73.67	70	112.00	78.40
Grand Junction	75	78.00	58.50	75	82.00	61.50
Glenwood Springs	70	108.00	75.06	70	112.00	78.40
Estes Park	53	151.00	80.03	54	158.00	85.32
Fort Collins	60	94.50	56.70	63	100.00	63.00
Other Colorado Areas	61	90.00	54.90	62	95.00	58.90
Colorado Total	64%	$135.00	$86.40	65%	$144.00	$93.60

Source: Hospitality Valuation Services, Inc., *Rocky Mountain Lodging Report*, and Colorado Business Economic Outlook Committee.

and ADRs increased 9.1% ($124.45 from $114.06) through September 2007. The data show good improvement in 2007, which is consistent with national trends. Both the leisure and business travel segments have grown, and most areas of the lodging market report occupancy gains year-to-date. A closer examination of the data indicates that occupancy increases have been accompanied by strong room-rate growth in the Denver metro market, the resort market, and higher-end properties. Thus, the outlook is quite promising for these segments.

The Colorado lodging and hospitality forecast table on this page displays data for many areas in the state by the key lodging variables of occupancy, ADR, and RevPAR. Strong revenue growth is anticipated in most regions. For the state as a whole, occupancy rates are expected to increase slightly; ADR will rise 6.7%, from $135 to $144; and RevPAR will increase 8.3%, from $86.40 to $93.60 in 2008.

Colorado's lodging market fundamentals are expected to remain robust through 2008, with anticipated growth in the demand for the leisure, individual commercial, and group traveler segments. It is projected that demand growth will outpace supply, due to construction costs. This will lead to increased occupancy pressure, which, in turn, will result in aggressive ADR growth in most markets. Those markets with lower average rates and those in interstate and small town areas may lag behind the higher-rated urban, airport, and resort areas, but will still experience healthy revenue gains. An increase in capital availability for

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Leisure and Hospitality

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the hospitality industry is anticipated to aid supply growth. With numerous projects already in the development pipeline, supply pressure is expected to accelerate late in the year, which will soften occupancy pressures and average rates.

Conventions

The Denver lodging market began to recover in 2004, improving through 2007. Similar to national trends, the expansion is expected to continue in 2008. ADR and RevPar should show strong growth in 2007 and in 2008.

Denver will add 779 hotel rooms to the downtown inventory in 2007, including the Hilton Garden Inn Hotel, Curtis Hotel, and the Ritz-Carlton Hotel. In October 2007, Oxford Lodging is expected to close on the Adam's Mark, with the intention of rebranding the hotel and making investments in capital improvements.

Other new lodging projects include Four Seasons, Embassy Suites, Homewood Suites, and a W Hotel in 2008–10.

Given the strength of the U.S. lodging market, meeting planners appear to have accepted the fact that it is a seller's market. To compete for major citywide conventions, it is critical that Denver's hotel community offer adequate group room blocks for convention business, which in a seller's market is often difficult to accomplish. Attrition of convention room blocks continues to be a problem for meeting planners as their convention delegates book rooms on the Internet outside of the official room block. In many cases, this trend can cost an association a great deal of money in damages, if they do not pick up the rooms outlined in their contract with the hotels.

With the adequate room blocks, the Colorado Convention Center is now capable of handling the largest meetings in the nation. Only 5% of conventions are too large to be accommodated in Denver.

National competition for lucrative citywide conventions is intense. With the expansion of the Colorado Convention Center, Denver competes against all major U.S. destinations, including those that have been branded as major convention cities for decades.

As of August 2007, an additional 815,000 square feet of new exhibit space will be available nationwide and before the end of 2007, that number will climb to nearly two million square feet. According to *Tradeshow Week,* 61 convention centers in the United States and Canada are new or are undergoing expansion, including 2 finished expansions and 13 new facilities, 33 planned expansions, and 13 sites in progress.

While new facilities influence booking trends, the key distinguisher between cities today is "destination appeal." Destination appeal is defined as the city's ability to provide excellent restaurants, hotel facilities, attractions, free-time activities, pre- and post-vacation opportunities and the perception that the city is a place that delegates want to go.

COLORADO LODGING OCCUPANCY AND AVERAGE DAILY ROOM RATES 2006–2007

	Occupancy Rate Percentage		Average Daily Rate Dollars	
	2006	2007	2006	2007
January	55.7%	56.8%	$120.70	$135.14
February	61.2	61.9	130.80	142.39
March	65.4	66.7	129.80	140.18
April	55.6	57.9	99.00	111.02
May	58.4	61.4	99.10	109.77
June	72.5	74.4	109.20	118.76
July	75.4	74.4	113.90	123.87
August	72.0	74.3	113.70	121.92
September	67.8	70.5	109.80	118.06
Year to Date	65.0%	66.6%	$114.00	$124.45

Source: *Rocky Mountain Lodging Report* and Colorado Business Economic Outlook Committee.

The best convention year in Denver's history was 2006, and 2007 will be even stronger. This trend is expected to continue in 2008 and 2009.

A total of 74 conventions used the Colorado Convention Center in 2007, a 34% increase over 2006. As of fall 2007, the Denver Metro Convention & Visitors Bureau confirmed 470 meetings at individual hotel properties for a total of 544 bookings in 2007. Together, these bookings will generate 614,930 room nights in 2007, a 17% increase over the 523,325 room nights in 2006.

Currently, 2008 is on pace with 2007 from a total room night standpoint, excluding the Democratic National Convention (DNC). The total number of convention bookings in 2008 is up 16%, but room nights are comparable to 2007.

One of Denver's strongest and highest profile convention years will be in 2008.

Elite conventions include the Frozen Four Hockey Tournament in April; the National Performing Arts Convention, which will attract the top media and leaders from all segments of the performing arts on June 11–14; the American Association of Museums, which will bring all of the nation's museum directors to Denver from April 28–30; and the very prestigious Congressional Medal of Honor Society, which will celebrate America's greatest military heroes, on September 14–19.

In addition to the 35,000 people coming to the DNC August 25–29, Denver will host 15,000 attendees for the International Association of Fire Chiefs conference from August 15–18, and 30,000 at Custom Electronic Design and Installation Association meeting on September 4–7, for a grand total of 80,000 visitors in about a three-week period.

Summary

Denver is a strong convention city that is increasingly perceived by meeting planners as a first-tier destination. The industry's opinion of Denver's infrastructure, airport, hotels, attractions, sports venues, cultural amenities, and convention center is among the very best in the country.

Denver's "bricks and mortar" meeting infrastructure rates high with meeting planners; however, the perception of Denver's experiential and destination appeal (attractions, nightlife, culture, shopping, and dining) continues to evolve. Meeting planners are not always aware of what Denver has to offer.

Meeting planners looking for convention centers are witnessing a "buyers' market," because many new centers have been added to the mix. This situation is reversed with hotels, where it is a "sellers market" owing to the fact that few new hotels have been added since 9/11.

Casinos and Gaming

Colorado's casino and gaming industry is on a strong growth pattern again after a pause in 2003. Adjusted gross proceeds (AGP) increased $29.6 million in 2005 over 2004 and $26.6 million in

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COLORADO CASINOS
1998–2008

Year	Colorado Casinos Open	Colorado Devices (000s)	Adjusted Gross Proceeds[a] (In Millions) Black Hawk	Central City	Cripple Creek	Total
1998	49	13.4	$272.0	$94.0	$113.2	$479.2
1999	48	14.0	354.9	73.8	122.6	551.3
2000	45	14.6	433.8	63.5	134.6	631.9
2001	44	14.6	478.3	59.7	139.5	676.7
2002	43	15.6	524.5	52.8	142.4	719.7
2003	44	15.5	505.9	49.9	142.5	698.3
2004	45	15.7	524.0	53.2	148.7	725.9
2005	46	16.4	531.9	72.6	151.0	755.5
2006	46	17.1	554.5	74.5	153.1	782.1
2007[b]	44	16.9	578.3	82.0	154.6	814.9
2008[c]	44	16.8	595.7	84.5	156.1	836.3

[a]AGP calculated on an annual basis, hence different from the state fiscal year.
[b]Estimated.
[c]Forecast.
Source: Colorado Division of Gaming and Colorado Business Economic Outlook Committee.

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2006 over 2005, and are projected to climb another $32.8 million in 2007 and $21.4 million in 2008. July 2007 was a notable month as revenues at Colorado casinos reached an all-time monthly record of $76.5 million in AGP, breaking the previous record of $74.5 million AGP in March 2007.

Black Hawk continues to dominate the Colorado casino sector. It is clearly the leader with 20 casinos, more than 10,000 gaming devices, and over 70% of the industry's AGP.

Since the completion of the new road from I-70 to Central City in 2005, casino revenues in that city have shown steady growth. Cripple Creek is also experiencing steady, consistent growth. It is anticipated that the Colorado gaming industry will remain strong in 2008, with adjusted gross revenue increasing by 2.6%, to $836.3 million.

In addition to the state-regulated casinos, Indian tribe casinos are located in the southwest part of the state. The Sky Ute Casino in Ignacio and the Ute Mountain Casino in Towaoc make important economic contributions, although their data are not available and are not included in this analysis.

Restaurants

The food service sector has been one of the strongest performing segments in the Colorado economy. According to the National Restaurant Association, for every $1 spent in restaurants in Colorado an additional $1.36 in sales in other industries in the state is generated. Each additional $1 million spent in eating and drinking places in Colorado generates another 41.7 jobs. Eating and drinking establishments in Colorado number an estimated 10,436, and 2007 restaurant sales will total $8.0 billion.

Since business conditions within the industry mirror general economic conditions, it is necessary to understand how the economy will perform in 2008. Real GDP growth of around 2% is anticipated; consequently, this expansion signals growth in the restaurant industry. The rate of increase in the disposable income is another strong indicator of restaurant sales. Advances in real disposable income in 2008 are expected to be in the 3% range. Thus, continued positive advances in restaurant sales are anticipated, although higher energy and food costs will pose challenges. Colorado is expected to continue to outperform the nation again in 2008, both in terms of restaurant sales and the overall economy.

Income growth will be moderate in Colorado, which is an important indicator of restaurant sales. Population will continue to grow at a solid rate, which provides the needed demographic boost for restaurant sales and expansion. Total restaurant sales in Colorado are expected to grow in the 6% range in 2008, topping $8.5 billion and putting Colorado in the top 10–15 states in the nation in terms of sales growth.

Visitation to state parks, national forests, BLM lands, and various county and city park and open space areas exceeds the visitation to National Park Service facilities in the state.

On the economic side, job growth in the restaurant industry will likely be slower in 2008 as compared to 2007, due to the constitutional minimum wage increase that takes place every January 1. This puts a damper on job expansion, especially at entry-level positions. Job growth will also be negatively affected by the migration of immigrant families to other states owing to the passage of laws denying social services to certain immigrants.

Almost half of Colorado citizens eat meals in restaurants on a typical day. Half also report that restaurants are essential to their lifestyle. Up to one-third of sales come from travelers and tourists. Four out of five consumers agree that going out to a restaurant is a better way to use their leisure time than cooking and cleaning up.

Parks and Outdoor Recreation

Colorado has an incredible outdoor recreation system anchored by premier national parks. Yet, visitation to state parks, national forests, Bureau of Land Management lands, and various county and city park and open space areas exceeds the visitation to National Park Service facilities in the state. All these sites highlight the vast opportunities for recreation in Colorado. NPS visitation of more than 5 million is an important component of tourism and the overall outdoor recreation system in Colorado. While NPS visits have been declining in recent years, data for the first nine months of 2007 show national park visits are rebounding nicely, with growth of 4.7%. Visits to Rocky Mountain National Park climbed 4.8%.

COLORADO PARKS VISITS
1998–2007
(In Thousands)

Parks	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007[a]
Bent's Old Fort NHS	41.1	36.8	30.5	31.0	29.8	31.2	31.0	27.8	26.5	24.4
Black Canyon of the Gunnison NP	193.5	200.1	191.5	181.0	173.7	167.2	175.6	180.8	160.5	208.1
Colorado NM	291.7	297.1	269.3	237.6	294.0	336.6	352.6	347.1	332.7	382.7
Curecanti NRA	973.7	1,044.5	1,022.3	879.8	732.7	1,008.8	1,006.1	882.8	936.4	959.4
Dinosaur NM[b]	311.0	303.9	293.8	241.5	221.4	214.5	240.7	266.8	206.1	177.7
Florissant Fossil Beds NM	79.8	81.5	82.1	79.7	62.5	67.5	61.3	59.5	56.1	54.8
Great Sand Dunes NM	279.8	286.7	260.8	277.5	234.8	251.4	267.2	279.6	258.7	280.2
Hovenweep NM[b]	10.4	20.9	19.1	16.5	13.6	13.1	11.8	11.7	11.6	11.7
Mesa Verde NP	604.6	635.7	452.3	513.4	406.4	438.6	446.8	498.3	557.3	546.4
Rocky Mountain NP	3,035.4	3,186.3	3,185.4	3,139.7	2,988.5	3,067.3	2,781.9	2,798.4	2,743.7	2,862.0
Total Visitors to Parks and Sites	5,820.9	6,093.8	5,807.0	5,597.6	5,157.4	5,596.3	5,374.9	5,352.8	5,289.6	5,507.5

[a]Estimated.

[b]Dinosaur NM and Hovenweep NM cross into Utah, but the number of visitors reported in this table is only for the Colorado portion of the parks.

Source: National Park Service and Colorado Business Economic Outlook Committee.

Colorado state park visits are on the rise. Colorado's 41 state parks attract more than 11 million visitors each year. Colorado State Parks manages more than 4,000 camp sites, and 57 cabins and yurts encompassing 246,000 land and water acres. It has registered more than 98,000 water vessels, 34,000 snowmobiles, and 93,000 off-highway vehicles. Estimated expenditures by Colorado state park visitors, as measured by purchases made within a 50-mile radius of the parks, total more than $200 million.

In addition to public lands, an immense amount of outdoor recreational activity in Colorado takes place on privately owned lands. Unfortunately, reliable visitation data for these areas are unavailable. Moreover, the outdoor recreation sector, both summer and winter, is extremely sensitive to weather and natural hazards, particularly wildfires and floods. Taking all this into account, it is projected that outdoor recreation behavior in Colorado will grow essentially in conjunction with the overall growth in state tourism. Thus, outdoor recreation visitation is forecast to increase by 1.5%–2%, and spending is projected to climb approximately 5% in 2008.

Skiing Industry

Colorado Ski Country USA (CSCUSA) resorts hosted more than 12.56 million skier visits in the 2006–07 season and set a new record for the second consecutive year. Skier visits are the measure used to track participation in skiing and snowboarding. A skier visit represents a person participating in the sport of skiing or snowboarding for any part of one day at a mountain resort.

While national industry numbers were down, Colorado's 2006–07 visits show continued growth, with an addition of approximately 30,000 skier visits over the previous season. According to figures released by the National Ski Areas Association, the nation posted 55.1 million skiers during the 2006–07 season. Consequently, Colorado set a record in overall market share by capturing nearly 23% of the ski business market share in the United States.

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CSCUSA reports and distributes skier visit numbers in three overall categories: destination resorts, Front Range destination resorts, and gems/Front Range resorts. Hosting over 84,000 more guests than last season, Colorado's destination resorts saw the largest numerical increase of the three categories. The Colorado Gems/Front Range resorts continued their growth trend for the fourth consecutive year, with more than 1.3 million guests during the 2006–07 winter season, an increase of 3.3%, or 43,776 guests. While both the Front Range Gems and Destination Resorts saw good growth years, Front Range Destination Resorts slid 1.3% from the previous record season. Despite highway closures and challenging intrastate travel from late December through February, including key holiday periods, these six resorts still enjoyed their second-best season ever, exceeded only by the previous season. By hosting a combined 7.3 million guests, not only does this category have the largest skiing market share in Colorado, but it serves more guests than most states do.

COLORADO SKIER VISITS BY TYPE OF SKI AREA
1997–2008
(In Millions)

Season	Destination Resorts[a]	Front Range Destination Resorts[b]	Gems/Front Range[c]	Total
1997-98	4.08	6.68	1.22	11.98
1998-99	3.83	6.44	1.12	11.39
1999-00	3.47	6.30	1.12	10.89
2000-01	3.58	6.95	1.14	11.67
2001-02	3.38	6.71	1.03	11.12
2002-03	3.46	6.85	1.30	11.61
2003-04	3.52	6.56	1.17	11.25
2004-05	3.64	6.91	1.26	11.81
2005-06	3.72	7.47	1.33	12.53
2006-07	3.81	7.37	1.38	12.56
2007-08[d]	3.82	7.41	1.39	12.62

[a]Resorts more than a two-hour drive from Denver with a bed base. This includes: Aspen Highlands, Aspen Mountain, Buttermilk, Crested Butte, Durango Mountain Resort, Howelson Hill, Silverton Mountain, Snowmass, Steamboat, Telluride, and Wolf Creek.

[b]Resorts within a two-hour drive of Denver with a bed base. This includes: Beaver Creek, Breckenridge, Copper Mountain, Keystone, Vail, and Winter Park.

[c]Resorts either within a two-hour drive from Denver and/or with no bed base. This includes: Arapahoe Basin, Eldora, Loveland, Monarch, Powderhorn, Ski Cooper, SolVista, and Sunlight.

[d]Forecast.

Source: Colorado Ski Country USA and Colorado Business Economic Outlook Committee.

After its second consecutive record season, Colorado continues to be the nation's premier winter ski destination, with more than 39,000 acres, 311 lifts, 2,229 trails, and 40 terrain parks with 23 pipes, 150 tables, and over 300 rails. The state's ski resorts once again dominated *SKI Magazine's* annual ranking of North America ski resorts. Six Colorado resorts were in the top 10, led by Vail, which ranked #2. The top 10 resorts, according to *SKI Magazine's* readers, are:

1. Deer Valley, Utah
2. *Vail*
3. Whistler/Blackcomb, British Columbia
4. *Aspen*
5. *Snowmass*
6. Park City, Utah
7. *Breckenridge*
8. *Beaver Creek*
9. *Steamboat*
10. Sun Valley, Idaho

The 2007–08 ski season will be helped by the investment of millions of dollars in on-and off-mountain improvements by the resorts. These enhancements include new restaurants, gondolas, terrain, villages, snowmaking equipment, high-speed lifts, grooming machines, children's centers, conference centers, lodges, and guest service and green initiatives.

Upcoming events will also help boost ski visits, including:

- ESPN Winter X Games 12 and the Bud Light Spring Jam at Aspen/Snowmass.
- Charles Schwab Birds of Prey World Cup Race Week, New Year's Eve Fireworks and Torchlight Ski-down, Beaver Creek and Bon Appétit Culinary and Wine Focus, and the Snowshoe Shuffle at Beaver Creek.
- Snow Daze, Carnival, the Honda snowboard competition session, Taste of Vail, Film Festival and the American Ski Classic at Vail.
- The Hartford Ski Spectacular, Chevrolet U.S. Snowboard Grand Prix at Breckenridge.
- USSA NorAM Super Series Women's Slalom/Giant Slalom, Rock Mountain Free Style Competition, 33rd Annual Wells Fargo Cup, Coca-Cola Spring Splash at Winter Park.
- The 34th Annual Cowboy Downhill at Steamboat.
- U.S. Freeskiing Open Championships, Colorado Special Olympics Winter Games, and the USASA Nationals at Copper, all at Copper Mountain.
- 17th Annual U.S. Extreme Freeskiing Championships at Crested Butte.

With the momentum of the record-breaking 2006–07 season, multimillion-dollar resort improvements, key events, excellent early reservations, and a strong international market, it is projected that skier visits will increase by 60,000. This will set a new record if Mother Nature cooperates and produces the needed snow.

DENVER INTERNATIONAL AIRPORT PASSENGERS
1998–2008
(In Millions)

Year	Enplanements	Deplanements	Total Passengers[a]
1998	18.4	18.4	36.8
1999	19.0	19.0	38.0
2000	19.4	19.4	38.8
2001	18.0	18.0	36.1
2002	17.8	17.8	35.7
2003	18.7	18.8	37.5
2004	21.1	21.1	42.4
2005	21.6	21.7	43.4
2006	23.7	23.7	47.3
2007[b]	24.7	24.7	49.3
2008[c]	25.5	25.5	51.1

[a]Due to rounding, the sum of the individual items may not equal the total.
[b]Estimated.
[c]Forecast.
Source: Denver International Airport and Colorado Business Economic Outlook Committee.

Air Travel

Air travel is very important to the Leisure and Hospitality Supersector. DIA posted its third-consecutive record year in 2006, with 47.3 million passengers. A total of 4.77 million passengers used DIA in July 2007, making it the busiest month ever. The August total was 4.69 million, 7% higher than the 4.38 million travelers who passed through DIA in the same month of 2006 and the second-busiest month on record.

September 2007 set another record for that month, with 3.95 million passengers and a 5.1% increase over the 3.76 million passengers posted the same month the previous year.

Through the first nine months of 2007, DIA recorded almost 38 million passengers, a 4.7% increase compared to the corresponding period in

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2006. This makes it nearly certain that another yearly record will be set in 2007, with 49.3 million passengers.

The airport's master plan sets its phase one capacity at 50 million passengers a year. It is expected that this total will be reached in 2008 with a projection of 51.1 million passengers.

Colorado Springs Municipal Airport enplanements and deplanements totaled just over 2 million passengers in 2006—about the same number as 2005. Traffic was up 9% in September 2007. Two new carriers, ExpressJet and Midwest Airlines, began serving the airport in 2007.

In addition to DIA and Colorado Springs, seven mountain airports provide service to many resorts.

Refer to the Trade, Transportation, and Utilities section for more information on air transportation.

Challenges

Volatile energy prices will impact the Colorado economy and be a special challenge to the Leisure and Hospitality Supersector. Since Colorado is a major drive vacation market, the price of gasoline remains a concern. While most consumers think in terms of gasoline prices, of equal importance is the price of diesel, jet fuel, and other refined products. These inputs have cost impacts throughout the economy and on the consumer's ability or desire to spend. The effect of volatile energy prices on discretionary income will influence funds available for travel expenditures.

Another concern is the current mortgage situation, along with the high level of debt that is currently carried by consumers and its impact on their ability to travel.

The "hassle factor" has become a real challenge. Waits in security lines, late flights, airplanes packed to capacity, congestion in the skies and on the highways, including bumper to bumper traffic on I-70, make visitors and locals ask if travel is still a fun, rewarding experience or if they should just stay at home.

Increased competition from in-home entertainment providers presents another obstacle. U.S. households spend billions annually on home electronics. Computers, HD and giant flat-screen LCD televisions, high-tech audio systems, CDs, DVDs, cable services, and NetFlix provide a multitude of leisure pursuits, making it less expensive to stay at home than to go out for entertainment.

Finally, national trends indicate that travel is now becoming a slow-growth industry. While revenues have risen sharply for most travel providers, it is because of increases in price rather than in trip volume and visitor counts. It is becoming an increasing challenge for travel marketers to convince the consumer to spend discretionary income on travel rather than on competing products. ✜

Other Services

The Other Services Supersector comprises three sectors: Repair and Maintenance; Personal and Laundry Services; and Religious, Grantmaking, Civic, Professional, and Similar Organizations. These are the personal service businesses that keep our cars running, clothes clean, hair cut, and promote causes for the greater public good. Although many of the companies in this supersector are large and nationally recognizable, such as Jenny Craig, the Sierra Club, and Martinizing Dry Cleaning, many businesses are unique to Colorado, including Bud's Muffler, Bob's Fine Furniture Refinishing, Mountain Cuts, Bighorn Center for Public Policy, and Busy-Bee Apparelmaster.

Colorado has had a higher annualized rate of growth in this supersector compared to the nation for the period 1997–2006, 2% versus 1.3%. Because these companies focus on personal services, this sector's growth rate often parallels the rate of population growth rather than overall employment increases.

In Colorado, 90,800 people were employed at nearly 12,700 firms in the Other Services Supersector in 2006. This represented 3.5% of the total state employment, while nationally the Other Services sector accounted for about 4% of all workers. In 2006, the average annual pay in this supersector in Colorado was nearly $33,000, slightly lower than the national average of approximately $33,800. About 2,000 jobs will be added in this sector in 2008.

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OTHER SERVICES EMPLOYMENT
1998–2008
(In Thousands)

Year	Repair and Maintenance Services	Personal and Laundry Services	Religious, Grantmaking, Civic, Professional, and Similar Organizations	Total[a]	Percentage Change
1998	22.0	19.4	36.0	77.3	2.1%
1999	22.8	19.7	36.5	79.0	2.2
2000	23.1	20.3	36.8	80.2	1.5
2001	23.5	21.0	39.3	83.8	4.5
2002	23.5	21.1	41.0	85.6	2.1
2003	22.8	21.1	41.9	85.9	0.4
2004	22.7	21.5	43.2	87.4	1.7
2005	22.7	21.9	44.0	88.5	1.3
2006	22.7	22.3	45.9	90.9	2.7
2007[b]	22.7	22.9	47.3	92.9	2.2
2008[c]	22.7	23.5	48.7	94.9	2.2

[a]Due to rounding, the sum of the individual items may not equal the total.

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Labor and Employment, and Colorado Business Economic Outlook Committee.

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Religious, Grantmaking, Civic, Professional, and Similar Organizations

Religious, Grantmaking, Civic, Professional, and Similar Organizations, the largest sector within Other Services, includes organizations that are engaged primarily in nonprofit work. They account for about half of the total sector employment. Nationally, grantmaking and social advocacy organizations have shown the strongest growth in employment, while labor unions have experienced a decline. The following four groups underwent strong growth during the later part of the 1990s and early 2000s, but have been relatively flat over the past five years: professional organizations, voluntary health organizations, human rights groups, and business associations. Employment in this subsector is projected to increase by about 1,400 jobs in 2008.

Personal and Laundry Services

This second sector grew at a compound annual growth rate of 1.9% between 1997 and 2006, about twice the rate of national growth. This category includes a wide array of employers, ranging from nail salons to parking garages and dry cleaning to cemeteries. Over the past five years the following areas showed steady increases: hair, nail, and skin care services; barber shops; beauty salons; death services; diet and weight reduction centers; and garages and parking services. The most notable increase has been in pet services.

Only two areas showed declines: dry cleaning services and photofinishing services. The advent of digital photography has almost eliminated companies that exclusively offer film development services. In 2006, approximately 3,500 firms provided personal and laundry services, and workers earned average annual wages of $20,455. Employment in the sector is projected to increase by 600 jobs, to 23,500, in 2008.

Repair and Maintenance Services

This third and smallest sector has been declining in employment since the start of the decade. However, the number of businesses has been increasing steadily, growing to about 4,600 firms in 2006. This situation is most likely a result of improved technology and repair and diagnostic equipment, and greater population over a larger geographical area. Average annual wages for the subsector were $34,319 in 2006.

Almost 80% of the employment in this sector is in automotive repair and services, which includes oil change and lube services, glass repair, and car washes. Improved production of automobiles has resulted in fewer trips to the repair shop. Other areas of decline include employment in electronic equipment and furniture businesses and firms that repair computers. Offsetting increases have been seen in the areas of home and garden equipment and commercial machinery repair. The outlook is for employment to remain flat, at 22,700 employees, in 2007 and 2008. ✜

Government

Trailing only Trade, Transportation and Utilities, Government is the second-largest supersector in the Colorado economy, with 367,300 employees in 2006, or 16.1% of total nonfarm employment. Total governmental employment in Colorado is expected to increase to 373,400 in 2007 and 379,100 the following year, for growth of 1.8% and 1.4%, respectively. Employment in government subsectors is driven by diverse factors. Gains and losses in total full-time equivalent (FTE) federal employment can be affected by base closures, funding levels for scientific research at various institutes and laboratories, and the budget for the state's national parks. State government employment is propelled by healthy growth in income and sales taxes, which are positively correlated. County budgets, which depend mostly on property taxes and fees, are somewhat more stable and predictable. Municipal budgets hinge on local sales taxes that may be volatile, leading to layoffs and furloughs in years of slow revenue growth.

Federal Government

Federal government employment in Colorado has generally been on a downward trend since 1994, with the exception of the 1.3% growth in 2000 as a result of hiring to conduct the U.S. Census. From 2001 to 2006, federal government employment declined at an average annual rate of 0.3%, with national federal employment levels exhibiting similar trends. In 2006, Colorado's federal government payrolls fell 1.1%, compared to a smaller 0.2% decline at the national level.

Federal employment in the state is currently dominated by the state's two largest federal employers—the U.S. Postal Service and the Department of Defense. The U.S. Postal Service employs almost 11,000 workers in Colorado and is showing flat employment growth. Although urban and rural areas in the state continue to experience population increases, these are offset by an overall decline in mail volume.

The Department of Defense accounted for approximately 10,400 workers throughout Colorado in 2007, a 1.4% rise over 2006. The combination of hiring in both large and small aerospace companies and high-profile deals is contributing to this employment increase. In particular, Lockheed

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GOVERNMENT EMPLOYMENT IN COLORADO
1998–2008
(In Thousands)

Industry Group	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007[a]	2008[b]
Total Government[c]	322.3	328.4	337.0	344.1	355.4	356.2	358.5	362.6	367.3	374.0	379.1
Federal	54.5	54.1	54.8	52.9	53.2	53.5	52.9	52.7	52.1	52.4	52.5
State	75.9	77.1	78.6	80.0	81.9	80.3	81.5	82.3	82.5	84.7	86.3
General	28.6	29.5	30.6	31.3	31.9	30.1	29.7	30.0	30.3	31.2	31.9
Education	47.3	47.6	48.0	48.7	50.0	50.2	51.8	52.3	52.2	53.5	54.4
Local	191.9	197.1	203.6	211.2	220.3	222.4	224.2	227.6	232.7	236.9	240.3
General	91.7	94.6	98.4	102.3	106.5	107.2	108.4	109.9	113.2	114.8	115.7
Education	100.2	102.5	105.2	108.9	113.8	115.2	115.8	117.7	119.5	122.1	124.6

[a]Estimated.

[b]Forecast.

[c]Due to rounding, the sum of the individual may not equal the total.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

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Martin Space Systems recently announced an $8.2 billion contract to design and build NASA's new Orion spacecraft. The company is hiring 25–50 new employees a month to help design. In addition, the new Lockheed-Boeing joint rocket venture, United Launch Alliance, is headquartered in Colorado.

In 2007, the Business Research Division completed an economic impact study of the federal facilities on the Metro Denver area. The study found an estimated 40,000 employees and contractors are employed at metro area facilities. The federal operations have a $6.7 billion impact on the Metro Denver region and an $8.4 billion impact on Colorado. Average wages for jobs at the facilities are higher than the state average wage and require a diverse set of skills.

Rebounding slightly, federal employment is expected to increase 0.6% in 2007 and 0.2%, for a total of 52,500, in 2008.

State Government

The state government's budget picture has improved markedly since the economic downturn that began in 2001. After a 2% decline in 2003, employment turned around in 2004 as the economy and tax revenue rebounded. The current forecast calls for continued growth in 2007 and 2008. With an improving revenue outlook, restoration of services that had been cut has led to the hiring of personnel to maintain pace with the growth in the caseload of the state's core programs. State government employment is expected to climb 2.7% by year-end 2007, the largest gain in more than 10 years, and rise again by 1.9% in 2008. Over the past decade, state government employment has increased by an average of 1.3% per year.

Due to Referendum C, it is estimated that the state will retain about $1.3 billion in revenue in FY 2007 that otherwise would have been returned to taxpayers under the provisions of TABOR. The improved budgetary flexibility provided by Referendum C, coupled with growth in state tax revenue, contributed to the 2007 employment increase that is expected to carry into 2008. Although state tax revenue continues to grow, the 6% general fund appropriations growth limit constrains the state's ability to expand current programs or create new ones.

One of the largest contributors to recent state general government employment growth (excluding higher education) is the addition of personnel in the state's judicial system. The judicial system's caseload is expected to increase about 19% from FY 2003 to FY 2008. Legislation that passed in 2007 increases the number of judges and associated staff in Colorado for the first time in several years to help keep pace with the caseload growth. Other substantial employment growth derives from a gain in personnel working in the state's correctional system to help support the growing inmate and parolee populations. The number of inmates is expected to climb almost 30% from FY 2003 to FY 2008, while the parolee population is projected to increase 75% during the same time period. In contrast, the state's population is estimated to rise only about 9%. Personnel growth for the state's correctional and judicial systems represents about half of the total personnel growth in the FY 2008 state budget, excluding higher education.

Although state tax revenue continues to grow, the 6% general fund appropriations growth limit constrains the state's ability to expand current programs or create new ones.

Over time, general state government employment (excluding higher education) is highly correlated with the change in the state's population. Government revenue and the growth in the caseload of the state's programs are also primary drivers of state government employment. After tepid growth in 2005 and 2006, state general government employment will increase by 900 workers in 2007 and by 700 employees in 2008.

Employment in the state's institutions of higher education currently accounts for approximately 62% of total state government employment. Current and expected enrollment growth, coupled with an improvement in the state higher education budget situation, should result in a rise in the number of higher education employees. However, enrollment growth is not expected to be substantial enough to drive significant personnel increases. Although the higher education budget picture has improved, state support for higher education is still constrained by the state's general fund 6% spending limit and the fact that spending in other parts of the general fund is mandated by statute and by the state constitution. After a slight decline in state higher education employment in 2006, employment will rebound in 2007, with an estimated 2.5% growth rate. Higher education employment is also expected to increase in 2008, though at a slower rate than for general state government, 1.7%.

Local Government

General

Local government comprises municipalities, counties, school districts, and special districts. As of October 2007, active local governments in Colorado totaled 2,985, including 64 counties and 270 municipalities. Special districts range from fire districts to urban drainage and flood districts to metropolitan districts.

From 2001 through 2006, local government employment in Colorado increased at an average annual rate of 2%. Total local government grew 2.1% in 2006 after posting only a 1.5% gain the prior year. Local government at the national level increased 0.9% from 2005 to 2006. A closer look at local government employment in Colorado reveals that noneducational employment climbed 2.9% in 2006, while local educational services employment, which accounts for 51% of local government employment, rose 1.4%.

Strong retail sales tax receipts and robust residential construction activity supported municipal government employment in 2005 and 2006. County government employment also benefited from residential building activity, as well as increased property tax revenues due to high levels of home sales in 2004 and 2005.

In 2007, Front Range municipalities reported higher employment figures than originally estimated in their budgets, but appear not to be planning major hiring increases in 2008. For example, the City and County of Denver will expand its payrolls by only 0.8%, to 11,372, in 2008. After two years of robust gains in sales taxes, growth in retail taxable activity has slowed and will impact the city's staffing patterns. At the same time, Aurora will enlarge its public safety department to comply with the 1993 charter amendment requiring two public safety employees per 1,000 residents. Total full-time equivalent (FTE) growth will only be 19, or 0.7%. In a final example, Lakewood will incrementally extend its operations by 19 FTE, or 2%, mostly as a result of expanding part-time positions into full-time ones, bringing its total FTE count to 870.

Small municipalities depend heavily on a few retailers for their tax base, and the opening of a large retail store in a neighboring town can dent local public finances. For example, the City of Arvada will only add two positions to its 700-member municipal workforce. Double-digit growth in health insurance costs will dampen the employment outlook in local governments for the foreseeable future. The City of Wheat Ridge has made a conscious effort to be conservative in its municipal workforce growth after cutting staff by 35.5 positions, or roughly 10%, in 2003 and 2004. The city has 222 FTE, and growth will be flat in 2008. Broomfield will be similarly cautious, preliminarily planning on only one new position in its 725-member staff.

Overall, municipal and county employment will increase by only 900 positions statewide in 2008, to 115,700. This growth of 0.8% over 2007 is well below the 10-year compound average annual growth rate of 2.4%.

Education

Changes in the local education subsector employment are projected using information on school district enrollment. The Colorado Legislative Council is estimating a 1.9% enrollment increase from the 2006–07 school year to the 2007–08 school year, a gain of 13,805 FTE students. This growth is slightly above the 1.5% rise in the 2006–07 school year enrollment, which was the largest increase in several years.

Salaries paid to school district employees and projected population changes also impact the local education subsector employment forecast. In the FY2005–06, total salaries paid to district employees increased 3.8%. Employee benefits account for a large and growing fraction of school district personnel expenditures, making up 19% of compensation paid in 2005–06, compared to 16% in 2002–03. Total compensation increased nearly 5% in 2005–06, while employment rose 1.8%. In 2004–05, salaries and benefits climbed 4.2%, while employment went up 1.5%.

In the fall of 2006, a total of 794,026 students were enrolled in Colorado public schools, a gain of 4% over the previous year. The state demographer's office is projecting an increase of 2% between 2007

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and 2008 in the population of school-age children. Still, many districts face decreasing enrollment among their traditional public schools. Most notably, Denver Public Schools recently proposed the closure of eight underenrolled schools. According to the *Rocky Mountain News,* about one-quarter of children ages 5–17 in Denver did not attend the city's traditional public schools, and officials expect that number to increase through 2016. Charter school enrollment in Denver has soared 300% in the last five years. Between 2000 and 2006, enrollment in Denver charter schools grew by 6,846 students, while it fell by 4,028 in traditional Denver public schools.

During the 2006–07 school year, nearly 7% of Colorado's public school students attended 142 charter schools, with 52,000 enrolled students. Charter school employees are public employees by law and are included in the local government education subsector.

Colorado ranked 17th in the nation in the percentage of residents with a high school degree, at 88% of residents, according to the U.S. Census Bureau's 2006 American Community Survey. In 2005, 88.7% of Colorado residents had earned at least a high school diploma, ranking the state 13th nationally.

According to the National Center for Education Statistics' Projections of Education Statistics to 2015, total enrollment in elementary and secondary schools across the nation is expected to rise 6% between 2003 and 2015, compared to 12.7% estimated growth for Colorado. Colorado ranks 9th in projected growth among the 32 states that forecasted an enrollment increase between 2003 and 2015.

Overall, school district employment will grow 2.1% in Colorado in 2008, to 124,600 employees. ✜

International Trade

Export Outlook and Forecast

Despite an overall rise in U.S. exports prompted by global market conditions favoring U.S. goods and services, Colorado's merchandise exports are expected to decline in 2007. Following a strong 17.3% increase in 2006, Colorado exports fell by 6% through the first eight months of 2007. In particular, the loss of manufacturing jobs in Colorado, caused by the closure of high-tech manufacturing operations in the state, has contributed to the downturn in merchandise exports. Based on general market conditions, the 6% decline already experienced, and a history of weak exports in the fourth quarter, Colorado merchandise exports are expected to fall 11% in 2007. A more competitive U.S. dollar and continued growth in Colorado agricultural exports will lead to a slight rebound in 2008. Accordingly, the International Trade Committee is forecasting Colorado exports will rise 1.5% in 2008.

Global, National, and State Backdrop

Although global economic expansion remains sound, albeit slowing slightly, there are downside risks to growth in 2008. For the first half of 2007, global growth remained above 5%, led by China, India, and Russia. However, financial market turmoil spilling over from the U.S. mortgage market difficulties into emerging markets, slower growth in Europe as a result of currency appreciation, and the trade impact of diminished U.S. spending are all expected to lower 2008 global growth to 4.8%, down from the IMF forecast of 5.2% for 2007. Trends in commodity prices represent another potential risk to global growth, particularly if oil prices continue to move upward.

The U.S. economy is expected to slow in 2008, owing to the crisis in the subprime mortgage market that is affecting housing, construction, and consumer spending in both the U.S. and global financial markets. Disposable income is taking a hit from higher resets on subprime adjustable rate mortgages and job losses in residential construction and mortgage-related financial services. The immediate impact on overseas markets is the reversal in risk appetite while other factors—lower U.S. imports, investor losses, and the potential negative impact on newly developing mortgage markets in emerging market economies—may have extended effects on global markets. Nonetheless, lower U.S. consumption could also positively impact exports as suppliers shift sales overseas to make up for reduced domestic consumption.

Theoretically, the weak U.S. dollar could lead to higher exports of U.S. products, providing exporters with more competitive pricing. The U.S. dollar (interbank market rate) has declined 12.9% in nominal terms against the euro for the 12-month period through late October 2007. Indeed, the decline in the value of the dollar against other major trading currencies appears to have had an overall positive impact on U.S. exports, which grew more than twice as fast as imports in the first half of 2007. For the year through August 2007, the U.S. trade deficit for goods and services declined 10% relative to the same period in 2006, according to a U.S. Census Bureau report. As further evidence, the Port of Long Beach—the second largest in the nation—reported a 4.5% decline in the number of unfilled containers leaving the port over the 11 months ending September 30, 2007.

VALUE OF COLORADO EXPORTS
FISCAL YEARS 2002–2008
(In Millions of Dollars)

Year	Total Exports	Percentage Change
2002	$5,521.7	-9.9%
2003	6,109.1	10.6
2004	6,651.0	8.9
2005	6,783.6	2.0
2006	7,956.0	17.3
2007[a]	7,080.8	-11.0
2008[b]	7,187.0	1.5

[a]Estimated.
[b]Forecast.
Source: World Institute for Strategic Economic Research and Colorado Business Economic Outlook Committee.

Unfortunately, Colorado merchandise exports have not realized the benefits of the more competitive currency due to other factors impacting the state's performance. Most significant is the loss in manufacturing jobs in the state, which has negatively impacted the export of high-tech components. The Manufacturing Committee estimates that 4,400 jobs in this sector (NAICS 334) will be lost in 2007 and an additional 4,000 will disappear in 2008. Exports of computers and data storage devices and

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TOP 20 COLORADO EXPORTS (In Millions of Dollars)

Description	2005	2006	Aug 2007 YTD	Percentage Change 2005- 2006	Percentage Change 2006- 2007 YTD
Electronic Integrated Circuits and Micro assemblies	$763.0	$1,296.6	$612.3	69.9%	-26.7%
Automatic Data Process Machines; Magn Reader Etc.	983.1	936.6	343.6	-4.7	-42.7
Print Machinery, Machines Ancillary to Printing	10.7	12.4	212.9	15.6	2,247.3
Medical, Surgical, Dental or Vet Inst, No Elec, Pts	176.9	221.7	209.8	25.3	43.7
Parts Etc for ADP and Other Office Machines	654.5	656.7	169.5	0.3	-60.1
Meat of Bovine Animals, Fresh or Chilled	152.2	263.1	166.1	72.9	-1.9
Photo Plates and Film, Flat, Sensitized, Unexposed	124.2	166.4	132.8	34.0	26.5
Animal Parts	29.2	51.7	120.7	76.9	304.4
Instruments for Measure or Check Flow, Level Etc., Pts	117.1	126.4	107.6	7.9	29.6
Electric Apparatus for Line Telephony Etc., Parts	230.7	239.3	101.9	3.7	-37.9
Instruments for Physical Analysis Etc.; Microtome; Pts	100.1	122.6	90.8	22.5	22.6
Raw Hides and Skins of Bovine or Equine Animals	85.9	98.4	90.7	14.5	50.3
Parts of Balloons Etc., Aircraft, Spacecraft Etc.	142.2	126.6	90.6	-11.0	-0.5
Molybdenum Ores and Concentrates	43.9	48.6	87.3	10.7	136.4
Photo Film in Rolls Sensitized, Unexposed	171.3	211.4	73.9	23.4	-45.8
Meat of Swine (Pork), Fresh, Chilled or Frozen	92.7	74.8	62.1	-19.2	28.4
Orthopedic Appl; Artif Body Pts; Hear Aid; Pts Etc.	61.2	73.5	60.8	20.1	29.6
Beryllium, Chrom, Germ, Vanad, Gallium, Hafnm, Etc.	11.5	64.1	57.3	455.0	59.4
TV Receivers, Including Video Monitors and Projectors	155.5	10.9	55.3	-93.0	610.5
Oscilloscopes, Spectrum Analyzers Etc., Parts Etc.	117.5	210.3	49.7	78.9	-65.8
Total All Commodities	$6,783.6	$7,956.0	$4,932.5	17.3%	-6.0%

Source: Foreign Trade Division of the U.S. Census Bureau and WISER.

electronic integrated circuits (HS 8471 and HS 8542) declined a combined 33.4% through August 2007 as they were hit hard by the closure of a large manufacturing facility.

Export Trends with Free Trade Partners

With the WTO Doha round of negotiations at a standstill and U.S. national elections on the horizon in 2008, little progress is expected in global trade negotiations and the ratification of pending bilateral free trade agreements. This could be unfortunate for Colorado exporters as the International Trade Administration notes that "FTAs [free trade agreements] have proved to be one of the best ways to open up foreign markets to U.S. exporters. Last year, trade with U.S. FTA partners was significantly greater than their relative share of the global economy" (ITA, US Export Fact Sheet, August 2007 Export Statistics, released October 11, 2007).

FTAs have been signed with Panama, Peru, Colombia, and South Korea, and they are grandfathered under the President's Trade Promotion Authority. Political concerns overshadow the Colombian treaty, and South Korea is likely to be held up owing to the lack of access for U.S. beef exports, an important export market for Colorado ranchers. Upcoming elections could change the dynamics of FTA policies in the United States, while public sentiment is also drifting away from support for free trade. A recent Pew Research Center poll showed that five years ago 78% of Americans thought world trade was having a positive impact; today only 59% agree.

After a record year in 2006, Colorado's exports have dropped among five of the state's nine free trade partners. The top five free trade partners (Canada, Mexico, Australia, Singapore, and Israel) together declined 7% in exports from Colorado, with significant decreases in machinery and mechanical appliances, and the electrical machinery equipment industries. However, the other four free trade partners (Chile, Jordan, Bahrain, and Morocco) combined showed an increase of 19% in exports from Colorado. The industries that accounted for this proliferation are more diverse and reveal no specific pattern or product trends.

Colorado Exports to Foreign Trade Agreement Markets

Colorado's Manufacturing Exports

While the state's exports of agricultural products, minerals, and a number of key manufactured products, such as medical equipment, instrumentation, industrial photographic products, and printers, continued to grow through August 2007, the two largest manufactured product categories, electronic integrated circuits (HS 8542) and computers and data storage devices (HS 8471) declined by 26.7% and 42.7%, respectively. These decreases, combined with a 60.1% decline in exports of parts for computers and other office machines (HS 8473), overshadowed the growth seen in many other manufactured product categories. While U.S. exports for these same three categories (HS 8542, HS8471, and HS 8473) also fell, Colorado businesses in these industry sectors experienced larger declines.

In some cases, the manufacture of these components has moved closer to the markets where the final assembly work is done, while in other cases the manufacturing was consolidated at another U.S. location. Future growth in these key product categories is questionable, although Colorado remains the location of choice for most of the design and engineering support services.

Colorado's Services Exports—The Great Unknown

Discerning the full economic importance of Colorado's exports is hampered by a lack of statistical data for services sector exports at the state level. This is particularly important for Colorado because services represents a large portion of the state economy. In Colorado, 43.1% of GDP in 2006 could be attributed to services, whereas agriculture, mining, and manufacturing represented a combined total of 12.8% of GDP. If the definition of the services sector is narrowed to the traditional export services—information, and professional and technical services—it still represented 16.5% of Colorado's GDP in 2006—3.7% more than the traditional merchandise export sectors.

According to anecdotal evidence, including press reports regarding the operations of large service companies in Colorado and reports from local export assistance programs, revenues from foreign contracts are important. No system exists to track foreign tourists visiting Colorado and estimate the amount of revenues they contribute to the economy. Large revenues are also generated from the influx of foreign students within the Colorado university system and foreign student spending in the state's economy. Nonetheless, it can be concluded that the importance of this export sector is much more significant than the picture portrayed by existing data.

Top Export Markets by Region

Americas

Shipments to Canada, Latin America, and the Caribbean made up approximately 40% of all Colorado exports through August 2007, an increase of 2% from 2006. However, total exports to the countries of the Western hemisphere fell 1.7% from the same period last year. For Colorado, Canada continued to be the dominant market in the Americas, totaling $1.18 billion through August 2007, also down slightly from 2006. Mexico held its

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EXPORT TRENDS WITH FREE TRADE PARTNERS
2002–2007 YTD
(In Millions of Dollars)

Country	Commodities (sorted by Aug. 2007 YTD)	2002	2003	2004	2005	2006	2006 Aug YTD	2007 Aug YTD
NAFTA	Total All Commodities	$1,795.8	$2,002.1	$2,349.8	$2,656.4	$2,869.4	$1,877.0	$1,826.3
	1) Industrial Machinery, Including Computers	766.9	904.5	1,148.2	1,178.4	1,304.3	825.0	627.4
	2) Meat and Edible Meat Offal	164.6	202.9	178.5	241.5	339.1	221.6	208.1
Australia	Total All Commodities	117.5	112.7	140.7	222.8	217.6	156.0	102.2
	1) Pharmaceutical Products	1.8	1.1	6.5	18.6	34.1	24.6	25.9
	2) Industrial Machinery, Including Computers	40.1	40.1	33.5	50.6	51.9	38.7	24.9
Singapore	Total All Commodities	237.2	236.7	187.2	156.1	177.8	119.2	81.9
	1) Industrial Machinery, Including Computers	45.9	56.8	52.3	49.6	38.1	27.4	23.3
	2)Optic, Photo, Etc.; Medical Instruments, Etc.	68.3	68.8	28.7	29.5	24.4	18.9	15.7
Israel	Total All Commodities	21.1	38.1	24.9	39.4	56.1	39.6	30.2
	1) Electric Machinery Etc.; Sound, TV Equip and Parts	2.9	2.4	4.4	5.3	8.8	5.1	8.2
	2) Natural Pearls, Prec Stones, Prec Met, Etc; Coin	2.7	7.1	7.3	17.1	19.5	14.9	7.1
Chile	Total All Commodities	10.5	9.4	12.9	14.5	20.1	14.1	15.1
	1) Industrial Machinery, Including Computers	3.9	2.6	5.0	4.6	3.6	2.6	6.4
	2) Optic, Photo, Etc.; Medical Instruments, Etc.	1.0	0.8	1.4	1.3	4.1	2.8	2.3
Jordan	Total All Commodities	1.1	0.6	1.3	1.7	1.2	0.7	1.8
	1) Oil Seeds, Etc.; Misc Grain, Seed, Fruit, Plant, Etc.	0.1	0.1	0.0	0.1	0.0	0.1	0.4
	2) Special Classification Provisions, NESOI	0.0	0.1	0.0	0.0	0.0	0.0	0.4
Bahrain	Total All Commodities	0.4	0.8	0.3	0.8	1.1	0.7	1.4
	1) Optic, Photo, Etc.; Medical Instruments, Etc.	0.1	0.3	0.0	0.1	0.1	0.0	0.6
	2) Electric Machinery, Etc.; Sound, TV Equip and Parts	0.1	0.1	0.1	0.1	0.6	0.2	0.3
Morocco	Total All Commodities	0.6	0.4	0.9	0.8	0.4	0.2	0.3
	1) Optic, Photo, Etc.; Medical Instruments, Etc.	0.1	0.1	0.6	0.2	0.3	0.1	0.1
	2) Oil Seeds, Etc.; Misc Grain, Seed, Fruit, Plant, Etc.	0.2	0.2	0.1	0.1	0.0	0.0	0.1

Note: 1 and 2 represent top product categories for each FTA market.

Source: Foreign Trade Division of the U.S. Census Bureau and WISER.

MAJOR DESTINATIONS FOR COLORADO EXPORTS OF MANUFACTURED GOODS, MINERALS, AND AGRICULTURAL PRODUCTS (In Millions of Dollars)

Country	2003	2004	2005	2006	Percentage of Total
Canada	$1,431.7	$1,660.4	$1,807.5	$1,849.3	23.2%
Mexico	570.4	689.4	849.0	1,020.1	12.8
China (Taiwan)	237.0	255.1	205.7	706.7	8.9
China (Mainland)	213.2	356.2	355.7	583.7	7.3
Japan	443.1	411.3	384.3	399.5	5.0
Germany	282.0	272.1	277.9	370.7	4.7
Malaysia	302.0	309.5	246.1	242.0	3.0
Korea, Republic of	424.6	341.9	273.8	240.0	3.0
United Kingdom	237.3	253.5	240.5	221.0	2.8
France	267.1	250.1	224.9	219.0	2.8
Australia	112.7	140.8	222.8	218.0	2.7
Hong Kong	202.4	228.0	204.5	217.0	2.7
Netherlands	245.6	236.7	243.5	181.0	2.3
Singapore	236.7	187.2	156.1	178.0	2.2
Switzerland	80.9	75.8	78.9	147.3	1.9
All Other Countries	882.4	982.7	1,012.5	1,162.7	14.6
Total All Countries	$6,109.1	$6,651.0	$6,783.6	$7,955.9	100.0%

Source: Foreign Trade Division of the U.S. Census Bureau and WISER.

place behind Canada in Colorado exports through the same period, with $641 million. This is down somewhat from 2006—a record year in which exports to Mexico topped $1 billion for the first time. The next largest Latin American market, Brazil, has seen positive export growth in the first three quarters of 2007, with more than $63 million recorded through August.

Although the region as a whole is affected by the downturn in the U.S. economy, Latin America has continued to expand, with an average of 16% GDP growth per capita in the past four years. China continues to invest heavily in Latin America, both in natural resources and other sectors. Bilateral trade between Latin America and China reached more than $70 billion in 2006. Much foreign direct investment in Mexico has gone to the services sector instead of manufacturing, and emphasis has been placed on the need for reform at PEMEX, the state-run oil company. This could affect the future economic stability of the country, due to the importance of PEMEX to the overall Mexican economy.

With real GDP growth for 2007 forecasted to decline, U.S. exports to the Americas are expected to remain stagnant or decrease slightly owing to the reduced forecasted growth.

Asia-Pacific

Total Colorado merchandise exports to Asia-Pacific/Oceania through August 2007 were $1.74 billion, a decrease of 17% over the same period in 2006. The leading markets for Colorado in this region, in order of value of shipments, are China, Taiwan, Japan, the Philippines, Hong Kong, Malaysia, the Republic of Korea, Australia, Singapore, India, Thailand, Indonesia, New Zealand, and Vietnam. Only the Philippines, India, and Vietnam registered 2007 YTD export gains over 2006—95%, 26%, and 117%, respectively. Export markets hardest hit in the eight months of 2007 versus the comparable timeframe in 2006 include Taiwan (-42%), Singapore (-31%), Malaysia (-27%), Korea (-19%), and Japan (-10%). In addition, exports to China, Taiwan, and Japan accounted for almost half of Colorado's merchandise shipments to the region during this same period.

Exports to the Asia-Pacific/Oceania region in 2006 represented 26% of Colorado's worldwide merchandise exports. The strongest U.S. products sold to this region in 2006 were electric machinery, including sound and TV equipment; nuclear reactors, boilers, etc.; aircraft, spacecraft, and parts; and optic, photo, medical, or surgical instruments.

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Economic growth projections in Asia remain favorable. Baseline forecasts show marginal slowing, to 8.2%. Asian Development Outlook projects 10.8% growth for China; 8.5% for India and most of the other Asian economies; 6.5% for Indonesia; and 2% for Japan. Asia's private and public sectors, with China and India being the most aggressive, are expanding their global influence in traditional and nontraditional markets outside of Asia. They are undertaking massive programs in subsidies, foreign aid, infrastructure, technology transfer, concessionary loans, and cultural promotions to numerous African and South American countries in exchange for access to oil, minerals, other raw materials, and markets for low-cost goods.

Europe

Colorado exports to Europe totaled $1.1 billion through August 2007, up 6% over 2006. Europe's overall percentage as a regional market for Colorado exports increased to 22% in August compared to 19% in 2006. The leading markets for Colorado products in Europe in 2007 were (in rank order) Germany, the Netherlands, the United Kingdom, and France. A factor that has helped increase Colorado exports to Europe has been the further depreciation of the U.S. dollar against the euro, which has also slowed European exports.

INTERNATIONAL REAL GDP PERCENTAGE INCREASE 2001–2008

	2001	2002	2003	2004	2005	2006	2007[a]	2008[b]
Asia Pacific	1.6%	2.3%	3.0%	4.5%	5.1%	5.5%	5.6%	5.3%
Australia	2.7	3.6	3.3	3.5	2.7	2.7	4.2	3.7
China	7.3	9.1	10.0	10.1	9.9	11.1	11.4	10.7
Japan	0.4	0.1	1.8	2.3	2.6	2.2	2.0	1.9
South Korea	3.8	7.0	3.1	4.7	4.0	5.0	4.8	5.1
Taiwan	-2.2	4.2	3.4	6.1	4.1	4.7	4.6	4.6
Eastern Europe	1.7	4.6	5.7	7.2	6.0	6.8	6.7	6.1
Russia	5.1	4.7	7.3	7.2	6.4	6.7	7.4	6.8
Western Europe	1.5	1.1	0.9	2.3	1.6	2.9	2.7	2.2
France	2.1	1.1	1.1	2.0	1.2	2.2	1.8	1.9
Germany	0.8	0.1	-0.2	1.6	1.0	2.9	2.6	2.2
Italy	1.7	0.3	0.1	0.9	0.1	1.9	1.8	1.4
United Kingdom	2.3	2.1	2.7	3.3	1.9	2.8	2.9	2.0
North America	0.4	2.5	2.9	4.1	3.2	2.9	2.0	2.4
Canada	1.8	2.9	1.8	3.3	2.9	2.8	2.5	2.4
Mexico	-0.1	0.8	1.4	4.2	3.0	4.8	2.9	3.4
United States	0.8	1.6	2.5	3.9	3.0	2.9	2.1	2.4

[a]Estimated.

[b]Forecast.

Source: Consensus Forecasts and Colorado Business Economic Outlook Committee.

AGRICULTURAL EXPORTS FROM THE STATE OF COLORADO
FISCAL YEARS 2004–2008
(In Millions of Dollars)

Commodity	2004	2005	2006	2007[a]	2008[b]
Live Animals and Meat, exc. Poultry	$236.4	$317.9	$431.0	$551.7	$676.7
Hides and Skins	157.3	141.1	159.7	177.3	177.3
Wheat, Flour and Products	200.6	122.5	148.6	200.7	208.1
Feedgrains and Products	106.1	92.4	115.8	127.4	130.9
Vegetables and Preparations	73.3	78.8	80.9	86.5	89.5
Feeds and Fodders	54.6	59.9	73.3	80.6	82.8
Fats, Oils, and Greases	36.5	27.2	28.1	30.9	30.9
Dairy Products	6.8	6.1	15.5	20.2	20.2
Seeds	13.4	15.4	14.6	14.9	14.9
Sunflower Seed and Oil	12.2	9.4	9.7	11.9	10.9
Poultry and Products	3.5	4.4	4.3	5.2	5.1
Fruits and Preparations	1.9	2.3	2.5	2.6	2.6
Other	62.7	66.9	75.2	86.5	86.5
Total[c]	$965.2	$944.3	$1,159.2	$1,396.4	$1,536.4

[a]Estimated.

[b]Forecast.

[c]Totals may not add due to rounding.

Source: U.S. Department of Agriculture Economic Research Service (ERS), ERS Forecast, and Colorado Business Economic Outlook Committee.

An economic deceleration is underway in Western Europe, partially due to the prospect of further currency appreciation, rising administered interest rates, and an overall shift to a more restrictive fiscal stance across Europe. Projected GDP for Western Europe in 2008 will be 2.2%. Some of Colorado's strongest European export markets will experience more robust growth, such as the United Kingdom, which is projected to have output growth of 2%, and Germany, with 2.2%.

Five percent of Colorado's exports to Europe go to Eastern Europe. Shipments to this region increased by 28% from 2005 to 2006, and are up an additional 92% through August 2007. The leading markets for Colorado are Russia, Poland, and Hungary, and top products include machine tools, parts for machinery, and automatic data processing machines. Real GDP growth in Eastern Europe is expected to climb 6.1%, higher than that expected in Western Europe.

Middle East and Africa

Combined sales to the Middle East and Africa made up just over 2% of Colorado's exports. For the first eight months of 2007, exports to the Middle East fell 3%. Colorado's largest market in the region, Israel, reached $30 million in sales, down 23% over the same period last year. Colorado companies sold $25 million in products to Africa through August 2007, an increase of 5%.

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International Trade

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Colorado's largest African market was the Republic of South Africa, at $9.4 million.

The continuing boom in world commodity markets remains a key support for growth in the Middle East and Africa. GDP growth in these regions is expected to remain above 5% in 2008. However, as the economic impact of ongoing geopolitical uncertainties and regional conflicts cannot be excluded, risks in these regions continue to be high.

Prospects for Colorado Agricultural Exports

Colorado's agricultural exports grew 23% in 2006, to $1.16 billion, with the export markets for meat products leading the growth. Agricultural exports now represent 14% of Colorado's total exports, up from 13.3% in 2005. Colorado's 2007 forecast is for agricultural exports to climb 20% over 2006, with the strong demand for Colorado beef and the rising harvest and market prices for wheat representing 73% of increased agricultural exports. Colorado's 2008 agricultural sector should continue to grow in 2008 by 10% from 2007 levels, building on beef exports.

Colorado's leading export sector (beef, livestock, and meat products) continues to rebound from market losses in 2004 when markets closed to beef shipped from the United States. While Colorado's agricultural exports have rebounded to pre-2003 levels, meat exports to Japan and South Korea have not returned, and represent lost sales of $170 million each year the markets remain closed.

The U.S. Meat Export Federation (USMEF) reports that while global trends are up, Colorado and U.S. beef exporters continue to face barriers in key markets.

> "Beef (including variety meat) exports to 'open' markets have increased 33% in value and 17% in volume compared to 2003. This growth includes exports to all markets except Japan, South Korea, China/Hong Kong and Russia. Although countries representing 75% of the 2003 volumes are considered 'open' in varying degrees, only 51% of the 2003 monthly volumes are currently being exported. The lower export volumes are the result of trade restrictions (under 21 months of age in Japan, under 30 months of age in most other markets, boneless beef, and no variety meat) imposed by many of these 'open' markets.
>
> U.S. beef exports are projected to continue to increase, especially with anticipated market access to China and Russia, as well as increased access to Japan and South Korea. Global demand for beef will continue to grow, fueled by increasing incomes, but limited by higher costs of production and continued restrictions due to animal diseases."

Colorado's wheat exports will grow in 2007 and 2008, building on record state harvest levels (the highest in 10 years), as well as high export commodity prices.

Produce exports are growing in Colorado as the market in Mexico opens to U.S. produce. In 2006, Colorado shipped more than 1,100 loads of potatoes and 237 loads of onions to Mexico. Colorado's growing season blends well with Mexico. A study in 2006 revealed that over 64% of the fruits and vegetables imported from Mexico are shipped during the December to May winter months, providing products that are not available in the United States and not competing with any Colorado agricultural production.

With the ending of import quotas effective January 1, 2008, Colorado's access to the Mexican pinto bean market should improve in 2007 and beyond. This will fulfill obligations within the NAFTA accord that requires the elimination of import barriers on pinto beans no later than 2008.

COLORADO'S TOP AGRICULTURAL EXPORTS REGIONAL DESTINATIONS (In Millions of Dollars)

Region	Exports 2004	2005	2006
Mexico	$243.5	$275.0	$356.9
Canada	142.8	168.3	235.3
Japan	86.3	90.9	109.5
Hong Kong and China	87.2	63.0	76.0
Taiwan	52.0	49.1	67.2
EU 25	44.1	39.0	41.0
Korea	46.6	34.8	39.6
Other	263.2	224.8	229.5
Total[a]	$965.2	$944.3	$1,155.0

[a]Total may not equal sum due to rounding.

Source: WISER, U.S. Bureau of Census.

Top Markets for Agriculture Exports

Mexico continues as the top destination for agricultural products, growing 30% in 2006 to more than $356 million. Canada remains Colorado's second largest market, at $235 million, followed by Japan.

Mexico and Canada accounted for more than 51% of Colorado's 2006 agricultural exports, while these two markets represented 32% of agricultural exports for the United States. The growing market for beef in both countries dominates increases in exports.

Colorado's export volumes to Asia remain below 2003 levels because of delays in the reopening of the markets after the bovine spongiform encephalopathy scare. Japan fell from 16% of Colorado agricultural exports in 2003 to 9% in 2006, while Korea dropped from 11% 2003 to 3.4% in 2006. The Asian market in general and the Chinese market in particular have grown much faster than Colorado's agricultural exports to these markets. China has become the major importer of U.S. cotton and soybeans, which represents 70% of their total agricultural product imports. China has strong growth potential for Colorado and U.S. beef. While China declared its market open to U.S. beef in 2006, no agreement has been reached on trade resumption conditions. Therefore, no beef has been exported to China.

The first U.S. beef shipments to South Korea illustrate the challenges to reopening beef markets in Asia. Strict enforcement of boneless import requirements has caused problems for U.S. companies exporting beef to Korea. The continuing trade barriers for beef are a point of contention as the U.S. Senate considers ratification of the Korean-U.S. (KORUS) Free Trade Agreement.

International Students

During the 2005–06 academic year, the number of international students enrolled in U.S. higher education institutions remained fairly steady, at 564,766, down about 1% from the previous year's total. Colorado had 5,183 international students during this period, a decline of 5.7%, according to the Institute of International Education's annual report on international academic mobility. International students' expenditures in Colorado totaled an estimated $122.8 million for 2005–06.

The leading countries of origin for international students in Colorado for 2005–06 were India, with 478 students (9.2%); Korea, with 477 students (9.2%); China, with 394 students (7.6%); Taiwan, with 354 students (6.8%); and Japan, with 323 students (6.2%).

International students brought more than $13.49 billion to the U.S. economy last year in money spent on tuition, living expenses, and related costs, according to NAFSA: Association of International Educators. U.S. Department of Commerce data continue to rank U.S. higher education among the five largest service sector exports.

Difficulties attracting international students to U.S. colleges and universities can be attributed to several factors, including real and perceived difficulties in obtaining student visas (especially in scientific and technical fields), rising U.S. tuition costs, vigorous recruitment activities by other English-speaking nations, and perceptions abroad that it is more difficult for international students to come to the United States. In addition, universities in students' home countries have been increasing their capacity to provide a high-quality education to a greater number of students, at both the undergraduate and graduate levels.

Preliminary figures for 2007–08 for international students enrolled in Colorado higher education institutions show that the University of Colorado at Boulder was again the only university to break the 1,000-student mark, with 1,135 international students out of a total of 28,624 (up 167 students from the previous year). The Boulder campus is followed by Colorado State University, with 839 international students (down 145 students); the University of Denver, with 742 international students (down 140); University of Colorado Denver, with 513 international students (down 137); and the Colorado School of Mines, with 425 international students (up 136). Aims Community College is an example of a community college with a commitment to international students, with 63 international students (up 46). These figures were compiled from the international admissions office of each institution.

International Visitors to Colorado

An established methodology does not exist to accurately measure foreign visitors to Colorado; however, some assumptions can be made by looking at overall U.S. trends. The U.S. Department of Commerce projects record arrivals and receipts

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International Trade

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COMPARISON OF OVERSEAS VISITORS TO THE UNITED STATES AND TO COLORADO 1996–2005 (excludes Canada and Mexico)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Visitation to U.S. (000s)	22,658.0	24,194.0	23,698.0	24,466.0	25,975.0	21,866.0	19,117.0	18,026.0	20,322.0	21,679.0
Visitation to CO (000s)	566.0	532.0	261.0	269.0	286.0	240.0	249.0	180.0	224.0	303.0
Inbound to U.S.	na	6.8%	-2.1%	3.2%	6.2%	-15.8%	-12.6%	-5.7%	12.7%	6.7%
Inbound to CO	na	-6.0%	-50.9%	3.1%	6.3%	-16.1%	3.8%	-27.7%	24.4%	35.3%

Source: United States Department of Commerce, Office of Travel and Tourism Industries.

from international travelers to the United States in 2007. The forecast exceeds the previous record arrival year of 2000, when more than 51.2 million international travelers visited the United States. In 2007, the United States is projected to host almost 54 million international visitors, a 5% increase over 2006. In 2006, the United States hosted 51 million international visitors, a 4% gain over the prior year.

The arrivals forecast for 2007–11 predicts that by 2011, international arrivals will reach 61 million, an increase of 20% between 2006 and 2011.

Forecast Highlights by Region

North America—Canada and Mexico are the top two markets generating visitors to the United States. They are forecasted to grow by 4% and 3%, respectively, in 2007, and by 19% and 15%, respectively, from 2006 to 2011. In addition, Mexico set a record for arrivals and spending in 2001–2005.

Europe—Visitors from Europe are expected to generate 8% more visitors in 2007 and 25% more from 2006 to 2011, to reach 12.6 million visitors. The United Kingdom is projected to post a 5% growth rate in 2007, securing its position as the top overseas market. Germany, France, and Italy are the next largest arrival markets within the region. France is forecasted to lead the growth among these three markets in 2007.

Asia Pacific—Asia is projected to generate annual visitation growth averaging 3% to 6% each year from 2006 to 2011. The largest Asian market and second-largest overseas market, Japan, is forecasted to increase by 17%, reaching nearly 4.2 million visitors by 2011. Stronger growth is predicted to come from the Republic of Korea (+27%), Australia (+26%), India (+66%), the Peoples Republic of China (+81%), and Taiwan (+23%).

South America—The number of visitors from South America is projected to expand by 33% from 2006 to 2011, the highest regional growth rate. The largest single source market from the region, Brazil, is expected to be up 39% by 2011 compared with 2006 levels. Double-digit growth is also projected for Venezuela (41%) and Argentina (38%) over the forecast period. ✤

Summary

The consensus of the 2008 Business Economic Outlook estimating committees is that Colorado will experience moderate growth, in the range of 43,000–56,000 new jobs, for the fourth consecutive year. The state economy, along with other western states, will be at the forefront of employment, population, and productivity growth. The outlook is for Colorado's employment to grow at a rate of 1.9% in 2008, adding 43,300 jobs, compared to 1.1% for the United States. This projected growth is above the 10-year average of 37,800 jobs per year. State population will increase by more than 100,000 as it approaches 5 million people.

During the 10-year period 1997–2006, total state employment climbed by nearly 300,000 jobs. About 54% of these jobs were in the Professional and Business Services, Educational and Health Services, and Government Supersectors, and two-thirds of the projected growth for 2008 will be in the same three areas. Manufacturing is the only sector to show a loss during this period. Nearly 38,000 high-paying manufacturing jobs were lost or reclassified to other NAICS categories.

As the structure of the economy has evolved over the past decade, apprehension has been expressed about the types of jobs that are being added. This concern has centered on the jobs that are replacing primary jobs, notably in the Manufacturing and Information Supersectors. A simple analysis of projected wages based on this forecast suggests that this consternation may be justified. In other words, it appears that total wages for higher paying sectors will be countered by more rapid growth in total wages for lower paying jobs.

NEW JOBS CREATED IN NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT SECTORS

	Jobs Added		Total Jobs Added	Percentage of Total Jobs Added
Industry	2007[a]	2008[b]	1997-2006	1997-2006
Natural Resources and Mining	4,000	5,000	7,600	2.5%
Construction	-2,200	-1,000	47,200	15.8
Manufacturing	-4,400	-4,000	-37,800	-12.6
Durable Goods	-1,500	-900	-27,300	-9.1
Nondurable Goods	-2,900	-3,100	-10,500	-3.5
Trade, Transportation, and Utilities	11,100	5,400	38,200	12.8
Wholesale Trade	2,600	1,000	6,700	2.2
Retail Trade	6,300	3,000	24,900	8.3
Transportation and Utilities	2,200	1,400	6,600	2.2
Information	100	900	1,900	0.6
Financial Activities	1,200	400	25,500	8.5
Professional and Business Services	19,000	15,500	58,500	19.6
Educational and Health Services	9,100	8,000	52,700	17.6
Leisure and Hospitality	8,500	6,000	38,400	12.8
Other Services	2,000	2,000	15,200	5.1
Government	6,700	5,100	51,700	17.3
Total[c]	55,100	43,300	299,100	100.0%

[a]Estimated.

[b]Forecast.

[c]Due to rounding, the sum of the individual items may not equal the total.

Note: 2005 employment change includes the effect of 2,500 jobs being reclassified from Computer and Electronics Manufacturing to Scientific Research and Development Services (a subsector of Professional and Business Services).

Source: Colorado Business Economic Outlook Committee.

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Summary

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In 2008, the rapid rate of growth in the Natural Resources and Mining Supersector will add 5,000 positions, while 1,000 Construction jobs and 4,000 Manufacturing jobs will be cut. As a result, there will be no jobs added in the goods-producing sectors.

In 2007, the service-producing sectors added 57,700 jobs, followed by another 43,300 in 2008. Only the Financial Activities and Information Supersectors will show weak job growth in 2008.

The consistent job growth that has occurred since 2004 has caused Colorado's population to increase at a more rapid pace. This growth is brought about by a higher level of net migration. The state's population is expected to climb 2.1% compared to 0.9% for the United States. Colorado's population will increase by 103,500 persons and will exceed 5 million. Net migration will account for about 60% of the growth, or about 62,500 people.

Looking ahead, committee members believe the following events will shape future growth and prosperity of the national and state economy:

International and National

- Overall, the global economy will record solid but slower GDP growth. On the upside, North America is the only major area expected to record higher GDP growth in 2008. Despite lower expectations, solid growth will occur in China, Australia, Taiwan, South Korea, and some Eastern European countries. The greatest area of concern is weak growth in key Western European countries and Japan.
- Global financial markets have experienced volatility as a result of the upheaval in the credit markets.
- At home, one of the primary worries is a deeper than expected housing slump accompanied by a credit crunch. Concerns about inflation continue to exist, due, in part, to rising oil prices and the falling value of the dollar. The fear is that foreign investors will be less interested in holding dollar-denominated stocks and bonds because their value has decreased against other currencies. The sinking dollar will put limited inflationary pressure on imported goods.
- The Federal Reserve will remain focused on maintaining a balance between the threat of weak growth and higher inflation. Many Fed watchers believe that the Federal Reserve will spend most of 2008 observing from the sidelines, although a great diversity of opinion exists.
- Time will tell whether the November 2008 elections will result in political gridlock for most of that year as members of both parties remain cautious about playing their hand until after the election. At the same time, the current administration is determined to do whatever is possible to improve the economy as a means of persuading the electorate.
- Real GDP growth in the United States will improve in 2008, but remain well below potential. Personal consumption, business investment, and government spending will show solid growth.
- The twin deficits (trade balance and budget deficit) will remain risks.
- Finally, the consumer must remain engaged in the economy in a sensible manner. In many parts of the country, individuals' wealth effect has been affected by falling housing prices and volatile financial markets.

Colorado

- Colorado's economy will outperform the nation's; however, because Colorado is closely linked to the national economy, the state will continue to feel the ill effects of the housing slump and the subprime credit woes.
- Growth in renewable and traditional energy will play an ever-changing role in the development of the state economy. Consequently, severance tax collection and distribution will become a hotter topic of discussion.
- In January 2007, Denver was selected as the site of the Democratic National Convention (DNC) to be held in August 2008. Approximately 35,000 delegates, political enthusiasts, politicians, and media will visit the city. It is estimated that Denver will reap more than $150 million in economic benefits from the event and draw attention to the area.
- Colorado stands to benefit from the positive exposure gained from the DNC and other major conventions, as well as the successful seasons of its professional sports teams, particularly the Rockies, Avalanche, and Nuggets.

- The Governor's Office of State Planning and Budgeting projects gross general fund increases of 3% in FY 2008 and an increase of 4% in the following fiscal year. Because TABOR restrictions are on hold, the legislature can continue to provide more and better services as a result of increased state tax revenues. Results of a survey conducted in late 2007 indicated that if a vote were held, it would be unlikely that a continuation of Referendum C would pass, which means that the state legislature must be judicious with fiscal decisions. Discussions have also been held on the subject of asking voters to approve a statewide tax increase in 2008 for education, transportation, and healthcare.
- In a poll conducted as part of the Business Leaders Confidence Index,® the top three issues facing the state according to Colorado business and government leaders are the same as the 2006 responses, although the order is different. In 2007, the top issues facing the state are funding and maintaining quality education, immigration, and water availability/drought. New to the 2007 list are the real estate slowdown and foreclosures, and healthcare and insurance costs. A final issue is transportation funding and traffic congestion. The top issue facing Colorado businesses is the availability of qualified workforce and workforce training. Two of the top three issues are the same as last year: energy/fuel costs and business costs (materials, labor, and benefits). Other issues are government control, tax reform, and regulation, along with the downturn of the real estate market. ✜

CHANGES IN COLORADO NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
(In Thousands)

Sector	2006	2007[a]	2008[b]	2007 New Jobs[a]	Percentage Change	2008 New Jobs[b]	Percentage Change
Natural Resources and Mining	20.8	24.8	29.8	4.0	19.2%	5.0	20.2%
Construction	167.7	165.5	164.5	-2.2	-1.3	-1.0	-0.6
Manufacturing	149.1	144.7	140.7	-4.4	-3.0	-4.0	-2.8
Trade, Transportation, and Utilities	419.5	430.6	436.0	11.1	2.6	5.4	1.3
Information	75.6	75.7	76.6	0.1	0.1	0.9	1.2
Financial Activities	160.7	161.9	162.3	1.2	0.7	0.4	0.2
Professional and Business Services	331.8	350.8	366.3	19.0	5.7	15.5	4.4
Educational and Health Services	230.9	240.0	248.0	9.1	3.9	8.0	3.3
Leisure and Hospitality	265.0	273.5	279.5	8.5	3.2	6.0	2.2
Other Services	90.9	92.9	94.9	2.0	2.2	2.0	2.2
Government	367.3	374.0	379.1	6.7	1.8	5.1	1.4
Total	2,279.3	2,334.4	2,377.7	55.1	2.4%	43.3	1.9%

[a]Estimated.

[b]Forecast.

Note: Due to rounding, the sum of the individual sectors may not equal the total.

Source: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committee.

From Around the State: Boulder County

As Boulder County continues to recover from the economic downturn of 2002–03, the area's economy is showing strength in many sectors.

Population, Employment, and Income

Boulder County's population growth has slowed to a sustainable pace of approximately 1% a year. While more than one-third of the county's estimated 297,000 residents live in the City of Boulder, much of the population growth has occurred in other communities. The largest increases have been in Longmont and Erie, areas with the greatest amount of residential construction activity. Population growth in the county is expected to continue at current levels.

Employment in Boulder County has increased, and job growth is expected to continue. The number of jobs in the county rose an estimated 3% in 2007, outpacing employment growth for the nation (1.3%) and Colorado (2.4%). In May, the number of Boulder County jobs reached the peak employment level previously seen in 2001, and the Information Sector had a net increase in jobs for the first time since 2000.

According to 2006 Denver Regional Council of Government estimates, nearly three-fourths of the county's jobs were with employers located in Boulder (54%) or Longmont (20%). Boulder's economic vitality program has helped the City of Boulder retain primary employers and foster job growth. Longmont has continued to attract new companies and jobs through its ongoing economic development activities. Other municipalities in the county also have economic development programs, and most experienced job growth in 2007.

Unemployment in Boulder County continues to be low, falling from 3.8% at mid-year 2006 to 3% at mid-year 2007.

Boulder County has a high concentration of professional and scientific jobs, supported by the presence of the University of Colorado; major federally funded research facilities; and companies in the aerospace, bioscience, information, and manufacturing clusters. Jobs that pay higher than average wages, along with a well-educated and highly skilled labor force, have contributed to the higher than average income levels for county residents. In 2006, per capita income in Boulder County was $48,324, significantly higher than the per capita income for Colorado ($39,587) and the United States ($36,629).

Real Estate, Housing, and Construction

The local commercial real estate market has improved, with lower vacancy rates and higher lease rates. Although the number and dollar value of nonresidential building permits in Boulder County were down from mid-year 2006 to mid-year 2007, there was the cyclical increase from first to second quarter 2007.

The number of jobs in the county rose an estimated 3% in 2007, outpacing employment growth for the nation (1.3%) and Colorado (2.4%).

The number of residential building permits issued in Boulder County shows similar pattern, with a decrease from 2006 to 2007 and an increase from first to second quarter 2007.

Housing prices have continued to rise in the county, but at a slower rate than for the state. Office of Federal Housing Enterprise Oversight (OFHEO) House Price Index data show homes in Boulder County appreciated an average of 2.25% from mid-year 2006 relative to the corresponding timeframe in 2007. During the same period, the House Price Index for Colorado grew approximately 3%. From 2002 to 2007, housing prices in Boulder County rose 15.5% compared to 20.2% for the state.

The number of foreclosures in late 2007 hit a record high in Boulder County, reflecting a national trend related to the housing downturn and tighter credit markets. In August 2007, 103 foreclosures were filed, nearly two-thirds of which were for properties located in Longmont. The total number of foreclosures filed in the county through August was 611, an increase of 17% over last year. Foreclosures nationwide also hit a record high in August, soaring 115% over the August 2006 level.

Financial Services and Investment

Boulder County has 32 FDIC-insured financial institutions, with 114 offices and deposits totaling $5.6 billion, representing 6.9% of the state's FDIC-insured deposits. From mid-year 2006 to mid-year

2007, deposits in Boulder County's banks rose $191.5 million, or 3.5%, compared to an increase of 6.4% for the state.

According to the MoneyTree™ Report, Colorado companies received $549.7 million of venture capital investment between midyear 2006 and 2007. Of that amount, $241.8 million, or 44%, was invested in companies located in Boulder County. The county's high concentration of software development and biotechnology firms has helped fuel high levels of venture capital investment.

Retail Sales

Retail sales in Boulder County have significantly increased in the past year and are expected to continue their upward trend. Between midyear 2006 and midyear 2007, retail sales in the county increased 14%, from $1.75 billion to $2 billion. Much of the increase is a result of new retail development and redevelopment around the county.

Key Industries

Aerospace—Continued growth in the aerospace industry is expected in response to new space exploration projects and programs to commercialize aerospace technology. Colorado ranks second nationwide in aerospace employment, with 26,650 workers in the private sector. From 2006 to 2007, the number of aerospace workers in the state remained flat, reflecting productivity gains and changes in the industry. In addition to major aerospace-related programs at the University of Colorado, Boulder County is home to a significant number of the state's aerospace firms and employees. Of the approximately 300 aerospace or related companies in the state, roughly one-third are located in Boulder County.

Bioscience—Boulder County is likely to play a key role in the continued growth expected in the bioscience industry. According to the Colorado BioScience Association, bioscience companies total nearly 380 in the state, with approximately 16,000 employees. Roughly 80% of these jobs are located along the Front Range. From 2005 to 2006, bioscience employment climbed by approximately 3% in the Metro Denver area.

According to a 2006 report compiled for the Biotechnology Industry Organization, among all medium-sized metropolitan areas in the nation, Boulder County has the highest concentration of companies in the medical devices and equipment sector. It also has high concentrations in the research, testing, and medical laboratories, and drug and pharmaceutical sectors.

Information Technology—Since 2001, employment in the computer hardware sector has decreased at the national and local level. Between 2001 and 2006, the number of companies fell an average of 0.4% annually in the metro Denver area and 1.2% nationally. According to the most recent state labor department data available, Boulder County is home to 27% of the state's employers and 33% of Colorado's jobs in computer and electronic product manufacturing. The number of employers in the sector increased 3% between first quarter 2006 and first quarter 2007, while the number of employees dropped 15%.

In 2006, an estimated 3,430 companies employed 44,100 workers in the software industry in the Metro Denver area. Between 2005 and 2006, metro area employment in the industry grew by 9.5%. Approximately 80% of the state's software industry employment is in the Metro Denver area, and an estimated 30% of these jobs are in Boulder County.

Natural and Organic Products—Boulder County is at the center of the estimated $56 billion natural and organic products industry, which includes companies that produce natural or organic products, or provide marketing or other support. The industry has experienced significant growth that is expected to continue. Nationwide, sales of natural and organic foods climbed 13.9% between 2005 and 2006, compared to growth of 2.4% in sales of all foods. Industry experts estimate retail sales of organic foods and beverages will double in the next five years from the 2006 level of $17 billion.

Outdoor—According to the Outdoor Industry Foundation, the outdoor industry generated $289 billion in retail sales and services nationwide. Sales of outdoor equipment in the United States reached $6.9 billion in 2006, an increase of 9% from 2005. Boulder is widely recognized as a center for the expanding industry and is home to more than 100 companies in the outdoor recreation area, including manufacturers; distributors; retailers; marketing and media companies; medical, event, and other service providers; and national nonprofit organizations.

Renewable Energy—Boulder County is expected to experience continued growth in the renewable

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Boulder County

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energy and energy research sectors. In 2006, approximately 5,600 individuals were directly employed in renewable energy in the Metro Denver area; an estimated 24% of those jobs were located in Boulder County. Companies that provide energy using solar, wind, biomass, fuel cells, and hydro resources are included in the renewable energy sector. Renewable energy employment in the metro area increased 1.3% from 2005 to 2006.

The Metro Denver area also has a high concentration of employment in the energy research sector, which includes laboratory testing; scientific and technical consulting services; and environmental, energy, natural resource, and institutional research. Direct employment in the energy research sector in 2006 was 6,300 in Metro Denver, with approximately 17% of the jobs in Boulder County. From 2005 to 2006, energy research employment rose 8.6% in the metro area.

Tourism—Tourism is the second-largest industry in the state and a significant contributor to the Boulder County economy. According to the Boulder Convention and Visitors Bureau, tourism in the county has grown at a steady pace from 2002 to 2007, and the trend is expected to continue. From 2006 to 2007, hotel occupancy in the city of Boulder increased 4%, average hotel room rates climbed 7.5%, and accommodations tax collections rose 13%. During the same period, restaurant and food service tax collections grew 9%, and sales tax revenues increased in the historically high tourist traffic areas of Downtown Boulder (2%) and Pearl Street (2.9%).

Note: Sources used to compile this report are available from the Business Research Division. ✜

From Around the State: La Plata County

The Office of Economic Analysis and Business Research in the School of Business Administration at Fort Lewis College measures and reports on economic activity in La Plata County. The La Plata County economy is highly seasonal owing to tourism's impact on the local economy. Although significant tourism is associated with winter sports, most La Plata County tourism occurs during the summer. This summer concentration causes an annual third quarter seasonal upswing in economic indicators such as retail sales and employment.

However, La Plata County is the home of Fort Lewis College, which provides seasonal stability to the local economy. Most of the college's students attend classes from September through April, when tourist activity is relatively low. The presence of the students and their expenditures moderates the seasonal decline in the local economy.

Employment and Unemployment

On average, La Plata County had a lower unemployment rate (3.4%) in 2006 than both the United States (4.6%) and Colorado (4.3%). The county's rate remained below both the national and state unemployment rates in 2007.

The La Plata County labor force averaged 30,510 persons during 2006 (an increase of 6.7% over 2005), with average total employment of 29,479 (7.2% over 2005). In August 2007, the labor force totaled approximately 33,000, about 3.6% higher relative to the corresponding period the previous year and similar to the average annual labor force growth rate since 2000. Employment growth in La Plata averaged 4.5% from August 2006 to August 2007, and 3.6% over the 2000–07 period.

Interestingly, employment patterns within La Plata County are somewhat different from those found in the state and national economies. Employment is less concentrated in manufacturing than Colorado and the nation. In 2006, construction (about 17% of total income in La Plata County) and retail and tourism (21%) remained the strongest sectors in the county, though retail and tourism as a percentage of county income has fallen since 2001. With the loss of Valley Wide Health and others, the healthcare industry has also declined, though it still represents approximately 15% of total income, similar to the national average. Natural gas has roughly doubled from 2000 to 2006, to about 6% of county income, particularly due to rising prices. The impact of this sector remains significant given its contribution to county tax revenues. Other sectors, such as transportation and public utilities; wholesale trade; management; and finance, insurance, and real estate sales, have decreased in significance during the same period. Employment in services, retail trade, and government are more important providers of employment in La Plata County than in Colorado or the United States.

Given continued strength in the local economy, particularly the construction sector and the high price of natural gas, it is anticipated that unemployment will remain low in 2008, below 3.5%.

Given continued strength in the local economy, particularly the construction sector and the high price of natural gas, it is anticipated that unemployment will remain low in 2008, below 3.5%. Similarly, employment growth should remain strong, between 2% and 2.5% growth per year in the foreseeable future, assuming no further negative shocks to the housing market.

Income

Per capita income in La Plata County has increased during the last few years, both in absolute terms and relative to national per capita personal income. Per capita personal income in La Plata was $34,029 in 2006, the highest in Region 9. This represents approximately 78% of the Colorado state average, an increase from about 70% in 2001. In other words, since 2001, income has been growing at a faster rate in La Plata County than in the state, 5.1% compared to 2.7%.

Real Estate

Like many Colorado resort communities, La Plata County's economy is closely tied to real estate. Although there are numerous real estate indicators, the number of residential building permits provides insight into the condition of the market. When demand is strong, builders pull more building permits so they can build and sell homes. Unwilling to be stuck with homes they cannot sell in a soft

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market, builders reduce the number of permits when demand drops.

After a peak in the number of permits in the spring of 2002, Durango building activity has been in a slight downward trend, with the largest percentage drop (season over season) occurring in 2006. This trend mirrors the national real estate cycles.

After steadily increasing since 2000, the median home price in Durango has remained relatively flat, in the $350,000 range. With sales volumes decreasing and inventories remaining high, 2008 will be a critical year for local real estate.

Recent and Future Trends

The most recent economic indicators of La Plata County show continued growth. Comparing Q2 2007 data to Q2 2006, most La Plata County economic sectors improved or remained fairly steady. For example, according to the Federal Deposit Insurance Corporation (FDIC), La Plata County's banking deposits increased by 1.4% from $1.020 billion to $1.034 billion, not accounting for inflation. The FDIC information indicates a total of 9 commercial banks in La Plata County, with 19 branch offices.

All of the tourism indicators for the county either increased or remained fairly constant through Q2 2007. Comparing Q2 2007 to the corresponding period the previous year, ridership on the railroad (not including special events) increased 1.2%, visits to Mesa Verde National Park fell 2.7%, enplanements climbed 9.4%, and lodger's tax revenue (adjusted for inflation) surged 32.6%. Although Mesa Verde National Park is in Montezuma County, many of the tourists who visit the park stay in La Plata County. Furthermore, retail sales in La Plata County increased by 3.3% (adjusted for inflation).

Population growth will continue to fuel the construction and real estate sectors of the economy. Comparing Q2 2006 to Q2 2007, population in La Plata County increased 2.5% (as measured by the number of new residential electric meters installed). Although it appears that the housing market in La Plata County is cooling off from recent years, it is still relatively strong, with median residential housing prices rising 9.7% from Q2 2006 to Q2 2007 (adjusted for inflation).

Energy, in particular natural gas, remains a strong contributor to the local economy. Even with price volatility (energy prices fell 0.3% from Q2 2006 to Q2 2007—after adjusting for inflation), rents, royalties, and property tax revenues associated with natural gas production are significant sources of income to La Plata County and should remain so for some time. ✜

From Around the State: Mesa County

The Heat Is On

The watchful eye of the Fed continues to monitor a retracting national economy that has resulted from the fallout in the subprime market, a declining auto industry, and escalating oil prices. Meanwhile, the Grand Junction area economy is still as hot as ever. The Grand Junction GDP grew 80% over the past decade, and it was recently designated as the 15th fastest-growing economy in the nation. The Grand Junction MSA also ranked near the top of the Milken Institute's best-performing small cities list, placing 18th out of 179.

With energy extraction as its primary driver, followed by energy service industries and construction, the Grand Junction economy is projected to remain very strong. An estimated 43,000 wells are expected to be drilled in Colorado from 2006 to 2010. Concomitant to this are increases in overall gas production and the partnering of energy giants Kinder Morgan Energy Partners, Sempra, and ConocoPhillips on the construction of a 1,678-mile transmission pipeline capable of transporting 1.8 billion cubic feet of gas per day. When completed, the pipeline will extend from northern Colorado to eastern Ohio, with a 713-mile stretch reaching from Colorado into Cheyenne, Wyoming. It is expected to be in full service by mid-2009. To date, this equates to a $25 million infusion of capital investment into the economy. (Source: www.kindermorgangas.com)

To feed the insatiable global appetite for gas and oil, all indicators point to ongoing upward trends and continued economic growth. The development of the Piceance Basin alone is expected to generate a total of $3.4 billion in revenues and create more than 6,500 jobs, with labor earnings of $398 million. (Source: Colorado Energy Research Institute)

The rapid growth in the Grand Junction MSA has increased the average hourly wage to $16.10, which in past years has lagged behind national averages. At the same time, labor force and job growth rates are the highest in Colorado. In fact, in both 2006 and 2007 the number of jobs in the area is anticipated to increase by approximately 5%. Not surprisingly, one of the immediate issues is the low unemployment rate. After falling to 2.8% in May, it held steady at 3% in August and September of 2007. Even though the MSA's overall workforce climbed a staggering 42% over the previous 10 years, with an increase of 12.3% from January 2006 to September 2007, this growth still does not meet the demand for qualified workers. At the fiscal year-end in June 2007, the Mesa County Workforce Center recorded 8,000 open positions, a rise of 21% over the previous year. In an effort to find workers, the center has initiated recruitment efforts to hire workers from other parts of the country that are experiencing soft economic conditions. They are also tapping into military returnees and retirees, and are even recruiting in places like Puerto Rico.

This rapid growth has also reduced housing and facility vacancy rates to all-time lows and driven up the costs of land and construction. Single-family housing, with a median price of $209,783 in the first quarter of 2007, has appreciated so quickly that Grand Junction now has the fourth-fastest home appreciation rate in the country. Industrial land prices have tripled in just two years. The affordability and availability of housing is now a factor in workforce recruitment.

Communities and economic development organizations are working together to devise strategic plans to meet current needs and formulate long-term plans to ensure sustainable, balanced economic growth in the future. The Grand Junction MSA is poised for continued growth and change well into the next decade. Energy companies are working on 20-25 year plans that take the development of the industry from the ramp-up period, where the drilling and infrastructure are put into place, to the extraction, production, and maintenance mode. While this transition will likely be felt as an economic leveling off, the energy industry should remain a strong economic driver. ✜

From Around the State: Northern Colorado

The northern Colorado economy continues to grow slowly but steadily. In 2005–06, the region's job total increased by 5,730 jobs, or 2.8%. Over the past six years, employment growth in Larimer and Weld counties has averaged 1.4% per year. Although this is down substantially from the 4.2% annual average in the 1990s, it has generally been in-line with or outpaced the Colorado and U.S. economies. Plus, unemployment will remain well below the natural rate.

Growth in services continues to drive the regional economy. According to Quarterly Census of Employment and Wages data for 2005–06, the top five growth sectors in the region were: accommodation and food services (878 jobs); administrative, support, waste management, and remediation services (816 jobs); healthcare and social assistance (785 jobs); retail trade (527 jobs); and mining (508 jobs). This continues long-term trends as these sectors have accounted for about 61% of the net new jobs in the region since 2001. In terms of job losses, only the manufacturing (252 jobs); agriculture, forestry, fishing, and hunting (168 jobs); and transportation and warehousing (28 jobs) sectors showed declines.

Disaggregating the jobs data, some notable differences emerge between Larimer and Weld counties. Since 2001, Larimer County employment grew by a total of 5,449 workers, a 4.4% increase. More recently, Larimer County added 2,329 jobs between 2005 and 2006, a rise of 1.8%. Although Weld County is smaller in terms of employment, it has recently added more jobs than Larimer County. Since 2001, the number of total jobs in Weld County has grown by 8,822 positions, an 11.6% gain. Between 2005 and 2006, it rose by 3,401 jobs, or 4.3%. By comparison, Colorado's employment has climbed only 1.8% since 2001, and U.S. employment has grown 3.2%.

Perhaps the most troubling aspect of the region's economy in the past few years is the relatively poor performance of wages and per capita incomes. Between 2001 and 2006, inflation-adjusted earnings per worker have grown by only 5%, and per capita incomes have fallen 2%. This is due largely to losses of a number of high-paying jobs in the wake of the crash of the high-tech manufacturing sector, especially in Weld County. Unfortunately, negative real income growth has had important adverse consequences for a number of families in northern Colorado, and the region has seen increases in poverty rates and housing foreclosures.

One outcome of the modest employment growth has been a slowdown in population increases. While the region's population continues to swell, both through natural growth and in-migration, recent increases are notably lower than in the 1990s. Moreover, the concentration of the growth in southwest Weld County shows the latest changes are as much due to Metro Denver's steady outward creep as it is to the performance of northern Colorado's major economic hubs.

The effects of this growth are felt most directly in the regional housing market, which has witnessed a dramatic decline in new housing starts near the major cities and is weighed down by a large inventory of unsold new homes and general malaise about the national housing market. While regional housing market troubles have not been as severe as those at the national level, construction has slowed significantly. After averaging around 6,300 new permits per year from 2000 to 2005, single-family building permits declined markedly in 2006 (4,000 new permits). At the time of this writing, final 2007 figures are not yet available; however, year-to-date permits are substantially down from 2006.

Despite the slowdown in building permits, the value of these permits continues to increase. From 2000 to 2006, the average real cost (in 2006 dollars) per single-family building permit along the northern Front Range increased from $160,000 to $208,308.

2008 Regional Economic Outlook

Consistent with the overall mixed signals about both national and Colorado economies, employment growth in northern Colorado is expected to slow somewhat during 2008. Employment forecasts for 2008 indicate sluggish growth of 1.9%, or 4,000 new jobs. However, the region is expected to add a substantial number of jobs in high-paying supersectors, such as Professional, Scientific, and Technical Services; Financial Activities; and Healthcare. Additionally, models project an end to the slide in Manufacturing, with the sector forecasted to show positive employment growth in 2008.

While overall regional growth is expected to slow, emerging clean-energy technologies offer unique opportunities to help stem recent manufacturing job losses. In a recent study conducted by Colorado State University, several clean-energy sectors were identified in which the region currently has a substantial presence.

First, the region boasts international companies that are developing core renewable energy technologies, including wind power, solar photovoltaics (PV), and biomass. Additionally, northern Colorado is home to a variety of businesses focusing on the efficient utilization, distribution, and end uses of clean energy—from smart electric grids to more efficient engine controls to green building applications.

Together, these sectors have a substantial impact on the regional economy. In 2006, a total of 33 firms and organizations employed 2,132 workers in northern Colorado's clean-energy cluster. This is an increase of 53 jobs (2.5%) from 2001 and 152 jobs compared to 2005 (7.4%).

In 2008, the region is slated to add two substantial clean-energy businesses. Vestas Blades America, a subsidiary of Denmark's Vestas Wind Systems A/S, will open a new blade manufacturing facility in Windsor, which is expected to employ more than 600 workers. As well, AVA Solar, a manufacturer of solar photovoltaics and a Colorado State University spinoff, is expected to break ground on a project that will employ up to 500 workers. ✜

From Around the State: Pueblo County

In the coming year, Pueblo County may see the onset of several events that could have a far-reaching impact on its future development. Historically, Pueblo County has experienced low to moderate population growth. This trend may be changing as Pueblo becomes more fully integrated into the regional economy.

One manifestation of the change is the announced development of the Pueblo Springs Ranch, a 23,000-acre subdivision in northeast Pueblo County, located between Pueblo and Colorado Springs. At build-out, this project is projected to have about 75,000 households, translating into nearly 200,000 people—more than the present population of Pueblo County. The initial phase of the project calls for the building of 5,400 single-family homes. Construction could begin as early as summer 2008. The City of Pueblo has taken the initial steps toward annexing the property by accepting a deed on a 370-acre ribbon of land that surrounds the property. Once annexed, the property would nearly double the total area of the city. A major challenge posed by the project will be to ensure that adequate water rights exist to sustain a potential Pueblo County population in excess of 300,000. The developers of Pueblo Springs Ranch appear to be counting on its proximity to both the Colorado Springs and Pueblo markets to ensure its success. The City of Pueblo Department of Community Development has also received inquiries from several other developers that have expressed an interest in annexing areas north of the present city limits.

In terms of more tangible current trends, downtown Pueblo is experiencing a renaissance that enhances its viability as the cultural, financial, and, to some extent, retail hub of the community. The Historic Arkansas Riverwalk Project (HARP) has begun to pay the economic dividends its creators intended. The Cingular Call Center is now fully operational, adding a workforce of nearly 500 to downtown Pueblo. In August 2007, the new 44,000-square-foot headquarters of the Professional Bull Riders Association was dedicated. The facility presently has a staff of 70, with an additional 100 potential positions becoming available over the next few years. The City of Pueblo contributed more than $5.2 million from its half-cent sales tax for economic development to make this project a reality. Restaurants and coffee shops are opening near HARP, and an upscale residential development, located adjacent to Lake Elizabeth, has been completed.

Pueblo's first Best Buy retailer opened for business in September. This store, located in the Pueblo Crossings Shopping Center, is a welcome sight to local shoppers wanting to buy the basic electronic products previously unavailable in Pueblo. It presently employs 75 workers. Demand for these positions was intense, and the store manager reported receiving more than 1,400 applications for the initial hires.

On a more somber note, Pueblo continues to place very high in the rate of home foreclosures. A recent report from the Colorado Division of Housing shows the county ranking fifth highest of Colorado Front Range counties in foreclosures per occupied dwelling: 1 out of 78 occupied homes. Statewide, the Division of Housing is projecting the number of foreclosures in 2007 to be more than 30% higher than the 2006 level.

New residential construction in Pueblo has seen a marked slowdown. The 572 single-family starts issued through the first nine months of 2007 compares to 980 for the same period last year, about a 42% decrease. If the housing slowdown in Pueblo is of short duration, the community seems likely to experience continuing, even expanding, growth of its economy over the next several years. ✜

From Around the State: Southern Colorado

Five local and national issues are strongly influencing the El Paso County economy:

- Rising foreclosures and stagnating home values
- Low residential building permit activity
- Wage increases that are barely keeping up with inflation
- Deployments from Fort Carson to Iraq
- A restrictive Federal Reserve monetary policy resulting from concerns about inflation

These factors directly affect employment and wages, retail and wholesale activity, residential housing, commercial activity, and the economic outlook of the region.

Employment and Unemployment

On average, the monthly labor force in El Paso County through 2006 was estimated to be 298,840, an increase of 9,043 (3.1%) over the 2005 total of 289,797. Preliminary June 2007 figures from the Colorado Department of Labor put the El Paso County labor force at 301,015, compared to 290,905 in June 2006. Total private-sector employment, based on the Quarterly Census of Employment and Wages, averaged 202,789 in 2006, a gain of 4,208 jobs over 2005 levels. For the first time since 2001, private-sector employment exceeded 202,000 jobs. This increase followed similar gains in 2005 of 1.7%, or 4,087 jobs. This was the third consecutive year of positive job growth in the private sector for El Paso County after three successive years of declines.

The largest employment gains were in administrative and waste services (1,504 jobs), construction (994 jobs), accommodations (978 jobs), professional and technical services (754 jobs), healthcare (533 jobs), and retail (422 jobs). The employment gains in construction came from strong activity in the commercial sector, the Colorado Springs Metro Interstate Expansion (COSMIX), and housing on Fort Carson. These are not expected to be sustainable into 2008.

Job losses in information technology and manufacturing that began in 2001 continued into 2006. Information technology lost 975 jobs, while manufacturing fell by 386. Wholesale trade slid by 338 jobs.

The unemployment rate continued a downward trend, albeit at a slower rate. The average unemployment rate in El Paso County was 4.6% in 2006, a decrease from 5.4% the year before. Unemployment rates are expected to be 4.4% in 2007 and 4.6% in 2008.

When El Paso County is compared to Colorado as a whole, three employment and wage patterns stand out. First, the number of firms in El Paso County is growing at a faster rate than in Colorado.

The lower wage gains for El Paso County compared to Colorado is attributed to the change in the number of employees per firm and the loss of primary jobs.

Second, wages are increasing at much slower pace than the state average, which is expected to lead to slower income gains in El Paso County. Third, the lower wage gains for El Paso County compared to Colorado is attributed to the change in the number of employees per firm and the loss of primary jobs. In 2001, El Paso County averaged 13.9 employees per firm versus 12.4 employees for the state as a whole. By 2006, the averages had dropped to 11.8 for El Paso County and 11.0 for Colorado. In addition, between 2001 and 2006 El Paso County lost a disproportionate number of highly paid jobs among larger firms, including manufacturing and technology employers.

Wages and Income

The overall average wage for El Paso County increased in 2006 and stood at $38,584, an increase of $1,092, or 2.9%, over 2005. This follows a 2.6% increase in 2005 and a 3.3% gain in 2004. By comparison, the average wage in Colorado was $43,524 in 2006 and $41,600 in 2005. El Paso County remains well below the state average wage. The 2006 data indicate the average wage in El Paso County is 11.4% below the average wage in Colorado.

Of the 20 two-digit NAICS classifications, 19 had wage increases in 2006. Agriculture was the only sector to decline, -6.8%. Significant wage gains were realized in Management of Companies, 8.5%; Construction, 5.2%, Wholesale Trade, 5.1%; Manufacturing, 4.9%; Information, 4.6%; and Educational Services, 4.5%.

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Retail and Wholesale

Retail sales in El Paso County climbed 6% in 2006 compared to a stronger 6.6% in 2005. After adjusting for inflation and population growth in El Paso County, real retail sales fell 0.3% in 2006 versus an increase of 2% in 2005 and 9.1% in 2004.

Wholesale sales in El Paso County rose 6% in 2006. Wholesale activity growth in 2005 was more brisk, increasing 8.1%. The modest growth in wholesale sales is attributed to the loss of basic manufacturing firms since 2000.

Housing Construction and Commercial Activity

New single-family, detached residential construction declined 35.2% in 2006 relative to 2005. A total of 3,446 permits were pulled, compared to 5,314 in 2005. An unexpected increase in permit value occurred in 2006. The average permit value was $178,983—$30,000 higher than in 2005. This, along with other evidence, indicates that although fewer homes were built in 2006, those that were built were larger and had more options relative to those built the previous year.

Townhome construction also declined in 2006. Townhome permits totaled 682 in 2006, a decline of 249 units, or 26.4%. Permit values also fell, despite a 13% increase in construction cost reported by RSMeans. The average townhome permit value was $114,786 in 2006, compared to $116,922 in 2005 and $123,836 in 2004. Current townhome construction, which is dominated by smaller, less accessorized housing units, has emerged as the entry-level price point for single-family construction.

The extensive commercial construction in high residential growth corridors appears to be matched with demand.

Permits for a total of 289 multifamily units were issued in 2006, down 50.4% from the 2005 total. The decline, which was expected, reflects investor reluctance to get into a market that averaged approximately 11.7% vacancy during 2006. Average rents were $683 per month. Multifamily permit activity is expected to increase modestly in 2008.

Central business district (CBD) office vacancies decreased to 5.5% in 2006, compared to 7% in 2005. Leasing plus absorption totaled 143,492 square feet, which is typical of an average year's activity. Class A office space vacancies in the CBD slid to 6.7% in 2006, and vacancies were down 8.5 points since 2001. Metro office market vacancy rates fell to 6.9% in 2006 from 8.6% the prior year.

Along with the general decrease in vacancy rates among all classes of office space, leasing rates rose in 2006. The metro market increased to $10.86 a square foot from $10.29 in 2005, Triple Net (NNN). The CBD climbed to $11.41 a square foot, compared to $11.37 in 2005. Downtown Class A office space decreased to $14.17 a square foot from $14.34 in 2005.

Industrial vacancies fell to 6.6% in 2006, a significant drop from 8.3% in 2005. Similar to 2005 leasing and absorption rates, almost 2 million square feet were absorbed in 2006. Leasing plus absorption for 2007 should be about 1.2 million square feet. Rents increased to $7.15 a square foot in 2006, compared to $6.80 the previous year.

Through June 2007, it appears industrial rents have decreased. Industrial rents are expected to average $7.00 per square foot for 2007, although a slight decrease is possible if the economy slows further and new industrial construction takes place, especially among owner-occupied properties. If the Intel and SCI facilities are left vacant, industrial vacancy rates will be higher.

Aggregate shopping center lease rates rose 2.6% in 2006, to $13.30, while vacancy rates declined again, to 6.4%. Large facilities are either completed or under construction in Monument, Falcon, Fountain, and along Powers Boulevard and Woodmen. The extensive commercial construction in these high residential growth corridors appears to be matched with demand. Leasing plus absorption totaled almost 1.6 million square feet in 2006, an increase of 40,000 square feet.

Shopping center commercial activity in 2006 showed little sign of letting up. Leasing plus absorption should be close to 1.4 million square feet in 2007. As of fall 2007, rents are running $13.61 per square foot. Commercial activity trends are expected to continue through 2007 before they decline slightly in 2008 as the economy slows.

Where Is the Southern Colorado Economy Headed in 2008?

The future of the southern Colorado economy appears to depend on five factors:

- Better job and income growth from basic industry employers
- Reduced interest rates
- A reduction in foreclosures and spiraling problems related to them
- A rebound in residential construction
- The arrival of BRAC05 troops at Fort Carson

To move forward, the community must attract well-paying jobs in basic industries that, ideally, add to the diversification of the economic base, a goal of the Economic Development Corporation (EDC). Through July 2006, the EDC announced 1,545 jobs in a mix of sectors, including medical technology, financial services, and information technology. Of these 1,545 new jobs that were announced, 1,515 are expected to be filled by workers in the community; 30 are anticipated to be people who will relocate to El Paso County. The ability and success of the EDC is predicated on continued growth of the economy.

Growth prospects for the economy are, to a point, in the hands of the Federal Reserve and its monetary policy. Locally, foreclosures are expected to approach an all-time record for El Paso County in 2007. The problem is expected to abate somewhat in 2008, if the actions of the Federal Reserve instill confidence in financial markets.

A somewhat improved financial market and a decline in local foreclosures will not be sufficient to restore strength in the El Paso County new residential construction market. This sector is expected to fall slightly in 2008 and will be 1,100 new units below its equilibrium level. This will slow down employment growth by approximately 4,000 jobs. As a result, income growth will also be limited.

The silver lining to the cloud-covered economy is that interest rates have been reduced by 50 basis points as of September 30, 2006, and an additional 15 points in October 2007. Corrections to capital markets will follow. Foreclosure problems will improve as variable rate mortgages benefit slightly from interest rate cuts, and subprime mortgages begin to work their way out of the economy. As these factors evolve, the demand for new residential housing will increase. These events could accelerate if the EDC continues to be successful at attracting and keeping clusters of key basic employers. One final positive to the southern Colorado economy is the anticipated arrival of 5,200 troops and their families in 2009, which will have a significant, positive impact. The problem with the expected positive turns is that it will take 12 to 18 months for them to be realized. As a result, modest economic growth, at best, is projected for 2008. ✜

Appendix: North American Industry Classification System Descriptions and Concentrations

Beginning with the 2004 forecast, the economic sectors analyzed in this book reflect the new North American Industry Classification System, adopted in January 2001. The system was recently updated for the United States and Canada, and revisions are scheduled to go into effect in 2009 in Mexico. These modifications were made to account for NAFTA members' rapidly changing economies. The system will allow the United States to directly compare its economic data with that of Canada and Mexico. A brief summary of the composition of each supersector appears below, followed by a discussion of each area's concentration in the economy.

Natural Resources and Mining

Crop production; animal production; forestry and logging; fishing, hunting, and trapping; support activities for agriculture and forestry; oil and gas extraction, mining (except oil and gas); and support activities for mining.

Construction

Construction of buildings, heavy and civil engineering construction, and specialty trade contractors.

Manufacturing

Food manufacturing; beverage and tobacco product manufacturing; textile mills; textile product mills; apparel manufacturing; leather and allied product manufacturing; wood product manufacturing; paper manufacturing; printing and related support activities; petroleum and coal products manufacturing; chemical manufacturing; plastics and rubber products manufacturing; nonmetallic mineral product manufacturing; primary metal manufacturing; fabricated metal product manufacturing; machinery manufacturing; computer and electronic product manufacturing; electrical equipment, appliance, and component manufacturing; transportation equipment manufacturing; furniture and related product manufacturing; and miscellaneous manufacturing.

Trade, Transportation, and Utilities

Merchant wholesalers, durable goods; merchant wholesalers, nondurable goods; wholesale electronic markets and agents and brokers; motor vehicle parts and dealers; furniture and home furnishing stores; electronics and appliance stores; building material and garden equipment and supplies dealers; food and beverage stores; health and personal care stores; gasoline stations; clothing and clothing accessories stores; sporting goods, hobby, book, and music stores; general merchandise stores; miscellaneous store retailers; nonstore retailers; air transportation; rail transportation; water transportation; truck transportation; transit and ground passenger transportation; pipeline transportation; scenic and sightseeing transportation; support activities for transportation; postal service; couriers and messengers; and warehousing and storage.

Information

Publishing industries (except Internet); motion picture and sound recording industries; broadcasting (except Internet); telecommunications; data processing services, hosting, and related services; and other information services.

2006 SECTOR CONCENTRATIONS OF COLORADO FIRMS, EMPLOYMENT, AND WAGES

Sector	Percentage of Total			Location Quotient		
	Firms	Employment	Wages	Firms	Employment	Wages
Agriculture, Forestry, Fishing, Hunting	0.8%	0.8%	0.5%	0.70	0.76	0.78
Mining	0.7	1.1	2.1	2.16	2.00	2.09
Construction	12.6	8.9	8.8	1.22	1.32	1.24
Manufacturing	3.5	7.9	9.9	0.81	0.63	0.65
Wholesale Trade	7.2	5.1	7.2	1.00	0.98	1.01
Retail Trade	11.0	13.1	7.8	0.89	0.96	0.95
Transportation and Warehousing	2.1	3.3	3.2	0.84	0.88	0.88
Utilities	0.2	0.4	0.9	1.20	0.88	1.01
Information	2.0	4.0	7.0	1.20	1.48	1.67
Finance and Insurance	6.5	5.8	8.6	1.16	1.08	0.87
Real Estate and Rental and Leasing	5.9	1.8	2.4	1.37	1.35	1.26
Professional and Technical Services	15.2	8.6	14.1	1.37	1.32	1.33
Management of Companies and Enterprises	0.8	1.4	3.3	1.55	0.90	1.00
Administrative and Waste Services	5.6	7.5	5.2	1.08	1.02	1.03
Educational Services	1.2	1.4	1.0	1.25	0.70	0.59
Health Care and Social Assistance	7.1	10.7	9.9	0.84	0.82	0.82
Arts, Entertainment, and Recreation	1.5	2.3	1.6	1.04	1.39	1.33
Accommodation and Food Services	6.9	11.7	4.2	1.00	1.18	1.14
Other Services	7.2	3.5	2.4	0.55	0.90	0.97

[a]Total private industries were used as the base for LQ calculations.

Source: Colorado Department of Labor and Employment, Bureau of Labor Statistics.

Financial Activities

Monetary authorities—central bank; credit intermediation and related activities; securities, commodity contracts, and other financial investments and related activities; insurance carriers and related activities; funds, trusts, and other financial vehicles; real estate; rental and leasing services; lessors of nonfinancial intangible assets (except copyrighted works).

Professional and Business Services

Professional, scientific, and technical services; management of companies and enterprises; administrative and support services; waste management and remediation services.

Educational and Health Services

Educational services; ambulatory health care services; hospitals; nursing and residential care facilities; and social assistance.

Leisure and Hospitality

Performing arts, spectator sports, and related industries; museums, historical sites, and similar institutions; amusement, gambling, and recreation industries; accommodation; and food services and drinking places.

Other Services

Repair and maintenance; personal and laundry services; religious, grantmaking, civic, professional, and similar organizations; and private households.

Government

Executive, legislative, and other general government support; justice, public order, and safety activities; administration of human resource programs; administration of environmental quality programs; administration of housing programs, urban planning, and community development; administration of economic programs; space research and technology; and national security and international affairs.

Sector Concentration/ Location Quotient

A useful tool for examining an industry's relative concentration in an economy is the location quotient (LQ). The LQ is a ratio comparing and industry's share of a total (can be number of firms, employment, wages, etc.) at a local level to that industry's share of the total at a national level. Therefore, an employment LQ greater than 1 means the industry has a higher than average share of employment in a given area, or is relatively more concentrated in that area. For example, if manufacturing makes up 20% of employment in a state and 10% of total U.S. employment, that state would have an LQ of 2.0 for manufacturing (20/10 = 2). In other words, this means that manufacturing is twice as heavily concentrated in that state relative to the United States. Two of the tables in this section explore this concept.

The other table in this section examines average wages by sector for both Colorado and the United States. ✤

2006 AVERAGE ANNUAL WAGES BY SECTOR COLORADO AND UNITED STATES

Sector	Colorado	United States[a]
Agriculture, Forestry, Fishing, Hunting	$25,357	$24,132
Mining	84,346	78,224
Utilities	92,480	78,341
Construction	43,215	44,496
Manufacturing	54,865	51,427
Wholesale Trade	61,632	58,046
Retail Trade	25,849	25,567
Transportation and Warehousing	42,012	40,848
Information	76,257	65,962
Finance and Insurance	65,095	78,566
Real Estate and Rental and Leasing	41,071	41,952
Professional and Technical Services	71,544	68,469
Management of Companies and Enterprises	101,806	88,823
Administrative and Waste Services	30,516	29,332
Educational Services	33,093	37,880
Health Care and Social Assistance	40,205	39,301
Arts, Entertainment, and Recreation	29,592	29,950
Accommodation and Food Services	15,561	15,701
Other Services	30,104	26,923
Government	42,657	48,664
Total	$43,506	$42,414

[a]Average annual pay, Quarterly Census of Employment and Wages.

Source: Colorado Department of Labor and Employment, Bureau of Labor Statistics.

2006 CONCENTRATION OF SELECT SUBSECTORS IN COLORADO

	Location Quotient		
Industry	Firms	Employment	Wages
Food Manufacturing	0.92	0.70	0.68
Beverage and Tobacco Product Mfg	0.97	1.76	2.05
Chemical Manufacturing	0.68	0.48	0.39
Computer and Electronic Product Mfg	1.28	1.30	1.27
Transportation Equipment Mfg	0.62	0.35	0.44
Software Publishers	2.66	3.11	2.71
Telecommunications	0.93	1.71	2.27
Scientific Research and Development Services	1.45	1.36	1.54

[a]Total private industries were used as the base for LQ calculations.

Source: Colorado Department of Labor and Employment, Bureau of Labor Statistics.

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Business Research Division

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For over 90 years, the Business Research Division (BRD) of the Leeds School of Business has been providing business, economic, and market research that contributes to the efficient use of Colorado's resources. Through its annual Colorado Business Economic Outlook Forum, the BRD has established a base of knowledge that adds value to the division's work in other areas. In addition to providing research to public and private organizations, the division is the umbrella organization for Colorado Association of Manufacturing and Technology (CAMT) and the Rocky Mountain Trade Adjustment Assistance Center (RMTAAC).

Purposes of Unit

The BRD provides business, economic, and market research that contributes to the efficient use of Colorado's resources and increases interest in and awareness of the Leeds School of Business. The BRD provides support to the Colorado business community in the following areas:

Industry Support—Through research conducted with companies, associations, nonprofit organizations, educational institutions, and state and local governmental agencies throughout the world, the BRD has developed primary competencies in the areas of the impact of government and government policy, the role and impact of technology in Colorado, manufacturing issues and trends, and issues in the health-care industry. Secondary competencies have been developed as a result of research conducted in the construction, trade, services, and finance sectors.

Research for the State of Colorado—Each December the BRD presents its annual forecast of the Colorado state economy. Subsequent presentations are made during the year throughout the state. Selected summaries or research reports are available on the BRD's web site (www.leeds.colorado.edu/brd/). In addition, the BRD compiles the Colorado Business Leaders Confidence Index® (BLCI) on a quarterly basis. More information about the BLCI is available at www.blci.com.

Faculty and Center Research—The BRD cooperates with other centers in the Leeds School of Business and faculty members to assist them with conducting applied, relevant research that benefits the business community and the Leeds School of Business.

Student Research—The BRD provides opportunities for students to gain practical business experience by involving them in business and economic-related research projects.

U.S. Census Research—The division provides assistance to the business community in finding relevant information from U.S. census reports by obtaining and using statistical data and related products. The division is an affiliate in the State Data Center System.

Areas of Expertise

The Business Economic Outlook Forum provides an excellent base of knowledge for the BRD to conduct local, national, and international research for a diverse set of clients. In addition to supplying companies and state agencies with information to help them make better-informed business and policy decisions, this research provides the BRD with expertise in a number of areas. Through a variety of research tools (direct mail surveys, telephone surveys, focus groups, and personal interviews), the BRD has conducted research in:

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Business Research Division

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Technology

- Prepared a roadmap for nanotechnology in Colorado
- Conducted trend and issue analysis of biomedical, photonics, and renewable energy industries
- Compiled industry and sector directories
- Estimated impact of technology on Colorado

Manufacturing

- Investigated employment trends and issues
- Identified management and operational issues
- Prepared competitive intelligence and industry needs assessment
- Published industry and niche directories
- Identified methods for service providers to provide better service to manufacturers
- Determined the impact of key manufacturers on local economies

Healthcare

- Performed analyses of drug usage patterns for state Medicaid program
- Conducted customer satisfaction surveys of public and private health plans
- Conducted a comparative analysis of health plans
- Prepared a study of the appropriate information to provide clients using health plans

State and Local Policy Decision-Making Organizations

- Calculated fiscal impact of state agency on its clients
- Conducted customer satisfaction with state agency programs
- Prepared potential fiscal impact of retail store on city economy
- Identified city and county issues and trends with city and county employees
- Conducted customer satisfaction programs with federal programs to mitigate employment reduction because of defense layoffs
- Calculated fiscal impact of agricultural component on county economy
- Prepared analysis of issues and opinions regarding county growth trends
- Conducted public safety satisfaction/needs assessment study

Real Estate

- Analyzed real estate activity and value in Colorado, as well as eight Colorado regions
- Calculated the impact of commercial real estate on the state of Colorado in a collaborated study with the University of Colorado Real Estate Center and the University of Denver, Franklin L. Burns School of Real Estate and Construction Management
- Collaboratively analyzed the current affordable housing program in the City of Boulder with the University of Colorado Real Estate Center

Other Areas

- Conducted name recognition study for international financial services company
- Collected competitive intelligence and needs assessment to help company determine feasibility of moving to Colorado
- Prepared association membership satisfaction and needs assessment

General Economic Information

- Prepared local leading economic indicator series
- Collected local economic data for various city and county organizations

Business Economic Outlook Forum

- Make targeted presentations of the business economic forecast annually to more than 30 local, regional, and national organizations

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Leeds School of Business: Services to Business and Industry

Richard M. Burridge Center for Securities Analysis and Valuation

The mission of the Richard M. Burridge Center for Securities Analysis and Valuation is to encourage and support the creation and dissemination of new knowledge about financial markets, with an emphasis on U.S. financial markets. The center

- Facilitates the exchange of ideas and knowledge among students, professional investment managers, finance scholars, policymakers, and the investing public;
- Identifies critical research issues in the theory and practice of security analysis and valuation; and
- Encourages and supports vigorous qualitative and quantitative research on topics relevant and useful to money managers, valuation experts, and finance academics.

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University of Colorado Real Estate Center

Through the dedicated efforts of a committed University of Colorado faculty collegium, the CU Real Estate Center provides a world-class real estate curriculum at both the graduate and the undergraduate levels that prepares students to be leaders in the real estate industry.

The CU Real Estate Center was created in 1996 through the efforts of the CU Real Estate Council. The council consists of more than 350 real estate professionals contributing time, expertise, and financial support to educate the next generation of industry leaders. The partnership between the University of Colorado and the University of Colorado Real Estate Council creates a dynamic relationship that offers beneficial opportunities to further research and student involvement in real estate issues such as land use, growth management, sustainability, capital markets, and other related topics.

Through the CU Real Estate Council, the center provides a rewarding mentorship program designed to benefit both the students and council members. In addition, the center develops meaningful internship opportunities for students through the council network, requiring on-the-job experiences as part of the learning process for all students, with job placement opportunities as the ultimate goal of the program.

In August of 2002, the University of Colorado Real Estate Foundation (CUREF) was created by the University and CU Real Estate Council members to be an independent supporting organization to the University of Colorado. CUREF's mission is to maximize financial returns to the university by creating, managing, and growing a high income-producing real estate portfolio and to assist the university in implementing campus master plans. CUREF utilizes the resources of the CU Real Estate Center and provides support to the center through sponsorship of the CU Real Estate Council.

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The Robert H. and Beverly A. Deming Center for Entrepreneurship

Continued national recognitions affirm the quality of the Deming Center for Entrepreneurship's Program and its success creating innovative new areas of entrepreneurial opportunity. The Center's work in sustainable venturing, natural and organic products, and renewable energy keep it at the forefront of entrepreneurship education.

Collaborations cross-campus, in the business community, and with national government labs have established a model for the intersection of entrepreneurial creativity, technology, and innovation. Our students benefit from unparalleled access to world renowned faculty and researchers, and the Boulder region's diverse entrepreneurs, venture capitalist, and start-up resources. The area's vibrant, supportive entrepreneurial community is at the foundation of our success.

Successful collaborations include CU-Boulder's Technology Transfer Office, Renewable Energy Initiative, Entrepreneurial Law Clinic, Music Entrepreneurship Program, Silicon Flatirons Telecommunications Program, and College of Engineering and Applied Science. Partnerships have been built with CTEK Venture Centers,

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Boulder Innovation Center, Naturally Boulder Products Task Force, National Renewable Energy Laboratory (NREL), and the National Center for Atmospheric Research (NCAR), among others.

Sustainable Venturing Initiative

The Sustainable Venturing Initiative began in 2005 to offer tomorrow's entrepreneurial leaders an entrée into the fast-changing world of sustainable business opportunities, with a focus on the growing fields of clean technology and renewable energy. Students build on a rigorous foundation of skills and a network of creative entrepreneurs to help them put their ideas into practice.

Center Events and Programs

The Center's forward-thinking initiatives include the Cleantech Venture Challenge international business plan competition. A student competition showcasing emerging opportunities in the cleantech sector, this event promotes the development of venture-grade business ideas that address pressing environmental problems and increasing global demand for energy. The annual Sustainable Opportunities Summit is a conference that brings together corporate leaders, entrepreneurs, and venture capitalists from Colorado and the nation in a unique forum to assess the growing opportunities created by climate change.

The center's internal business plan competitions and existing programs continue to grow and thrive. Included among those are the undergraduate Certificate of Excellence in Entrepreneurial Studies, the Collegiate Entrepreneurs Organization, the annual Evening with Entrepreneurs event, and the new TREP Café student-run business that is housed in the Leeds School of Business. At the MBA level, the Graduate Entrepreneurs Association supports activities to encourage and promote student activity in entrepreneurship, including Learn from the Best and the annual Entrepreneurship Retreat. MBAs also continue the legacy of Entrepreneurial Solutions, a for-profit, student-run consulting firm staffed by a select group of MBA students. It serves the business community by providing high-value solutions that rely on the expertise of each year's team.

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Evening MBA Program

The Leeds School of Business Evening MBA program offers working professionals the opportunity to advance their careers and accelerate their professional growth by earning an MBA degree while maintaining full-time employment. The opportunity to immediately apply concepts learned in the MBA classroom to the work environment is a powerful tool to advance individual careers and maximize the value of the educational experience. Taught by the same nationally renowned faculty who teach in the Leeds School's full-time MBA program, the Evening MBA Program gives students and their companies access to the latest cutting-edge business knowledge and practices. Students in the evening program attend classes two nights per week for eight consecutive semesters. The program's dedication to superior administrative support provides evening students the ability to focus on the educational experience.

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Executive Development Programs

Executive Development Programs (EDP) at the Leeds School of Business is an executive education provider with a national presence. EDP specializes in business programs focused on the adult learner. From intense seven-month management courses to three-day basic business topics, our programs deliver high-impact education.

The faculty and the EDP staff can work with you to develop a custom program that will provide specific tools to help your organization achieve its unique goals. Led by our internationally recognized faculty, your organization will be better able to assess corporate strategies and to analyze the gaps in performance. Our customized solutions provide education with an emphasis on change management, finance and accounting, and a number of other business topics.

Come explore the many opportunities that EDP offers.

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Colorado Association of Manufacturing and Technology (CAMT)

The Colorado Association for Manufacturing and Technology (CAMT) is a statewide manufacturing assistance center, partially funded by the NIST Manufacturing Extension Partnership and hosted by the University of Colorado. CAMT encourages the global competitiveness of Colorado manufacturers through on-site technical assistance and support; collaboration-focused industry programs; and the leverage of government, university, and economic development partnerships. CAMT hosts myriad programs in support of its mission.

- Through on-site support and technical assistance, CAMT works to boost the competitiveness of Colorado manufacturers. CAMT's experienced engineers and business professionals, with skills in manufacturing, management, process, and technology, work closely with manufacturers to provide company assessments, customized training and workshops, and hands-on facilitation and implementation.
- CAMT has developed a web portal designed to strengthen the supply chain through enabling companies to search for local suppliers, collaborate on larger national and international opportunities, and pool selling capabilities (similar to the concept of a co-op).
- By partnering with Colorado universities and national laboratories, CAMT helps manufacturers access academic resources and find technology that is available to integrate with their product development.
- CAMT offers workforce development on-site training and workshops to provide employees with education in world-class manufacturing. In addition, programs are offered to high school students to foster greater awareness of, and appreciation for, career opportunities in manufacturing.
- Business networks are imperative to achieving regional industry growth, and CAMT has been a key driver in the initiation of manufacturing taskforces across the state. These taskforces provide a platform for business leaders to learn from other successful business leaders, share technical knowledge and innovations, and uncover strategic partnership opportunities.
- As a statewide manufacturing advocate, CAMT makes research and policy recommendations on issues such as OSHA, the environment, and healthcare that have a significant impact on manufacturing costs.

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Rocky Mountain Trade Adjustment Assistance Center (RMTAAC)

RMTAAC is an independent, nonprofit organization offering technical and professional assistance to small and medium-size manufacturers adversely affected by import competition.

The center is staffed by professionals with extensive private-sector experience in marketing, management, and engineering. RMTAAC project managers work closely with manufacturers to identify cost-effective strategies that enable them to compete with foreign producers.

In addition, project managers locate outside technical consultants to implement projects that require specialized expertise. Up to 50% of the total project cost is funded by the U.S. Department of Commerce.

Since 1981, RMTAAC has helped hundreds of manufacturers in a number of industries, including circuit board assembly, recreational equipment, material handling, testing equipment, building materials, apparel, and jewelry.

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Center for Business Integration

The Center for Business Integration (CBI) at the Leeds School of Business creates opportunities to bring together local business people, business students, and faculty to collaborate in solving business problems. Through project-based learning, CBI is connecting the experience provided by local companies, the knowledge created by the University, and the work conducted by students in the Leeds School. The center brings real-world projects to the classroom by assisting students and faculty in identifying, selecting, and executing projects for local companies. After the project has been selected, CBI provides support to faculty and students during project planning and execution.

CBI looks for projects that provide students with experience that will help them get better jobs. In addition, CBI seeks out employers who would like to test students on a real project before making hiring decisions. Successful past projects include: supply-chain audits and recommendations for improvement; Web site design; software selection; information system review and recommendations for improvement; new product design; business process review; internal control review; database design; product costing; business report design; and business intelligence.

One of the benefits to companies is that they can use this experience to infuse project management principles in their own operations. Managers who are chosen to work with the students are encouraged to participate in the project management components of the coursework. This learning, along with the skills gained through managing an actual company-related project, can have an impact on the effectiveness of internal project-management skills.

Projects are selected based on their value to our student's educational experience and relevance to our faculty's research. CBI prefers to receive projects prior to the beginning of the fall and spring semesters. If the opportunity to solve a real problem, to gain additional exposure to project management principles for your staff, and to work with students is appealing, CBI would be pleased to provide additional details.

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